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Published work which cites GAP

- [1] I. Abdeljaouad. Calculation of primitive invariants of finite groups. *RAIRO-INF THEOR APPL*, 33(1):59–77, 1999.
- [2] A. Abdolghafourian and M. A. Iranmanesh. Divisibility graph for symmetric and alternating groups. *Comm. Algebra*, 43(7):2852–2862, 2015.
- [3] A. Abdollahi. Some Engel conditions on finite subsets of certain groups. *Houston J. Math.*, 27(3):511–522, 2001.
- [4] A. Abdollahi. Engel graph associated with a group. *J. Algebra*, 318(2):680–691, 2007.
- [5] A. Abdollahi. Commuting graphs of full matrix rings over finite fields. *Linear Algebra Appl.*, 428(11-12):2947–2954, 2008.
- [6] A. Abdollahi. Cohomologically trivial modules over finite groups of prime power order. *J. Algebra*, 342:154–160, 2011.
- [7] A. Abdollahi. Non-solvable groups generated by involutions in which every involution is left 2-Engel. *J. Group Theory*, 18(1):111–114, 2015.
- [8] A. Abdollahi, F. Ashraf, and S. M. Shaker. The symmetric group of degree six can be covered by 13 and no fewer proper subgroups. *Bull. Malays. Math. Sci. Soc. (2)*, 30(1):57–58, 2007.
- [9] A. Abdollahi, M. J. Ataei, and A. M. Hassanabadi. Minimal blocking sets in $PG(n, 2)$ and covering groups by subgroups. *Comm. Algebra*, 36(2):365–380, 2008.
- [10] A. Abdollahi, M. J. Ataei, S. M. Jafarian Amiri, and A. M. Hassanabadi. Groups with a maximal irredundant 6-cover. *Comm. Algebra*, 33(9):3225–3238, 2005.
- [11] A. Abdollahi, R. Brandl, and A. Tortora. Groups generated by a finite Engel set. *J. Algebra*, 347:53–59, 2011.
- [12] A. Abdollahi, A. Faghihi, and A. M. Hassanabadi. Minimal number of generators and minimum order of a non-abelian group whose elements commute with their endomorphic images. *Comm. Algebra*, 36(5):1976–1987, 2008.
- [13] A. Abdollahi, A. Faghihi, S. A. Linton, and E. A. O'Brien. Finite 3-groups of class 3 whose elements commute with their automorphic images. *Arch. Math. (Basel)*, 95(1):1–7, 2010.
- [14] A. Abdollahi, A. Faghihi, and A. Mohammadi Hassanabadi. 3-generator groups whose elements commute with their endomorphic images are abelian. *Comm. Algebra*, 36(10):3783–3791, 2008.

- [15] A. Abdollahi and A. M. Hassanabadi. 3-rewritable nilpotent 2-groups of class 2. *Comm. Algebra*, 33(5):1417–1425, 2005.
- [16] A. Abdollahi and A. M. Hassanabadi. Non-cyclic graph associated with a group. *J. Algebra Appl.*, 8(2):243–257, 2009.
- [17] A. Abdollahi and S. M. Jafarian Amiri. On groups with an irredundant 7-cover. *J. Pure Appl. Algebra*, 209(2):291–300, 2007.
- [18] A. Abdollahi, S. M. Jafarian Amiri, and A. M. Hassanabadi. Groups with specific number of centralizers. *Houston J. Math.*, 33(1):43–57 (electronic), 2007.
- [19] A. Abdollahi, S. Janbaz, and M. Jazaeri. Groups all of whose undirected Cayley graphs are determined by their spectra. *J. Algebra Appl.*, 15(9):1650175, 15, 2016.
- [20] A. Abdollahi and M. Jazaeri. Groups all of whose undirected Cayley graphs are integral. *European J. Combin.*, 38:102–109, 2014.
- [21] A. Abdollahi and H. Khosravi. On the right and left 4-Engel elements. *Comm. Algebra*, 38(3):933–943, 2010.
- [22] A. Abdollahi and H. Khosravi. Right 4-Engel elements of a group. *J. Algebra Appl.*, 9(5):763–769, 2010.
- [23] A. Abdollahi and E. Vatandoost. Which Cayley graphs are integral? *Electron. J. Combin.*, 16(1):Research Paper 122, 17, 2009.
- [24] A. Abdollahi and M. Zallaghi. Character sums for Cayley graphs. *Comm. Algebra*, 43(12):5159–5167, 2015.
- [25] A. Abdollahi and M. Zarrin. Non-nilpotent graph of a group. *Comm. Algebra*, 38(12):4390–4403, 2010.
- [26] A. A. Abduh. On the representations of subgroups of the Janko sporadic simple group J_1 . *Far East J. Math. Sci. (FJMS)*, 2(6):963–971, 2000.
- [27] R. J. R. Abel, D. Combe, A. M. Nelson, and W. D. Palmer. GBRDs over supersolvable groups and solvable groups of order prime to 3. *Des. Codes Cryptogr.*, 69(2):189–201, 2013.
- [28] M. Aboras and P. Vojtěchovský. Automorphisms of dihedral-like automorphic loops. *Comm. Algebra*, 44(2):613–627, 2016.
- [29] O. A. AbuGhneim. On nonabelian McFarland difference sets. In *Proceedings of the Thirty-Fifth Southeastern International Conference on Combinatorics, Graph Theory and Computing*, volume 168, pages 159–175, 2004.
- [30] O. A. Abughneim. *Nonabelian McFarland and Menon-Hadamard difference sets*. ProQuest LLC, Ann Arbor, MI, 2005. Thesis (Ph.D.)—Central Michigan University.
- [31] N. Adamenko and I. Velichko. The investigation of some topologies on finite sets. *Appl. Sci.*, 8(1):8–12, 2006.

- [32] A. Adler. The Mathieu group M_{11} and the modular curve $X(11)$. *Proc. London Math. Soc.* (3), 74(1):1–28, 1997.
- [33] M. Afkhami, M. Farrokhi D. G., and K. Khashyarmanesh. Planar, toroidal, and projective commuting and noncommuting graphs. *Comm. Algebra*, 43(7):2964–2970, 2015.
- [34] A. Aguglia and A. Bonisoli. On the non-existence of a projective plane of order 15 with an A_4 -invariant oval. *Discrete Math.*, 288(1-3):1–7, 2004.
- [35] A. Aguglia and L. Giuzzi. Orthogonal arrays from Hermitian varieties. *Innov. Incidence Geom.*, 5:129–144, 2007.
- [36] A. Aguglia and L. Giuzzi. An algorithm for constructing some maximal arcs in $PG(2, q^2)$. *Results Math.*, 52(1-2):17–33, 2008.
- [37] A. Aguglia and L. Giuzzi. Construction of a 3-dimensional MDS-code. *Contrib. Discrete Math.*, 3(1):39–46, 2008.
- [38] F. Aguiló-Gost and P. A. García-Sánchez. Factoring in embedding dimension three numerical semigroups. *Electron. J. Combin.*, 17(1):Research Paper 138, 21, 2010.
- [39] F. Aguiló-Gost, P. A. García-Sánchez, and D. Llena. On the number of L-shapes in embedding dimension four numerical semigroups. *Discrete Math.*, 338(12):2168–2178, 2015.
- [40] N. Ahanjideh and A. Iranmanesh. On the Sylow normalizers of some simple classical groups. *Bull. Malays. Math. Sci. Soc.* (2), 35(2):459–467, 2012.
- [41] E. Aichinger. On the maximal ideals of non-zero-symmetric near-rings and of composition algebras of polynomial functions of Ω -groups. *Quaest. Math.*, 24(4):453–480, 2001.
- [42] E. Aichinger. The polynomial functions on certain semidirect products of groups. *Acta Sci. Math. (Szeged)*, 68(1-2):63–81, 2002.
- [43] E. Aichinger and M. Farag. On when the multiplicative center of a near-ring is a subnear-ring. *Aequationes Math.*, 68(1-2):46–59, 2004.
- [44] M. Akbari and A. R. Moghaddamfar. The existence or nonexistence of non-commuting graphs with particular properties. *J. Algebra Appl.*, 13(1):1350064, 11, 2014.
- [45] Z. Akhlaghi, A. Beltrán, M. J. Felipe, and M. Khatami. Structure of normal subgroups with three G -class sizes. *Monatsh. Math.*, 167(1):1–12, 2012.
- [46] Z. Akhlaghi and M. Khatami. Improving Thompson’s conjecture for Suzuki groups. *Comm. Algebra*, 44(9):3927–3932, 2016.
- [47] A. Akhmedov and B. D. Park. Exotic smooth structures on small 4-manifolds. *Invent. Math.*, 173(1):209–223, 2008.
- [48] S. Akiyama, F. Gähler, and J. Lee. Determining pure discrete spectrum for some self-affine tilings. *Discrete Math. Theor. Comput. Sci.*, 16(3):305–316, 2014.

- [49] A. Al Fares, E. Golvin, and M. Krebs. A class of 2-groups of derived length three. *Serdica Math. J.*, 41(2-3):329–332, 2015.
- [50] S. H. Alavi, A. Daneshkhah, H. P. Tong-Viet, and T. P. Wakefield. On Huppert’s conjecture for the Conway and Fischer families of sporadic simple groups. *J. Aust. Math. Soc.*, 94(3):289–303, 2013.
- [51] M. H. Albert, R. E. L. Aldred, M. D. Atkinson, C. C. Handley, D. A. Holton, and D. J. McCaughan. Sorting classes. *Electron. J. Combin.*, 12:Research Paper 31, 25, 2005.
- [52] M. H. Albert, M. D. Atkinson, and R. Brignall. The enumeration of three pattern classes using monotone grid classes. *Electron. J. Combin.*, 19(3):Paper 20, 34, 2012.
- [53] M. H. Albert and S. A. Linton. Growing at a perfect speed. *Combin. Probab. Comput.*, 18(3):301–308, 2009.
- [54] R. Z. Alev, A. V. Kargapolov, and V. V. Sokolov. The ranks of central unit groups of integral group rings of alternating groups. *Fundam. Prikl. Mat.*, 14(7):15–21, 2008.
- [55] R. Z. Alev and V. V. Sokolov. On central unit groups of integral group rings of alternating groups. *Proc. Steklov Inst. Math.*, 267(suppl. 1):S1–S9, 2009.
- [56] P. P. Alejandro, R. A. Bailey, and P. J. Cameron. Association schemes and permutation groups. *Discrete Math.*, 266(1-3):47–67, 2003. The 18th British Combinatorial Conference (Brighton, 2001).
- [57] J. Alexander, R. Balasubramanian, J. Martin, K. Monahan, H. Pollatsek, and A. Sen. Ruling out (160, 54, 18) difference sets in some nonabelian groups. *J. Combin. Des.*, 8(4):221–231, 2000.
- [58] F. Ali. On the ranks of O’N and Ly. *Discrete Appl. Math.*, 155(3):394–399, 2007.
- [59] F. Ali. On the ranks of Fi_{22} . *Quaest. Math.*, 37(4):591–600, 2014.
- [60] F. Ali and M. A. F. Ibrahim. On the ranks of Conway group Co_1 . *Proc. Japan Acad. Ser. A Math. Sci.*, 81(6):95–98, 2005.
- [61] F. Ali and M. A. F. Ibrahim. On the ranks of the Conway groups Co_2 and Co_3 . *J. Algebra Appl.*, 4(5):557–565, 2005.
- [62] F. Ali and M. A. F. Ibrahim. On the simple sporadic group He generated by the $(2, 3, t)$ generators. *Bull. Malays. Math. Sci. Soc. (2)*, 35(3):745–753, 2012.
- [63] F. Ali and J. Moori. The Fischer-Clifford matrices of a maximal subgroup of Fi'_{24} . *Represent. Theory*, 7:300–321 (electronic), 2003.
- [64] F. Ali and J. Moori. Fischer-Clifford matrices of the non-split group extension $2^6 \cdot U_4(2)$. *Quaest. Math.*, 31(1):27–36, 2008.
- [65] M. H. Ali and M. Schaps. Lifting McKay graphs and relations to prime extensions. *Rocky Mountain J. Math.*, 38(2):373–393, 2008.

- [66] D. Allcock. Triangles of Baumslag-Solitar groups. *Canad. J. Math.*, 64(2):241–253, 2012.
- [67] D. Allcock and C. Hall. Monodromy groups of Hurwitz-type problems. *Adv. Math.*, 225(1):69–80, 2010.
- [68] J. Almeida and A. Costa. Presentations of Schützenberger groups of minimal subshifts. *Israel J. Math.*, 196(1):1–31, 2013.
- [69] J. Almeida and M. Delgado. Tameness of the pseudovariety of abelian groups. *Internat. J. Algebra Comput.*, 15(2):327–338, 2005.
- [70] M. Alp. Special cases of cat^1 -groups. *Commun. Fac. Sci. Univ. Ank. Ser. A1 Math. Stat.*, 47(1-2):1–10, 1998.
- [71] M. Alp. Some results on derivation groups. *Turkish J. Math.*, 24(2):121–128, 2000.
- [72] M. Alp. Special cases of cat^1 -groups. *Algebras Groups Geom.*, 17(4):468–478, 2000.
- [73] M. Alp. Induced cat^1 -groups. *Turkish J. Math.*, 25(2):245–261, 2001.
- [74] M. Alp. Sections in GAP. *Proc. Inst. Math. Mech. Natl. Acad. Sci. Azerb.*, 14:18–26, 206, 2001.
- [75] M. Alp. Enumeration of Whitehead groups of low order. *Internat. J. Algebra Comput.*, 12(5):645–658, 2002.
- [76] M. Alp. Enumeration of 1-truncated simplicial groups of low order. *INDIAN JOURNAL OF PURE & APPLIED MATHEMATICS*, 35(3):333–345, MAR 2004.
- [77] M. Alp. Pullbacks of crossed modules and Cat^1 -commutative algebras. *Turkish J. Math.*, 30(3):237–246, 2006.
- [78] M. Alp and S. Pak. Underlying groupoids. *Commun. Fac. Sci. Univ. Ank. Ser. A1 Math. Stat.*, 49(1-2):25–31, 2000.
- [79] M. Alp and C. D. Wensley. Enumeration of cat^1 -groups of low order. *Internat. J. Algebra Comput.*, 10(4):407–424, 2000.
- [80] M. Alp and C. D. Wensley. Automorphisms and homotopies of groupoids and crossed modules. *Appl. Categ. Structures*, 18(5):473–504, 2010.
- [81] A. Álvarez, J. L. Bravo, and C. Christopher. On the trigonometric moment problem. *Ergodic Theory Dynam. Systems*, 34(1):1–20, 2014.
- [82] S. Ambrose, M. Neunhöffer, C. E. Praeger, and C. Schneider. Generalised sifting in black-box groups. *LMS J. Comput. Math.*, 8:217–250 (electronic), 2005.
- [83] J. An, J. J. Cannon, E. A. O’Brien, and W. R. Unger. The Alperin weight conjecture and Dade’s conjecture for the simple group Fi'_{24} . *LMS J. Comput. Math.*, 11:100–145, 2008.
- [84] J. An and H. Dietrich. The AWC-goodness and essential rank of sporadic simple groups. *J. Algebra*, 356:325–354, 2012.

- [85] J. An and C. W. Eaton. Nilpotent blocks of quasisimple groups for odd primes. *J. Reine Angew. Math.*, 656:131–177, 2011.
- [86] J. An and C. W. Eaton. Nilpotent blocks of quasisimple groups for the prime two. *Algebr. Represent. Theory*, 16(1):1–28, 2013.
- [87] J. An, F. Himstedt, and S. Huang. Uno’s invariant conjecture for Steinberg’s triality groups in defining characteristic. *J. Algebra*, 316(1):79–108, 2007.
- [88] J. An, F. Himstedt, and S. Huang. Dade’s invariant conjecture for the symplectic group $\mathrm{Sp}_4(2^n)$ and the special unitary group $\mathrm{SU}_4(2^{2n})$ in defining characteristic. *Comm. Algebra*, 38(6):2364–2403, 2010.
- [89] J. An and G. Hiss. Restricting the Steinberg character in finite symplectic groups. *J. Group Theory*, 9(2):251–264, 2006.
- [90] J. An and S. Huang. Dade’s invariant conjecture for the general unitary group $\mathrm{GU}_4(q^2)$ in defining characteristic. *Internat. J. Algebra Comput.*, 20(3):357–380, 2010.
- [91] J. An and E. A. O’Brien. The Alperin and Dade conjectures for the Fischer simple group Fi_{23} . *Internat. J. Algebra Comput.*, 9(6):621–670, 1999.
- [92] J. An and E. A. O’Brien. Conjectures on the character degrees of the Harada-Norton simple group HN . *Israel J. Math.*, 137:157–181, 2003.
- [93] J. An and E. A. O’Brien. The Alperin and Dade conjectures for the Conway simple group Co_1 . *Algebr. Represent. Theory*, 7(2):139–158, 2004.
- [94] J. An and E. A. O’Brien. The Alperin and Uno conjectures for the Fischer simple group Fi_{22} . *Comm. Algebra*, 33(5):1529–1557, 2005.
- [95] J. An, E. A. O’Brien, and R. A. Wilson. The Alperin weight conjecture and Dade’s conjecture for the simple group J_4 . *LMS J. Comput. Math.*, 6:119–140 (electronic), 2003.
- [96] C. S. Anabanti and S. B. Hart. On a conjecture of Street and Whitehead on locally maximal product-free sets. *Australas. J. Combin.*, 63:385–398, 2015.
- [97] J. W. Anderson and A. Wootton. A lower bound for the number of group actions on a compact Riemann surface. *Algebr. Geom. Topol.*, 12(1):19–35, 2012.
- [98] J. W. Anderson and A. Wootton. Gaps in the space of skeletal signatures. *Arch. Math. (Basel)*, 102(2):181–190, 2014.
- [99] K. Anderson and D. B. Surowski. Coxeter-petrie complexes of regular maps. *EUROPEAN JOURNAL OF COMBINATORICS*, 23(8):861–880, NOV 2002.
- [100] J. André, J. Araújo, and P. J. Cameron. The classification of partition homogeneous groups with applications to semigroup theory. *J. Algebra*, 452:288–310, 2016.
- [101] J. M. André. The maximum inverse subsemigroup of a near permutation semigroup. *Comm. Algebra*, 33(10):3607–3617, 2005.

- [102] N. Andruskiewitsch, I. Angiono, A. García Iglesias, A. Masuoka, and C. Vay. Lifting via cocycle deformation. *J. Pure Appl. Algebra*, 218(4):684–703, 2014.
- [103] N. Andruskiewitsch and F. Fantino. On pointed Hopf algebras associated with alternating and dihedral groups. *Rev. Un. Mat. Argentina*, 48(3):57–71 (2008), 2007.
- [104] N. Andruskiewitsch, F. Fantino, G. A. García, and L. Vendramin. On twisted homogeneous racks of type D. *Rev. Un. Mat. Argentina*, 51(2):1–16, 2010.
- [105] N. Andruskiewitsch, F. Fantino, M. Graña, and L. Vendramin. Pointed Hopf algebras over some sporadic simple groups. *C. R. Math. Acad. Sci. Paris*, 348(11-12):605–608, 2010.
- [106] N. Andruskiewitsch, F. Fantino, M. Graña, and L. Vendramin. Finite-dimensional pointed Hopf algebras with alternating groups are trivial. *Ann. Mat. Pura Appl. (4)*, 190(2):225–245, 2011.
- [107] S. A. Annin, G. J. Sherman, and J. J. Ziebarth. Research questions for undergraduates on triple products in finite groups. *PRIMUS*, VI(1):1–7, March 1996. The periodical is on 'Problems, Resources, and Issues in Undergraduate Mathematics Studies', edited by the Department of Mathematical Sciences, United States Military Academy, West point NY 10996-9902 USA.
- [108] M. F. Anton. Homological symbols and the Quillen conjecture. *J. Pure Appl. Algebra*, 213(4):440–453, 2009.
- [109] F. Antoneli, P. H. Baptistelli, A. P. S. Dias, and M. Manoel. Invariant theory and reversible-equivariant vector fields. *J. Pure Appl. Algebra*, 213(5):649–663, 2009.
- [110] F. Antoneli, A. P. S. Dias, and P. C. Matthews. Invariants, equivariants and characters in symmetric bifurcation theory. *Proc. Roy. Soc. Edinburgh Sect. A*, 138(3):477–512, 2008.
- [111] Z. Arad, M. Muzychuk, and A. Oliver. On groups with conjugacy classes of distinct sizes. *J. Algebra*, 280(2):537–576, 2004.
- [112] I. M. Araújo. *Presentations for semigroup constructions and related computational methods*. PhD thesis, University of St Andrews, 2000.
- [113] I. M. Araújo, A. V. Kelarev, and A. Solomon. An algorithm for commutative semigroup algebras which are principal ideal rings. *Comm. Algebra*, 32(4):1237–1254, 2004.
- [114] I. M. Araújo and A. Solomon. Computing with semigroups in GAP—a tutorial. In *Semigroups (Braga, 1999)*, pages 1–18. World Sci. Publ., River Edge, NJ, 2000.
- [115] J. Araújo, W. Bentz, and J. Konieczny. The commuting graph of the symmetric inverse semigroup. *Israel J. Math.*, 207(1):103–149, 2015.
- [116] J. Araújo, P. V. Bünaeu, J. D. Mitchell, and M. Neunhöffer. Computing automorphisms of semigroups. *J. Symbolic Comput.*, 45(3):373–392, 2010.
- [117] J. Araújo, M. Kinyon, and J. Konieczny. Minimal paths in the commuting graphs of semigroups. *European J. Combin.*, 32(2):178–197, 2011.

- [118] M. Araya. More mutually disjoint Steiner systems $S(5, 8, 24)$. *J. Combin. Theory Ser. A*, 102(1):201–203, 2003.
- [119] M. Araya and M. Harada. MDS codes over \mathbb{F}_9 related to the ternary Golay code. *Discrete Math.*, 282(1-3):233–237, 2004.
- [120] M. Araya and M. Harada. On the classification of certain ternary codes of length 12. *Hiroshima Math. J.*, 46(1):87–96, 2016.
- [121] M. Araya, M. Harada, and H. Kharaghani. Some Hadamard matrices of order 32 and their binary codes. *J. Combin. Des.*, 12(2):142–146, 2004.
- [122] C. Archer, P. Cara, and J. Krempa. Using the Frattini subgroup and independent generating sets to study RWPri geometries. *Beiträge Algebra Geom.*, 46(1):169–177, 2005.
- [123] J. Arnaudiès and A. Valibouze. Lagrange resolvents. *J. Pure Appl. Algebra*, 117/118:23–40, 1997. Algorithms for algebra (Eindhoven, 1996).
- [124] D. M. Arquette and D. A. Bulutoglu. The linear programming relaxation permutation symmetry group of an orthogonal array defining integer linear program. *LMS J. Comput. Math.*, 19(1):206–216, 2016.
- [125] E. Artal, J. Carmona, J. I. Cogolludo, and H. Tokunaga. Sextics with singular points in special position. *J. Knot Theory Ramifications*, 10(4):547–578, 2001.
- [126] E. Artal Bartolo. A curve of degree five with non-abelian fundamental group. *Topology Appl.*, 79(1):13–29, 1997.
- [127] E. Artal Bartolo. Fundamental group of a class of rational cuspidal curves. *Manuscripta Math.*, 93(3):273–281, 1997.
- [128] E. Artal Bartolo and J. Carmona Ruber. Zariski pairs, fundamental groups and Alexander polynomials. *J. Math. Soc. Japan*, 50(3):521–543, 1998.
- [129] E. Artal Bartolo, J. Carmona Ruber, and J. I. Cogolludo Agustín. Essential coordinate components of characteristic varieties. *Math. Proc. Cambridge Philos. Soc.*, 136(2):287–299, 2004.
- [130] E. Artal Bartolo, J. Carmona Ruber, and J. I. Cogolludo Agustín. Effective invariants of braid monodromy. *Trans. Amer. Math. Soc.*, 359(1):165–183, 2007.
- [131] E. Artal Bartolo, J. Carmona Ruber, J. I. Cogolludo-Agustín, and M. Marco Buzunáriz. Topology and combinatorics of real line arrangements. *Compos. Math.*, 141(6):1578–1588, 2005.
- [132] E. Artal Bartolo and J. I. Cogolludo-Agustín. On the connection between fundamental groups and pencils with multiple fibers. *J. Singul.*, 2:1–18, 2010.
- [133] E. Artal Bartolo, J. I. Cogolludo-Agustín, and J. Ortigas-Galindo. Kummer covers and braid monodromy. *J. Inst. Math. Jussieu*, 13(3):633–670, 2014.

- [134] M. Asaeda. Galois groups and an obstruction to principal graphs of subfactors. *Internat. J. Math.*, 18(2):191–202, 2007.
- [135] A. K. Asboei, S. S. S. Amiri, A. Iranmanesh, and A. Tehranian. A characterization of sporadic simple groups by nse and order. *J. Algebra Appl.*, 12(2):1250158, 3, 2013.
- [136] A. Ash, D. Pollack, and W. Sinnott. A_6 -extensions of \mathbb{Q} and the mod p cohomology of $GL_3(\mathbb{Z})$. *J. Number Theory*, 115(1):176–196, 2005.
- [137] A. R. Ashrafi. On finite groups with a given number of centralizers. *Algebra Colloq.*, 7(2):139–146, 2000.
- [138] A. R. Ashrafi. On decomposability of finite groups. *J. Korean Math. Soc.*, 41(3):479–487, 2004.
- [139] A. R. Ashrafi. (p, q, r) -generation of the sporadic group HN. *Taiwanese J. Math.*, 10(3):613–629, 2006.
- [140] A. R. Ashrafi and B. Taeri. On finite groups with a certain number of centralizers. *J. Appl. Math. Comput.*, 17(1-2):217–227, 2005.
- [141] A. R. Ashrafi and G. Venkataraman. On finite groups whose every proper normal subgroup is a union of a given number of conjugacy classes. *Proc. Indian Acad. Sci. Math. Sci.*, 114(3):217–224, 2004.
- [142] A. Assi and P. A. García-Sánchez. Constructing the set of complete intersection numerical semigroups with a given Frobenius number. *Appl. Algebra Engrg. Comm. Comput.*, 24(2):133–148, 2013.
- [143] A. Assi and P. A. García-Sánchez. Algorithms for curves with one place at infinity. *J. Symbolic Comput.*, 74:475–492, 2016.
- [144] B. Assmann and B. Eick. Computing polycyclic presentations for polycyclic rational matrix groups. *J. Symbolic Comput.*, 40(6):1269–1284, 2005.
- [145] B. Assmann and B. Eick. Testing polycyclicity of finitely generated rational matrix groups. *Math. Comp.*, 76(259):1669–1682 (electronic), 2007.
- [146] B. Assmann and S. Linton. Using the Mal'cev correspondence for collection in polycyclic groups. *J. Algebra*, 316(2):828–848, 2007.
- [147] R. Atanasov, T. Foguel, and A. Penland. Equal quasi-partition of p -groups. *Results Math.*, 64(1-2):185–191, 2013.
- [148] M. S. Attar. Finite p -groups in which each central automorphism fixes centre elementwise. *Comm. Algebra*, 40(3):1096–1102, 2012.
- [149] A. Aubert, J. Michel, and R. Rouquier. Correspondance de Howe pour les groupes réductifs sur les corps finis. *Duke Math. J.*, 83(2):353–397, 1996.
- [150] P. Aubry and A. Valibouze. Parallel computation of resolvents by multimodular techniques and decomposition formula. *Internat. J. Algebra Comput.*, 22(5):1250043, 21, 2012.

- [151] S. V. Ault. Symmetric homology of algebras. *Algebr. Geom. Topol.*, 10(4):2343–2408, 2010.
- [152] M. Avitabile, G. Jurman, and S. Mattarei. The structure of thin Lie algebras with characteristic two. *Internat. J. Algebra Comput.*, 20(6):731–768, 2010.
- [153] M. Avitabile and S. Mattarei. Thin Lie algebras with diamonds of finite and infinite type. *J. Algebra*, 293(1):34–64, 2005.
- [154] A. Azad and C. E. Praeger. Maximal subsets of pairwise noncommuting elements of three-dimensional general linear groups. *Bull. Aust. Math. Soc.*, 80(1):91–104, 2009.
- [155] A. Azizi, M. Talbi, M. Talbi, A. Derhem, and D. C. Mayer. The group $\text{Gal}(k_3^{(2)}|k)$ for $k = \mathbb{Q}(\sqrt{-3}, \sqrt{d})$ of type $(3, 3)$. *Int. J. Number Theory*, 12(7):1951–1986, 2016.
- [156] H. Bäärnhielm, D. Holt, C. R. Leedham-Green, and E. A. O’Brien. A practical model for computation with matrix groups. *J. Symbolic Comput.*, 68(part 1):27–60, 2015.
- [157] H. Bäärnhielm and C. R. Leedham-Green. The product replacement Prospector. *J. Symbolic Comput.*, 47(1):64–75, 2012.
- [158] L. Babai. Randomization in group algorithms: conceptual questions. In *Groups and computation, II (New Brunswick, NJ, 1995)*, volume 28 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 1–17. Amer. Math. Soc., Providence, RI, 1997.
- [159] L. Babai and I. Pak. Strong bias of group generators: an obstacle to the “product replacement algorithm”. In *Proceedings of the Eleventh Annual ACM-SIAM Symposium on Discrete Algorithms (San Francisco, CA, 2000)*, pages 627–635. ACM, New York, 2000.
- [160] A. Bächle and W. Kimmerle. On torsion subgroups in integral group rings of finite groups. *J. Algebra*, 326:34–46, 2011.
- [161] M. R. Bacon, L. Kappe, and R. F. Morse. On the nonabelian tensor square of a 2-Engel group. *Arch. Math. (Basel)*, 69(5):353–364, 1997.
- [162] L. Bader, D. Ghinelli, and T. Penttila. On monomial flocks. *European J. Combin.*, 22(4):447–454, 2001.
- [163] E. Badr and F. Bars. Automorphism groups of nonsingular plane curves of degree 5. *Comm. Algebra*, 44(10):4327–4340, 2016.
- [164] E. Badr and F. Bars. Non-singular plane curves with an element of “large” order in its automorphism group. *Internat. J. Algebra Comput.*, 26(2):399–433, 2016.
- [165] C. Bagiński and A. Konovalov. On 2-groups of almost maximal class. *Publ. Math. Debrecen*, 65(1-2):97–131, 2004.
- [166] C. Bagiński and A. Konovalov. The modular isomorphism problem for finite p -groups with a cyclic subgroup of index p^2 . In *Groups St. Andrews 2005. Vol. 1*, volume 339 of *London Math. Soc. Lecture Note Ser.*, pages 186–193. Cambridge Univ. Press, Cambridge, 2007.
- [167] G. D. Bailey. Coherence and enumeration of tilings of 3-zonotopes. *Discrete Comput. Geom.*, 22(1):119–147, 1999.

- [168] R. A. Bailey, P. J. Cameron, and R. Connelly. Sudoku, gerechte designs, resolutions, affine space, spreads, reguli, and Hamming codes. *Amer. Math. Monthly*, 115(5):383–404, 2008.
- [169] R. A. Bailey, P. J. Cameron, P. Dobcsányi, J. P. Morgan, and L. H. Soicher. Designs on the web. *Discrete Math.*, 306(23):3014–3027, 2006.
- [170] R. F. Bailey. Uncoverings-by-bases for base-transitive permutation groups. *Des. Codes Cryptogr.*, 41(2):153–176, 2006.
- [171] R. F. Bailey. Error-correcting codes from permutation groups. *Discrete Math.*, 309(13):4253–4265, 2009.
- [172] R. F. Bailey. The metric dimension of small distance-regular and strongly regular graphs. *Australas. J. Combin.*, 62:18–34, 2015.
- [173] R. F. Bailey, J. Cáceres, D. Garijo, A. González, A. Márquez, K. Meagher, and M. L. Puertas. Resolving sets for Johnson and Kneser graphs. *European J. Combin.*, 34(4):736–751, 2013.
- [174] R. F. Bailey and J. P. Dixon. Distance enumerators for permutation groups. *Comm. Algebra*, 35(10):3045–3051, 2007.
- [175] R. F. Bailey and T. Prellberg. Decoding generalised hyperoctahedral groups and asymptotic analysis of correctible error patterns. *Contrib. Discrete Math.*, 7(1):1–14, 2012.
- [176] R. F. Bailey and B. Stevens. Hamiltonian decompositions of complete k -uniform hypergraphs. *Discrete Math.*, 310(22):3088–3095, 2010.
- [177] S. J. Baishya. Revisiting the Leinster groups. *C. R. Math. Acad. Sci. Paris*, 352(1):1–6, 2014.
- [178] S. J. Baishya and A. K. Das. Harmonic numbers and finite groups. *Rend. Semin. Mat. Univ. Padova*, 132:33–43, 2014.
- [179] M. D. Baker. Link complements and the Bianchi modular groups. *Trans. Amer. Math. Soc.*, 353(8):3229–3246, 2001.
- [180] M. Balagović and C. Policastro. Category \mathcal{O} for the rational Cherednik algebra associated to the complex reflection group G_{12} . *J. Pure Appl. Algebra*, 216(4):857–875, 2012.
- [181] J. Ballantyne, C. Bates, and P. Rowley. The maximal subgroups of $E_7(2)$. *LMS J. Comput. Math.*, 18(1):323–371, 2015.
- [182] J. Ballantyne and P. Rowley. Local fusion graphs and sporadic simple groups. *Electron. J. Combin.*, 22(3):Paper 3.18, 13, 2015.
- [183] A. Ballester-Bolinches, E. Cosme-Llópez, and R. Esteban-Romero. Algorithms for permutability in finite groups. *Cent. Eur. J. Math.*, 11(11):1914–1922, 2013.
- [184] A. Ballester-Bolinches and R. Esteban-Romero. On a question of Beidleman and Robinson. *Comm. Algebra*, 30(12):5757–5770, 2002.

- [185] B. Ballinger, G. Blekherman, H. Cohn, N. Giansiracusa, E. Kelly, and A. Schürmann. Experimental study of energy-minimizing point configurations on spheres. *Experiment. Math.*, 18(3):257–283, 2009.
- [186] Z. Balogh. Further results on a filtered multiplicative basis of group algebras. *Math. Commun.*, 12(2):229–238, 2007.
- [187] Z. Balogh and T. Juhász. Nilpotency class of symmetric units of group algebras. *Publ. Math. Debrecen*, 79(1-2):171–180, 2011.
- [188] Z. Balogh and Y. Li. On the derived length of the group of units of a group algebra. *J. Algebra Appl.*, 6(6):991–999, 2007.
- [189] J. Bamberg, A. Devillers, J. B. Fawcett, and C. E. Praeger. Locally triangular graphs and rectagraphs with symmetry. *J. Combin. Theory Ser. A*, 133:1–28, 2015.
- [190] J. Bamberg, S. P. Glasby, and E. Swartz. AS-configurations and skew-translation generalised quadrangles. *J. Algebra*, 421:311–330, 2015.
- [191] J. Bamberg and T. Penttila. Transitive eggs. *Innov. Incidence Geom.*, 4:1–12, 2006.
- [192] J. Bamberg and T. Penttila. Overgroups of cyclic Sylow subgroups of linear groups. *Comm. Algebra*, 36(7):2503–2543, 2008.
- [193] D. C. Banks, S. A. Linton, and P. K. Stockmeyer. Counting cases in subitope algorithms. *IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS*, 10(4):371–384, JUL–AUG 2004.
- [194] P. Bantay. Permutation orbifolds and their applications. In *Vertex operator algebras in mathematics and physics (Toronto, ON, 2000)*, volume 39 of *Fields Inst. Commun.*, pages 13–23. Amer. Math. Soc., Providence, RI, 2003.
- [195] P. H. Baptistelli and M. Manoel. The σ -isotypic decomposition and the σ -index of reversible-equivariant systems. *Topology Appl.*, 159(2):389–396, 2012.
- [196] M. Barakat and M. Cuntz. Coxeter and crystallographic arrangements are inductively free. *Adv. Math.*, 229(1):691–709, 2012.
- [197] M. Barakat and M. Lange-Hegermann. An axiomatic setup for algorithmic homological algebra and an alternative approach to localization. *J. Algebra Appl.*, 10(2):269–293, 2011.
- [198] M. Barakat and M. Lange-Hegermann. On the Ext-computability of Serre quotient categories. *J. Algebra*, 420:333–349, 2014.
- [199] V. G. Bardakov and A. Y. Vesnin. On a generalization of Fibonacci groups. *Algebra Logika*, 42(2):131–160, 255, 2003.
- [200] M. K. Bardoe. The universal embedding for the involution geometry of the Suzuki sporadic simple group. *J. Algebra*, 186(2):447–460, 1996.
- [201] M. K. Bardoe. The universal embedding for the $U_4(3)$ involution geometry. *J. Algebra*, 186(2):368–383, 1996.

- [202] M. K. Bardoe. The universal embedding for the involution geometry of Co_1 . *J. Algebra*, 217(2):555–572, 1999.
- [203] A. Barg. Complexity issues in coding theory. In *Handbook of coding theory, Vol. I, II*, pages 649–754. North-Holland, Amsterdam, 1998.
- [204] J. W. Barnes, B. W. Colletti, and D. L. Neuway. Using group theory and transition matrices to study a class of metaheuristic neighborhoods. *European J. Oper. Res.*, 138(3):531–544, 2002.
- [205] R. W. Barraclough. The character table of a group of shape $(2 \times 2 \cdot G):2$. *LMS J. Comput. Math.*, 13:82–89, 2010.
- [206] R. W. Barraclough and R. A. Wilson. The character table of a maximal subgroup of the Monster. *LMS J. Comput. Math.*, 10:161–175, 2007.
- [207] F. Barry, D. MacHale, and A. Ní Shé. Some supersolvability conditions for finite groups. *Math. Proc. R. Ir. Acad.*, 106A(2):163–177, 2006.
- [208] L. Bartholdi. Lamps, factorizations, and finite fields. *Amer. Math. Monthly*, 107(5):429–436, 2000.
- [209] L. Bartholdi. Endomorphic presentations of branch groups. *J. Algebra*, 268(2):419–443, 2003.
- [210] L. Bartholdi. The 2-dimension series of the just-nonsolvable BSV group. *New Zealand J. Math.*, 33(1):17–23, 2004.
- [211] L. Bartholdi. Lie algebras and growth in branch groups. *Pacific J. Math.*, 218(2):241–282, 2005.
- [212] L. Bartholdi. Branch rings, thinned rings, tree enveloping rings. *Israel J. Math.*, 154:93–139, 2006.
- [213] L. Bartholdi. Automorphisms of free groups. I. *New York J. Math.*, 19:395–421, 2013.
- [214] L. Bartholdi, X. Buff, H. Graf von Bothmer, and J. Kröker. Algorithmic construction of Hurwitz maps. *Exp. Math.*, 24(1):76–92, 2015.
- [215] L. Bartholdi and M. R. Bush. Maximal unramified 3-extensions of imaginary quadratic fields and $\text{SL}_2(\mathbb{Z}_3)$. *J. Number Theory*, 124(1):159–166, 2007.
- [216] L. Bartholdi and P. de la Harpe. Representation zeta functions of wreath products with finite groups. *Groups Geom. Dyn.*, 4(2):209–249, 2010.
- [217] L. Bartholdi, B. Enriquez, P. Etingof, and E. Rains. Groups and Lie algebras corresponding to the Yang-Baxter equations. *J. Algebra*, 305(2):742–764, 2006.
- [218] L. Bartholdi and S. N. Sidki. The automorphism tower of groups acting on rooted trees. *Trans. Amer. Math. Soc.*, 358(1):329–358 (electronic), 2006.

- [219] E. A. Bartolo, J. C. Ruber, and J. I. C. Agustin. Essential coordinate components of characteristic varieties. *MATHEMATICAL PROCEEDINGS OF THE CAMBRIDGE PHILOSOPHICAL SOCIETY*, 136:287–299, MAR 2004.
- [220] A. B. M. Basheer and T. T. Seretlo. On a group of the form $2^{14} : Sp(6, 2)$. *Quaest. Math.*, 39(1):45–57, 2016.
- [221] R. Bastos and A. C. Dantas. On finite groups with few automorphism orbits. *Comm. Algebra*, 44(7):2953–2958, 2016.
- [222] C. Bates, D. Bundy, S. Hart, and P. Rowley. Commuting involution graphs for sporadic simple groups. *J. Algebra*, 316(2):849–868, 2007.
- [223] C. Bates and P. Rowley. Involutions in Conway’s largest simple group. *LMS J. Comput. Math.*, 7:337–351, 2004.
- [224] C. Bates and P. Rowley. Centralizers of real elements in finite groups. *Arch. Math. (Basel)*, 85(6):485–489, 2005.
- [225] C. Bates and P. Rowley. Normalizers of p -subgroups in finite groups. *Arch. Math. (Basel)*, 92(1):7–13, 2009.
- [226] N. Bauermeister. Automorphismen von Steinersystemen $S(t, t + 2, v)$. Diplomarbeit, Universität Hannover, STRING-NOT-KNOWN: jan 2002.
- [227] B. Baumeister, C. Haase, B. Nill, and A. Paffenholz. On permutation polytopes. *Adv. Math.*, 222(2):431–452, 2009.
- [228] B. Baumeister, G. Kaplan, and D. Levy. Covering a finite group by the conjugates of a coset. *J. Algebra*, 448:84–103, 2016.
- [229] G. Baumslag, S. Cleary, and G. Havas. Experimenting with infinite groups. I. *Experiment. Math.*, 13(4):495–502, 2004.
- [230] K. Baur and J. Draisma. Higher secant varieties of the minimal adjoint orbit. *J. Algebra*, 280(2):743–761, 2004.
- [231] K. Baur, J. Draisma, and W. A. de Graaf. Secant dimensions of minimal orbits: computations and conjectures. *Experiment. Math.*, 16(2):239–250, 2007.
- [232] R. Beals. Algorithms for matrix groups and the Tits alternative. *J. Comput. System Sci.*, 58(2):260–279, 1999. 36th IEEE Symposium on the Foundations of Computer Science (Milwaukee, WI, 1995).
- [233] R. Beals. Improved algorithms for the Tits alternative. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 63–77. de Gruyter, Berlin, 2001.
- [234] R. Beals and L. Babai. Las Vegas algorithms for matrix groups. In *34th Annual Symposium on Foundations of Computer Science (Palo Alto, CA, 1993)*, pages 427–436. IEEE Comput. Soc. Press, Los Alamitos, CA, 1993.

- [235] R. Beals, C. R. Leedham-Green, A. C. Niemeyer, C. E. Praeger, and A. Seress. Constructive recognition of finite alternating and symmetric groups acting as matrix groups on their natural permutation modules. *J. Algebra*, 292(1):4–46, 2005.
- [236] P. E. Becker. Investigation of solvable (120, 35, 10) difference sets. *J. Combin. Des.*, 13(2):79–107, 2005.
- [237] K. I. Beidar, W. Ke, and H. Kiechle. Circularity of finite groups without fixed points. *Monatsh. Math.*, 144(4):265–273, 2005.
- [238] K. I. Beidar, W. Ke, and H. Kiechle. Automorphisms of certain design groups. II. *J. Algebra*, 313(2):672–686, 2007.
- [239] J. C. Beidleman and M. F. Ragland. The intersection map of subgroups and certain classes of finite groups. *Ric. Mat.*, 56(2):217–227, 2007.
- [240] P. D. Beites, A. P. Nicolás, A. P. Pozhidaev, and P. Saraiva. On identities of a ternary quaternion algebra. *Comm. Algebra*, 39(3):830–842, 2011.
- [241] A. Beltrán. Invariant Sylow subgroups and solvability of finite groups. *Arch. Math. (Basel)*, 106(2):101–106, 2016.
- [242] A. Beltrán and M. J. Felipe. Finite groups with a disconnected p -regular conjugacy class graph. *Comm. Algebra*, 32(9):3503–3516, 2004.
- [243] A. Beltrán, M. J. Felipe, G. Malle, A. Moretó, G. Navarro, L. Sanus, R. Solomon, and P. H. Tiep. Nilpotent and abelian Hall subgroups in finite groups. *Trans. Amer. Math. Soc.*, 368(4):2497–2513, 2016.
- [244] A. Beltrán, M. J. Felipe, and C. Melchor. Graphs associated to conjugacy classes of normal subgroups in finite groups. *J. Algebra*, 443:335–348, 2015.
- [245] A. Beltrán, M. J. Felipe, and C. Shao. Class sizes of prime-power order p' -elements and normal subgroups. *Ann. Mat. Pura Appl. (4)*, 194(5):1527–1533, 2015.
- [246] A. Beltrán, M. J. Felipe, and C. Shao. p -divisibility of conjugacy class sizes and normal p -complements. *J. Group Theory*, 18(1):133–141, 2015.
- [247] A. Benini and F. Morini. Partially balanced incomplete block designs from weakly divisible nearrings. *Discrete Math.*, 301(1):34–45, 2005.
- [248] C. D. Bennett and S. Shpectorov. A new proof of a theorem of Phan. *J. Group Theory*, 7(3):287–310, 2004.
- [249] A. Berczky. Maximal overgroups of Singer elements in classical groups. *J. Algebra*, 234(1):187–206, 2000.
- [250] J. Berenbom, J. Fendel, G. T. Gilbert, and R. L. Hatcher. Sliding piece puzzles with oriented tiles. *Discrete Math.*, 175(1-3):23–33, 1997.
- [251] C. Bergman and G. Slutzki. Computational complexity of generators and nongenerators in algebra. *Internat. J. Algebra Comput.*, 12(5):719–735, 2002.

- [252] L. W. Berman, M. Mixer, B. Monson, D. Oliveros, and G. Williams. The monodromy group of the n -pyramid. *Discrete Math.*, 320:55–63, 2014.
- [253] L. W. Berman, B. Monson, D. Oliveros, and G. I. Williams. The monodromy group of a truncated simplex. *J. Algebraic Combin.*, 42(3):745–761, 2015.
- [254] J. J. Bernal, D. H. Bueno-Carreño, and J. J. Simón. Cyclic and BCH codes whose minimum distance equals their maximum BCH bound. *Adv. Math. Commun.*, 10(2):459–474, 2016.
- [255] H. Besche. Die Berechnung von Charaktergraden und Charakteren endlicher auflösbarer Gruppen im Computeralgebrasystem GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1992.
- [256] H. U. Besche and B. Eick. The groups of order at most 1000 except 512 and 768. *J. Symbolic Comput.*, 27(4):405–413, 1999.
- [257] H. U. Besche and B. Eick. The groups of order $q^n \cdot p$. *Comm. Algebra*, 29(4):1759–1772, 2001.
- [258] H. U. Besche, B. Eick, and E. A. O’Brien. The groups of order at most 2000. *Electron. Res. Announc. Amer. Math. Soc.*, 7:1–4, 2001.
- [259] H. U. Besche, B. Eick, and E. A. O’Brien. A millennium project: constructing small groups. *Internat. J. Algebra Comput.*, 12(5):623–644, 2002.
- [260] C. Bessenrodt and C. Behns. On the Durfee size of Kronecker products of characters of the symmetric group and its double covers. *J. Algebra*, 280(1):132–144, 2004.
- [261] C. Bessenrodt and A. S. Kleshchev. Irreducible tensor products over alternating groups. *J. Algebra*, 228(2):536–550, 2000.
- [262] C. Bessenrodt, G. Malle, and J. B. Olsson. Separating characters by blocks. *J. London Math. Soc. (2)*, 73(2):493–505, 2006.
- [263] D. Bessis. Sur le corps de définition d’un groupe de réflexions complexe. *Comm. Algebra*, 25(8):2703–2716, 1997.
- [264] D. Bessis. The dual braid monoid. *Ann. Sci. École Norm. Sup. (4)*, 36(5):647–683, 2003.
- [265] D. Bessis and J. Michel. Explicit presentations for exceptional braid groups. *Experiment. Math.*, 13(3):257–266, 2004.
- [266] A. Betten, A. Delandtsheer, M. Law, A. C. Niemeyer, C. E. Praeger, and S. Zhou. Finite line-transitive linear spaces: theory and search strategies. *Acta Math. Sin. (Engl. Ser.)*, 25(9):1399–1436, 2009.
- [267] C. Bhattacharya and K. W. Smith. Factoring $(16, 6, 2)$ Hadamard difference sets. *Electron. J. Combin.*, 15(1):Research Paper 112, 16, 2008.
- [268] B. Bhattacharyya. Group actions on graphs related to Krishnan-Sunder subfactors. *Trans. Amer. Math. Soc.*, 355(2):433–463 (electronic), 2003.

- [269] J. N. S. Bidwell. Automorphisms of direct products of finite groups. II. *Arch. Math. (Basel)*, 91(2):111–121, 2008.
- [270] J. N. S. Bidwell and M. J. Curran. The automorphism group of a split metacyclic p -group. *Arch. Math. (Basel)*, 87(6):488–497, 2006.
- [271] J. N. S. Bidwell and M. J. Curran. Corrigendum to “The automorphism group of a split metacyclic p -group”. [Arch. Math. 87 (2006) 488–497] [see 2283679]. *Arch. Math. (Basel)*, 92(1):14–18, 2009.
- [272] J. N. S. Bidwell and M. J. Curran. Automorphisms of finite abelian groups. *Math. Proc. R. Ir. Acad.*, 110A(1):57–71, 2010.
- [273] T. Bilgin, N. Gorentas, and I. G. Kelebek. Characterization of central units of $\mathbb{Z}A_n$. *J. Korean Math. Soc.*, 47(6):1239–1252, 2010.
- [274] M. Biliotti and A. Montinaro. On $PGL(2, q)$ -invariant unitals embedded in Desarguesian or in Hughes planes. *Finite Fields Appl.*, 24:66–87, 2013.
- [275] L. J. Billera, H. Thomas, and S. van Willigenburg. Decomposable compositions, symmetric quasisymmetric functions and equality of ribbon Schur functions. *Adv. Math.*, 204(1):204–240, 2006.
- [276] F. Binder and P. Mayr. Algorithms for finite near-rings and their N -groups. *J. Symbolic Comput.*, 32(1-2):23–38, 2001. Computer algebra and mechanized reasoning (St. Andrews, 2000).
- [277] T. Bischops. Collectoren im Programmsystem GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, June 1989.
- [278] A. Bishnoi and B. De Bruyn. A new near octagon and the Suzuki tower. *Electron. J. Combin.*, 23(2):Paper 2.35, 24, 2016.
- [279] A. Bishnoi and B. De Bruyn. On semi-finite hexagons of order $(2, t)$ containing a subhexagon. *Ann. Comb.*, 20(3):433–452, 2016.
- [280] M. Bishop, J. M. Douglass, G. Pfeiffer, and G. Röhrle. Computations for Coxeter arrangements and Solomon’s descent algebra: Groups of rank three and four. *J. Symbolic Comput.*, 50:139–158, 2013.
- [281] M. Bishop, J. M. Douglass, G. Pfeiffer, and G. Röhrle. Computations for Coxeter arrangements and Solomon’s descent algebra II: Groups of rank five and six. *J. Algebra*, 377:320–332, 2013.
- [282] M. Bishop, J. M. Douglass, G. Pfeiffer, and G. Röhrle. Computations for Coxeter arrangements and Solomon’s descent algebra III: Groups of rank seven and eight. *J. Algebra*, 423:1213–1232, 2015.
- [283] C. Bisi and F. Polizzi. On proper polynomial maps of \mathbb{C}^2 . *J. Geom. Anal.*, 20(1):72–89, 2010.

- [284] A. Björner and F. H. Lutz. Simplicial manifolds, bistellar flips and a 16-vertex triangulation of the Poincaré homology 3-sphere. *Experiment. Math.*, 9(2):275–289, 2000.
- [285] P. F. Blanchard. Exceptional group ring automorphisms for groups of order 96. *Comm. Algebra*, 29(11):4823–4830, 2001.
- [286] V. Blanco, P. A. García-Sánchez, and A. Geroldinger. Semigroup-theoretical characterizations of arithmetical invariants with applications to numerical monoids and Krull monoids. *Illinois J. Math.*, 55(4):1385–1414 (2013), 2011.
- [287] V. Blanco, P. A. García-Sánchez, and J. Puerto. Counting numerical semigroups with short generating functions. *Internat. J. Algebra Comput.*, 21(7):1217–1235, 2011.
- [288] V. Blanco and J. Puerto. An application of integer programming to the decomposition of numerical semigroups. *SIAM J. Discrete Math.*, 26(3):1210–1237, 2012.
- [289] V. Blanco and J. C. Rosales. Irreducibility in the set of numerical semigroups with fixed multiplicity. *Internat. J. Algebra Comput.*, 21(5):731–744, 2011.
- [290] V. Blanco and J. C. Rosales. On the enumeration of the set of numerical semigroups with fixed Frobenius number. *Comput. Math. Appl.*, 63(7):1204–1211, 2012.
- [291] F. M. Bleher. Tensor products and a conjecture of Zassenhaus. *Arch. Math. (Basel)*, 64(4):289–298, 1995.
- [292] F. M. Bleher. Finite groups of Lie type of small rank. *Pacific J. Math.*, 187(2):215–239, 1999.
- [293] F. M. Bleher, M. Geck, and W. Kimmerle. Automorphisms of generic Iwahori-Hecke algebras and integral group rings of finite Coxeter groups. *J. Algebra*, 197(2):615–655, 1997.
- [294] F. M. Bleher, G. Hiss, and W. Kimmerle. Autoequivalences of blocks and a conjecture of Zassenhaus. *J. Pure Appl. Algebra*, 103(1):23–43, 1995.
- [295] W. Bley and R. Boltje. Cohomological Mackey functors in number theory. *J. Number Theory*, 105(1):1–37, 2004.
- [296] R. D. Blyth and R. F. Morse. Computing the nonabelian tensor squares of polycyclic groups. *J. Algebra*, 321(8):2139–2148, 2009.
- [297] R. D. Blyth, R. F. Morse, and J. L. Redden. On computing the non-abelian tensor squares of the free 2-Engel groups. *Proc. Edinb. Math. Soc. (2)*, 47(2):305–323, 2004.
- [298] R. Bocklandt. Graded Calabi Yau algebras of dimension 3. *J. Pure Appl. Algebra*, 212(1):14–32, 2008.
- [299] B. D. Boe. Geometry of the Jantzen region in Lusztig’s conjecture. *Math. Comp.*, 70(235):1265–1280, 2001.
- [300] B. D. Boe and W. Graham. A lookup conjecture for rational smoothness. *Amer. J. Math.*, 125(2):317–356, 2003.

- [301] M. Bogaerts. New upper bounds for the size of permutation codes via linear programming. *Electron. J. Combin.*, 17(1):Research Paper 135, 9, 2010.
- [302] M. Bogdanov and M. Teillaud. Delaunay triangulations and cycles on closed hyperbolic surfaces. Research Report 8434, INRIA, STRING-NOT-KNOWN: dec 2013.
- [303] W. A. Bogley. On shift dynamics for cyclically presented groups. *J. Algebra*, 418:154–173, 2014.
- [304] J. Bohli, R. Steinwandt, M. I. González Vasco, and C. Martínez. Weak keys in MST_1 . *Des. Codes Cryptogr.*, 37(3):509–524, 2005.
- [305] J. Bokowski, A. Guedes de Oliveira, U. Thiemann, and A. Veloso da Costa. On the cube problem of Las Vergnas. *Geom. Dedicata*, 63(1):25–43, 1996.
- [306] I. V. Bondarenko, N. V. Bondarenko, S. N. Sidki, and F. R. Zapata. On the conjugacy problem for finite-state automorphisms of regular rooted trees. *Groups Geom. Dyn.*, 7(2):323–355, 2013. With an appendix by Raphaël M. Jungers.
- [307] A. Bonisoli and S. Bonvicini. On the existence spectrum for sharply transitive G -designs, G a $[k]$ -matching. *Discrete Math.*, 332:60–68, 2014.
- [308] A. Bonisoli and G. Korchmáros. Irreducible collineation groups fixing a hyperoval. *J. Algebra*, 252(2):431–448, 2002.
- [309] A. Bonisoli and D. Labbate. One-factorizations of complete graphs with vertex-regular automorphism groups. *J. Combin. Des.*, 10(1):1–16, 2002.
- [310] A. Bonisoli and G. Rinaldi. Primitive collineation groups of ovals with a fixed point. *European J. Combin.*, 24(7):797–807, 2003.
- [311] C. Bonnafé. On the character ring of a finite group. In *Algèbre et théorie des nombres. Années 2003–2006*, Publ. Math. Univ. Franche-Comté Besançon Algèbr. Theor. Nr., pages 5–23. Lab. Math. Besançon, Besançon, 2006.
- [312] C. Bonnafé and J. Michel. Computational proof of the Mackey formula for $q > 2$. *J. Algebra*, 327:506–526, 2011.
- [313] O. Bonten. *Über Kommutatoren in endlichen einfachen Gruppen*. PhD thesis, RWTH, Aachen, 1993.
- [314] S. Bonvicini. Frattini-based starters in 2-groups. *Discrete Math.*, 308(2-3):380–381, 2008.
- [315] S. Bonvicini and B. Ruini. Symmetric bowtie decompositions of the complete graph. *Electron. J. Combin.*, 17(1):Research Paper 101, 19, 2010.
- [316] A. R. Booker. Artin’s conjecture, Turing’s method, and the Riemann hypothesis. *Experiment. Math.*, 15(4):385–407, 2006.
- [317] M. A. Borges-Trenard, M. Borges-Quintana, J. A. Castellanos-Garzón, and E. Martínez-Moro. The symmetric group given by a Gröbner basis. *J. Pure Appl. Algebra*, 207(1):149–154, 2006.

- [318] M. A. Borges Trenard and H. Pérez Rosés. Characterizing the normal forms of a finitely presented monoid. In *Fourth Italian-Latin American Conference on Applied and Industrial Mathematics (Havana, 2001)*, pages 294–300. Inst. Cybern. Math. Phys., Havana, 2001.
- [319] M. A. Borges-Trenard and H. Pérez-Rosés. Enumerating words in finitely presented monoids. *Investigación Oper.*, 22(1):62–66, 2001. 4th International Conference on Operations Research (Havana, 2000).
- [320] A. Borovik and J. Burdges. A new trichotomy theorem for groups of finite Morley rank. *J. Lond. Math. Soc. (2)*, 77(1):1–14, 2008.
- [321] A. V. Borovik. Orthogonal and symplectic black box groups, revisited. math.GR/0110234, 2002.
- [322] A. Bors. Classification of finite group automorphisms with a large cycle. *Comm. Algebra*, 44(11):4823–4843, 2016.
- [323] K. Bou-Rabee and B. Seward. Generalizing Magnus’ characterization of free groups to some free products. *Comm. Algebra*, 42(9):3950–3962, 2014.
- [324] S. Bouc. The slice Burnside ring and the section Burnside ring of a finite group. *Compos. Math.*, 148(3):868–906, 2012.
- [325] S. Bouc. The Roquette category of finite p -groups. *J. Eur. Math. Soc. (JEMS)*, 17(11):2843–2886, 2015.
- [326] S. Bouc, R. Stancu, and J. Thévenaz. Simple biset functors and double Burnside ring. *J. Pure Appl. Algebra*, 217(3):546–566, 2013.
- [327] S. Bouyuklieva, W. Willems, and N. Yankov. On the automorphisms of order 15 for a binary self-dual $[96, 48, 20]$ code. *Des. Codes Cryptogr.*, 79(1):171–182, 2016.
- [328] A. Bovdi and L. Erdei. Unitary units in modular group algebras of 2-groups. *Comm. Algebra*, 28(2):625–630, 2000.
- [329] V. Bovdi. Group rings in which the group of units is hyperbolic. *J. Group Theory*, 15(2):227–235, 2012.
- [330] V. Bovdi and M. Hertweck. Zassenhaus conjecture for central extensions of S_5 . *J. Group Theory*, 11(1):63–74, 2008.
- [331] V. Bovdi, C. Höfert, and W. Kimmerle. On the first Zassenhaus conjecture for integral group rings. *Publ. Math. Debrecen*, 65(3-4):291–303, 2004.
- [332] V. Bovdi and A. Konovalov. Wreath products in unit groups of modular group algebras of some finite 2-groups. In *A Conference in Honor of Albert Bovdi’s 70th Birthday. Abstracts. Debrecen, Hungary, November 18–23*, pages 26–27, 2005.
- [333] V. Bovdi and A. Konovalov. Integral group ring of the first Mathieu simple group. In *Groups St. Andrews 2005. Vol. 1*, volume 339 of *London Math. Soc. Lecture Note Ser.*, pages 237–245. Cambridge Univ. Press, Cambridge, 2007.

- [334] V. Bovdi and A. Konovalov. Integral group ring of the Mathieu simple group M_{24} . *J. Algebra Appl.*, 11(1):1250016, 10, 2012.
- [335] V. A. Bovdi, E. Jespers, and A. B. Konovalov. Torsion units in integral group rings of Janko simple groups. *Math. Comp.*, 80(273):593–615, 2011.
- [336] V. A. Bovdi and A. B. Konovalov. Integral group ring of the Mathieu simple group M_{23} . *Comm. Algebra*, 36(7):2670–2680, 2008.
- [337] V. A. Bovdi and A. B. Konovalov. Integral group ring of Rudvalis simple group. *Ukraïn. Mat. Zh.*, 61(1):3–13, 2009.
- [338] V. A. Bovdi and A. B. Konovalov. Torsion units in integral group ring of Higman-Sims simple group. *Studia Sci. Math. Hungar.*, 47(1):1–11, 2010.
- [339] V. A. Bovdi, A. B. Konovalov, and S. Linton. Torsion units in integral group ring of the Mathieu simple group M_{22} . *LMS J. Comput. Math.*, 11:28–39, 2008.
- [340] V. A. Bovdi, A. B. Konovalov, and S. Linton. Torsion units in integral group rings of Conway simple groups. *Internat. J. Algebra Comput.*, 21(4):615–634, 2011.
- [341] V. A. Bovdi, A. B. Konovalov, and E. d. N. Marcos. Integral group ring of the Suzuki sporadic simple group. *Publ. Math. Debrecen*, 72(3-4):487–503, 2008.
- [342] V. A. Bovdi, A. B. Konovalov, and S. Siciliano. Integral group ring of the Mathieu simple group M_{12} . *Rend. Circ. Mat. Palermo (2)*, 56(1):125–136, 2007.
- [343] S. Boyd, P. Diaconis, P. Parrilo, and L. Xiao. Fastest mixing Markov chain on graphs with symmetries. *SIAM J. Optim.*, 20(2):792–819, 2009.
- [344] T. Boykett and K. Howell. The multiplicative automorphisms of a finite nearfield, with an application. *Comm. Algebra*, 44(6):2336–2350, 2016.
- [345] N. Boyko, A. Konovalov, and E. Shepel. Wreath products in the unit group of the modular group algebra of the group $g(32,15)$. In *Actual problems of mathematics and computer science. 2nd regional scientific conference of young researchers. Zaporozhye, Ukraine, April 22–23, 2004*, pages 32–33, 2004.
- [346] Y. Boyko, A. Konovalov, and A. Gnezdovsky. Investigation of linearly independent subgroups of unit groups of modular group algebras of finite 2-groups. In *Actual problems of mathematics and computer science. 2nd regional scientific conference of young researchers. Zaporozhye, Ukraine, April 22–23, 2004*, pages 24–25, 2004.
- [347] J. D. Bradley and S. M. Goodwin. Conjugacy classes in Sylow p -subgroups of finite Chevalley groups in bad characteristic. *Comm. Algebra*, 42(8):3245–3258, 2014.
- [348] S. BraiĆ. Primitive symmetric designs with at most 255 points. *Glas. Mat. Ser. III*, 45(65)(2):291–305, 2010.
- [349] S. BraiĆ, A. Golemac, J. Mandić, and T. Vučićić. Graphs and symmetric designs corresponding to difference sets in groups of order 96. *Glas. Mat. Ser. III*, 45(65)(1):1–14, 2010.

- [350] S. Braić, A. Golemac, J. Mandić, and T. Vučićić. Primitive symmetric designs with prime power number of points. *J. Combin. Des.*, 18(2):141–154, 2010.
- [351] S. Braić, A. Golemac, J. Mandić, and T. Vučićić. Primitive symmetric designs with up to 2500 points. *J. Combin. Des.*, 19(6):463–474, 2011.
- [352] S. Braić, J. Mandić, and T. Vučićić. Primitive block designs with automorphism group $\text{PSL}(2, q)$. *Glas. Mat. Ser. III*, 50(70)(1):1–15, 2015.
- [353] S. Bratus and I. Pak. Fast constructive recognition of a black box group isomorphic to S_n or A_n using Goldbach’s conjecture. *J. Symbolic Comput.*, 29(1):33–57, 2000.
- [354] P. Bravi, J. Gandini, and A. Maffei. Projective normality of model varieties and related results. *Represent. Theory*, 20:39–93, 2016.
- [355] J. Bray, C. Parker, and P. Rowley. Cayley type graphs and cubic graphs of large girth. *Discrete Math.*, 214(1-3):113–121, 2000.
- [356] J. N. Bray and R. T. Curtis. Double coset enumeration of symmetrically generated groups. *J. Group Theory*, 7(2):167–185, 2004.
- [357] J. N. Bray, I. A. I. Suleiman, P. G. Walsh, and R. A. Wilson. Generating maximal subgroups of sporadic simple groups. *Comm. Algebra*, 29(3):1325–1337, 2001.
- [358] A. Breda d’Azevedo, D. A. Catalano, and R. Duarte. Regular pseudo-oriented maps and hypermaps of low genus. *Discrete Math.*, 338(6):895–921, 2015.
- [359] A. Breda d’Azevedo and R. Duarte. Bipartite-uniform hypermaps on the sphere. *Electron. J. Combin.*, 14(1):Research Paper 5, 20, 2007.
- [360] A. Breda D’Azevedo and G. A. Jones. Totally chiral maps and hypermaps of small genus. *J. Algebra*, 322(11):3971–3996, 2009.
- [361] K. Bremke. The decomposition numbers of Hecke algebras of type F_4 with unequal parameters. *Manuscripta Math.*, 83(3-4):331–346, 1994.
- [362] K. Bremke and G. Malle. Reduced words and a length function for $G(e, 1, n)$. *Indag. Math. (N.S.)*, 8(4):453–469, 1997.
- [363] D. Bremner, M. Dutour Sikirić, D. V. Pasechnik, T. Rehn, and A. Schürmann. Computing symmetry groups of polyhedra. *LMS J. Comput. Math.*, 17(1):565–581, 2014.
- [364] A. Bretto and A. Faisant. Cayley graphs and G -graphs: some applications. *J. Symbolic Comput.*, 46(12):1403–1412, 2011.
- [365] A. Bretto, A. Faisant, and L. Gillibert. G -graphs: a new representation of groups. *J. Symbolic Comput.*, 42(5):549–560, 2007.
- [366] T. Breuer. Potenzabbildungen, Untergruppenfusionen, Tafel-Automorphismen. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, April 1991.

- [367] T. Breuer. Subgroups of J_4 inducing the same permutation character. *Comm. Algebra*, 23(9):3173–3176, 1995.
- [368] T. Breuer. Integral bases for subfields of cyclotomic fields. *Appl. Algebra Engrg. Comm. Comput.*, 8(4):279–289, 1997.
- [369] T. Breuer. Computing possible class fusions from character tables. *Comm. Algebra*, 27(6):2733–2748, 1999.
- [370] T. Breuer. *Characters and automorphism groups of compact Riemann surfaces*, volume 280 of *London Mathematical Society Lecture Note Series*. Cambridge University Press, Cambridge, 2000.
- [371] T. Breuer. Computing character tables of groups of type $M.G.A.$ *LMS J. Comput. Math.*, 14:173–178, 2011.
- [372] T. Breuer, R. M. Guralnick, and W. M. Kantor. Probabilistic generation of finite simple groups. II. *J. Algebra*, 320(2):443–494, 2008.
- [373] T. Breuer, L. Héthelyi, E. Horváth, B. Külshammer, and J. Murray. Cartan invariants and central ideals of group algebras. *J. Algebra*, 296(1):177–195, 2006.
- [374] T. Breuer and E. Horváth. On block induction. *J. Algebra*, 242(1):213–224, 2001.
- [375] T. Breuer and K. Lux. The multiplicity-free permutation characters of the sporadic simple groups and their automorphism groups. *Comm. Algebra*, 24(7):2293–2316, 1996.
- [376] T. Breuer and G. Pfeiffer. Finding possible permutation characters. *J. Symbolic Comput.*, 26(3):343–354, 1998.
- [377] M. Brittenham, S. Hermiller, and R. G. Todd. 4-moves and the Dabkowski-Sahi invariant for knots. *J. Knot Theory Ramifications*, 22(11):1350069, 20, 2013.
- [378] T. Britz and C. G. Rutherford. Covering radii are not matroid invariants. *Discrete Math.*, 296(1):117–120, 2005.
- [379] O. Broche, E. Jespers, and M. Ruiz. Antisymmetric elements in group rings with an orientation morphism. *Forum Math.*, 21(3):427–454, 2009.
- [380] M. J. Brookes, C. M. Campbell, and E. F. Robertson. Efficiency and direct products of groups. In *Groups—Korea '94 (Pusan)*, pages 25–33. de Gruyter, Berlin, 1995.
- [381] P. Brooksbank, H. Qin, E. Robertson, and A. Seress. On Dowling geometries of infinite groups. *J. Combin. Theory Ser. A*, 108(1):155–158, 2004.
- [382] P. A. Brooksbank. A constructive recognition algorithm for the matrix group $\Omega(d, q)$. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 79–93. de Gruyter, Berlin, 2001.
- [383] P. A. Brooksbank. Constructive recognition of classical groups in their natural representation. *J. Symbolic Comput.*, 35(2):195–239, 2003.

- [384] P. A. Brooksbank. Fast constructive recognition of black-box unitary groups. *LMS J. Comput. Math.*, 6:162–197, 2003.
- [385] P. A. Brooksbank. Fast constructive recognition of black box symplectic groups. *J. Algebra*, 320(2):885–909, 2008.
- [386] S. A. Broughton and A. Wootton. Finite abelian subgroups of the mapping class group. *Algebr. Geom. Topol.*, 7:1651–1697, 2007.
- [387] A. E. Brouwer, J. H. Koolen, and M. H. Klin. A root graph that is locally the line graph of the Petersen graph. *Discrete Math.*, 264(1-3):13–24, 2003. The 2000 *Com²MaC* Conference on Association Schemes, Codes and Designs (Pohang).
- [388] A. E. Brouwer, J. H. Koolen, and R. J. Riebeek. A new distance-regular graph associated to the Mathieu group M_{10} . *J. Algebraic Combin.*, 8(2):153–156, 1998.
- [389] J. Browkin and H. Gangl. Tame kernels and second regulators of number fields and their subfields. *J. K-Theory*, 12(1):137–165, 2013.
- [390] K. S. Brown. The coset poset and probabilistic zeta function of a finite group. *J. Algebra*, 225(2):989–1012, 2000.
- [391] R. Brown, N. Ghani, A. Heyworth, and C. D. Wensley. String rewriting for double coset systems. *J. Symbolic Comput.*, 41(5):573–590, 2006.
- [392] R. Brown and C. D. Wensley. On finite induced crossed modules, and the homotopy 2-type of mapping cones. *Theory Appl. Categ.*, 1:No. 3, 54–70 (electronic), 1995.
- [393] R. Brown and C. D. Wensley. Computation and homotopical applications of induced crossed modules. *J. Symbolic Comput.*, 35(1):59–72, 2003.
- [394] D. P. Brozovic and P. K. Sin. A note on point stabilizers in sharp permutation groups of type $\{0, k\}$. *Comm. Algebra*, 44(8):3324–3339, 2016.
- [395] H. Brückner. *Algorithmen für endliche auflösbare Gruppen und Anwendungen*. PhD thesis, RWTH, Aachen, 1998.
- [396] O. Brunat. On Lusztig’s conjecture for connected and disconnected exceptional groups. *J. Algebra*, 316(1):303–325, 2007.
- [397] O. Brunat. Basic sets in defining characteristic for general linear groups of small rank. *J. Pure Appl. Algebra*, 213(5):698–710, 2009.
- [398] O. Brunat. On the inductive McKay condition in the defining characteristic. *Math. Z.*, 263(2):411–424, 2009.
- [399] O. Brunat and J. Gramain. A basic set for the alternating group. *J. Reine Angew. Math.*, 641:177–202, 2010.
- [400] O. Brunat and G. Malle. Characters of positive height in blocks of finite quasi-simple groups. *Int. Math. Res. Not. IMRN*, (17):7763–7786, 2015.

- [401] J. Brundan and S. M. Goodwin. Good grading polytopes. *Proc. Lond. Math. Soc. (3)*, 94(1):155–180, 2007.
- [402] J. Brundan and A. S. Kleshchev. Representations of the symmetric group which are irreducible over subgroups. *J. Reine Angew. Math.*, 530:145–190, 2001.
- [403] F. Brunk and S. Huczynska. Some Erdős-Ko-Rado theorems for injections. *European J. Combin.*, 31(3):839–860, 2010.
- [404] R. M. Bryant, S. Danz, K. Erdmann, and J. Müller. Vertices of Lie modules. *J. Pure Appl. Algebra*, 219(11):4816–4839, 2015.
- [405] J. Brzozowski, B. Li, and Y. Ye. Syntactic complexity of prefix-, suffix-, bifix-, and factor-free regular languages. *Theoret. Comput. Sci.*, 449:37–53, 2012.
- [406] S. Buckley, D. MacHale, and A. Ní Shé. Degree sum deficiency in finite groups. *Math. Proc. R. Ir. Acad.*, 115A(1):12, 2015.
- [407] T. P. Bueno and N. R. Rocco. On the q -tensor square of a group. *J. Group Theory*, 14(5):785–805, 2011.
- [408] E. Bujalance, F. Cirre, and P. Turbek. Symmetry types of cyclic covers of the sphere. *Israel J. Math.*, 191(1):61–83, 2012.
- [409] E. Bujalance, F. J. Cirre, and G. Gromadzki. Groups of automorphisms of cyclic trigonal Riemann surfaces. *J. Algebra*, 322(4):1086–1103, 2009.
- [410] M. Bulois. Irregular locus of the commuting variety of reductive symmetric Lie algebras and rigid pairs. *Transform. Groups*, 16(4):1027–1061, 2011.
- [411] M. Bulois and P. Hivert. Sheets in symmetric Lie algebras and slice induction. *Transform. Groups*, 21(2):355–375, 2016.
- [412] S. Bulygin and R. Pellikaan. Bounded distance decoding of linear error-correcting codes with Gröbner bases. *J. Symbolic Comput.*, 44(12):1626–1643, 2009.
- [413] S. V. Bulygin. Generalized Hermitian codes over $\text{GF}(2^r)$. *IEEE Trans. Inform. Theory*, 52(10):4664–4669, 2006.
- [414] D. Bundy and S. Hart. The case of equality in the Livingstone-Wagner theorem. *J. Algebraic Combin.*, 29(2):215–227, 2009.
- [415] D. Burde, B. Eick, and W. de Graaf. Computing faithful representations for nilpotent Lie algebras. *J. Algebra*, 322(3):602–612, 2009.
- [416] T. C. Burness. Fixed point ratios in actions in finite classical groups. II. *J. Algebra*, 309(1):80–138, 2007.
- [417] T. C. Burness. Fixed point ratios in actions of finite classical groups. I. *J. Algebra*, 309(1):69–79, 2007.

- [418] T. C. Burness. Fixed point ratios in actions of finite classical groups. III. *J. Algebra*, 314(2):693–748, 2007.
- [419] T. C. Burness. Fixed point ratios in actions of finite classical groups. IV. *J. Algebra*, 314(2):749–788, 2007.
- [420] T. C. Burness, C. E. Praeger, and A. Seress. Extremely primitive sporadic and alternating groups. *Bull. Lond. Math. Soc.*, 44(6):1147–1154, 2012.
- [421] T. C. Burness and H. P. Tong-Viet. Primitive permutation groups and derangements of prime power order. *Manuscripta Math.*, 150(1-2):255–291, 2016.
- [422] L. T. Butler. Positive-entropy integrable systems and the Toda lattice, II. *Math. Proc. Cambridge Philos. Soc.*, 149(3):491–538, 2010.
- [423] W. Butske. Endomorphisms of two dimensional Jacobians and related finite algebras. *Canad. Math. Bull.*, 55(1):38–47, 2012.
- [424] F. Calegari and N. M. Dunfield. Automorphic forms and rational homology 3-spheres. *Geom. Topol.*, 10:295–329 (electronic), 2006.
- [425] P. J. Callahan, J. C. Dean, and J. R. Weeks. The simplest hyperbolic knots. *J. Knot Theory Ramifications*, 8(3):279–297, 1999.
- [426] P. Cameron. Partitions and permutations. Preprint, 2002.
- [427] P. Cameron, J. Cilleruelo, and O. Serra. On monochromatic solutions of equations in groups. *Rev. Mat. Iberoam.*, 23(1):385–395, 2007.
- [428] P. Cameron, T. Prellberg, and D. Stark. Asymptotics for incidence matrix classes. *Electron. J. Combin.*, 13(1):Research Paper 85, 19, 2006.
- [429] P. J. Cameron. *Permutation groups*, volume 45 of *London Mathematical Society Student Texts*. Cambridge University Press, Cambridge, 1999.
- [430] P. J. Cameron. Coherent configurations, association schemes and permutation groups. In *Groups, combinatorics & geometry (Durham, 2001)*, pages 55–71. World Sci. Publ., River Edge, NJ, 2003.
- [431] P. J. Cameron. Partitions and permutations. *Discrete Math.*, 291(1-3):45–54, 2005.
- [432] P. J. Cameron. Root systems and optimal block designs. *Michigan Math. J.*, 58(1):181–194, 2009.
- [433] P. J. Cameron. Dixon’s theorem and random synchronization. *Discrete Math.*, 313(11):1233–1236, 2013.
- [434] P. J. Cameron and P. Cara. Independent generating sets and geometries for symmetric groups. *J. Algebra*, 258(2):641–650, 2002.
- [435] P. J. Cameron, D. A. Gewurz, and F. Merola. Product action. *Discrete Math.*, 308(2-3):386–394, 2008.

- [436] P. J. Cameron and D. Ghinelli. Tubes of even order and flat $\pi.C_2$ geometries. *Geom. Dedicata*, 55(3):265–278, 1995.
- [437] P. J. Cameron and S. Ghosh. The power graph of a finite group. *Discrete Math.*, 311(13):1220–1222, 2011.
- [438] P. J. Cameron and P. A. Kazanidis. Cores of symmetric graphs. *J. Aust. Math. Soc.*, 85(2):145–154, 2008.
- [439] P. J. Cameron and C. Y. Ku. Intersecting families of permutations. *European J. Combin.*, 24(7):881–890, 2003.
- [440] P. J. Cameron and T. W. Müller. A descent principle in modular subgroup arithmetic. *J. Pure Appl. Algebra*, 203(1-3):189–203, 2005.
- [441] P. J. Cameron and C. E. Praeger. Constructing flag-transitive, point-imprimitive designs. *J. Algebraic Combin.*, 43(4):755–769, 2016.
- [442] P. J. Cameron and A. Rudvalis. A design and a geometry for the group Fi_{22} . *Des. Codes Cryptogr.*, 44(1-3):11–14, 2007.
- [443] P. J. Cameron and L. H. Soicher. Block intersection polynomials. *Bull. Lond. Math. Soc.*, 39(4):559–564, 2007.
- [444] P. J. Cameron and P. Spiga. Most switching classes with primitive automorphism groups contain graphs with trivial groups. *Australas. J. Combin.*, 62:76–90, 2015.
- [445] P. J. Cameron and I. M. Wanless. Covering radius for sets of permutations. *Discrete Math.*, 293(1-3):91–109, 2005.
- [446] A. R. Camina and R. D. Camina. Recognising nilpotent groups. *J. Algebra*, 300(1):16–24, 2006.
- [447] A. R. Camina and F. Spiezia. Sporadic groups and automorphisms of linear spaces. *J. Combin. Des.*, 8(5):353–362, 2000.
- [448] R. Camina and A. Thillaisundaram. A note on p -central groups. *Glasg. Math. J.*, 55(2):449–456, 2013.
- [449] C. Campbell, G. Havas, S. Linton, and E. Robertson. Symmetric presentations and orthogonal groups. In *The atlas of finite groups: ten years on (Birmingham, 1995)*, volume 249 of *London Math. Soc. Lecture Note Ser.*, pages 1–10. Cambridge Univ. Press, Cambridge, 1998.
- [450] C. M. Campbell and P. P. Campbell. On the minimal length of semigroup presentations. *Novi Sad J. Math.*, 34(2):17–26, 2004.
- [451] C. M. Campbell and P. P. Campbell. The Fibonacci length of certain centro-polyhedral groups. *J. Appl. Math. Comput.*, 19(1-2):231–240, 2005.
- [452] C. M. Campbell, P. P. Campbell, H. Doostie, and E. F. Robertson. Fibonacci lengths for certain metacyclic groups. *Algebra Colloq.*, 11(2):215–222, 2004.

- [453] C. M. Campbell, P. P. Campbell, H. Doostie, and E. F. Robertson. On the Fibonacci length of powers of dihedral groups. In *Applications of Fibonacci numbers. Vol. 9*, pages 69–85. Kluwer Acad. Publ., Dordrecht, 2004.
- [454] C. M. Campbell, P. P. Campbell, B. T. K. Hopson, and E. F. Robertson. On the efficiency of direct powers of $\mathrm{PGL}(2, p)$. In *Recent advances in group theory and low-dimensional topology (Pusan, 2000)*, volume 27 of *Res. Exp. Math.*, pages 27–34. Heldermann, Lemgo, 2003.
- [455] C. M. Campbell, G. Havas, A. Hulpke, and E. F. Robertson. Efficient simple groups. *Comm. Algebra*, 30(2):971–975, 2002.
- [456] C. M. Campbell, G. Havas, A. Hulpke, and E. F. Robertson. Efficient simple groups. *Comm. Algebra*, 30(9):4613–4619, 2002.
- [457] C. M. Campbell, G. Havas, A. Hulpke, and E. F. Robertson. Efficient simple groups. *Comm. Algebra*, 31(10):5191–5197, 2003.
- [458] C. M. Campbell, G. Havas, C. Ramsay, and E. F. Robertson. Nice efficient presentations for all small simple groups and their covers. *LMS J. Comput. Math.*, 7:266–283 (electronic), 2004.
- [459] C. M. Campbell, G. Havas, C. Ramsay, and E. F. Robertson. On the efficiency of the simple groups of order less than a million and their covers. *Experiment. Math.*, 16(3):347–358, 2007.
- [460] P. S. Campbell. Steinberg characters for Chevalley groups over finite local rings. *J. Algebra*, 313(2):486–530, 2007.
- [461] P. S. Campbell and M. Nevins. Branching rules for ramified principal series representations of $\mathrm{GL}(3)$ over a p -adic field. *Canad. J. Math.*, 62(1):34–51, 2010.
- [462] J. J. Cannon, B. Eick, and C. R. Leedham-Green. Special polycyclic generating sequences for finite soluble groups. *J. Symbolic Comput.*, 38(5):1445–1460, 2004.
- [463] J. J. Cannon and D. F. Holt. Automorphism group computation and isomorphism testing in finite groups. *J. Symbolic Comput.*, 35(3):241–267, 2003.
- [464] J. J. Cannon and D. F. Holt. The transitive permutation groups of degree 32. *Experiment. Math.*, 17(3):307–314, 2008.
- [465] W. Cao. Smith normal form of augmented degree matrix and its applications. *Linear Algebra Appl.*, 431(10):1778–1784, 2009.
- [466] W. Cao. Degree matrices and estimates for exponential sums of polynomials over finite fields. *J. Algebra Appl.*, 12(7):1350030, 9, 2013.
- [467] O. Caprotti and M. Oostdijk. Formal and efficient primality proofs by use of computer algebra oracles. *J. Symbolic Comput.*, 32(1-2):55–70, 2001. Computer algebra and mechanized reasoning (St. Andrews, 2000).
- [468] P. Cara, S. Rottey, and G. Van de Voorde. A construction for infinite families of semisymmetric graphs revealing their full automorphism group. *J. Algebraic Combin.*, 39(4):967–988, 2014.

- [469] P. Cara, S. Rottey, and G. Van de Voorde. The isomorphism problem for linear representations and their graphs. *Adv. Geom.*, 14(2):353–367, 2014.
- [470] A. Caranti. Presenting the graded Lie algebra associated to the Nottingham group. *J. Algebra*, 198(1):266–289, 1997.
- [471] A. Caranti, F. Dalla Volta, and M. Sala. An application of the O’Nan-Scott theorem to the group generated by the round functions of an AES-like cipher. *Des. Codes Cryptogr.*, 52(3):293–301, 2009.
- [472] A. Caranti and G. Jurman. Quotients of maximal class of thin Lie algebras. The odd characteristic case. *Comm. Algebra*, 27(12):5741–5748, 1999.
- [473] A. Caranti and S. Mattarei. Nottingham Lie algebras with diamonds of finite type. *Internat. J. Algebra Comput.*, 14(1):35–67, 2004.
- [474] A. Caranti, S. Mattarei, and M. F. Newman. Graded Lie algebras of maximal class. *Trans. Amer. Math. Soc.*, 349(10):4021–4051, 1997.
- [475] G. Cardona. On the number of curves of genus 2 over a finite field. *Finite Fields Appl.*, 9(4):505–526, 2003.
- [476] G. Cardona. Representations of G_k -groups and twists of the genus two curve $y^2 = x^5 - x$. *J. Algebra*, 303(2):707–721, 2006.
- [477] W. Carlip and M. Mincheva. Symmetry of iteration graphs. *Czechoslovak Math. J.*, 58(133)(1):131–145, 2008.
- [478] W. Carlip and L. Somer. Primitive Lucas d -pseudoprimes and Carmichael-Lucas numbers. *Colloq. Math.*, 108(1):73–92, 2007.
- [479] J. F. Carlson and G. Matthews. Generators and relations for matrix algebras. *J. Algebra*, 300(1):134–159, 2006.
- [480] J. F. Carlson, M. Neunhöffer, and C. M. Roney-Dougal. A polynomial-time reduction algorithm for groups of semilinear or subfield class. *J. Algebra*, 322(3):613–637, 2009.
- [481] S. Carnahan and L. Childs. Counting Hopf Galois structures on non-abelian Galois field extensions. *J. Algebra*, 218(1):81–92, 1999.
- [482] G. Carnovale and F. Polizzi. The classification of surfaces with $p_g = q = 1$ isogenous to a product of curves. *Adv. Geom.*, 9(2):233–256, 2009.
- [483] M. Caroli and M. Teillaud. Delaunay triangulations of closed Euclidean d -orbifolds. *Discrete Comput. Geom.*, 55(4):827–853, 2016.
- [484] C. Carrara. (Finite) presentations of the Albert-Frank-Shalev Lie algebras. *Boll. Unione Mat. Ital. Sez. B Artic. Ric. Mat. (8)*, 4(2):391–427, 2001.
- [485] M. R. Casali and P. Cristofori. A catalogue of orientable 3-manifolds triangulated by 30 colored tetrahedra. *J. Knot Theory Ramifications*, 17(5):579–599, 2008.

- [486] D. Casiello, L. Indaco, and G. P. Nagy. On the computational approach to the problem of the existence of a projective plane of order 10. *Atti Semin. Mat. Fis. Univ. Modena Reggio Emilia*, 57:69–88 (2011), 2010.
- [487] B. Casselman. Computation in Coxeter groups. I. Multiplication. *Electron. J. Combin.*, 9(1):Research Paper 25, 22 pp. (electronic), 2002.
- [488] D. A. Catalano, M. D. E. Conder, S. F. Du, Y. S. Kwon, R. Nedela, and S. Wilson. Classification of regular embeddings of n -dimensional cubes. *J. Algebraic Combin.*, 33(2):215–238, 2011.
- [489] F. Catanese and S. Rollenske. Double Kodaira fibrations. *J. Reine Angew. Math.*, 628:205–233, 2009.
- [490] F. Celler. Kohomologie und Normalisatoren in GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1992.
- [491] F. Celler. *Konstruktive Erkennungsalgorithmen klassischer Gruppen in GAP*. PhD thesis, RWTH, Aachen, 1997.
- [492] F. Celler and C. R. Leedham-Green. Calculating the order of an invertible matrix. In *Groups and computation, II (New Brunswick, NJ, 1995)*, volume 28 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 55–60. Amer. Math. Soc., Providence, RI, 1997.
- [493] F. Celler, C. R. Leedham-Green, S. H. Murray, A. C. Niemeyer, and E. A. O’Brien. Generating random elements of a finite group. *Comm. Algebra*, 23(13):4931–4948, 1995.
- [494] F. Celler, J. Neubüser, and C. R. B. Wright. Some remarks on the computation of complements and normalizers in soluble groups. *Acta Appl. Math.*, 21(1-2):57–76, 1990.
- [495] M. Chaboksavar, M. Farrokhi Derakhshandeh Ghouchan, and F. Saeedi. Finite groups with a given absolute central factor group. *Arch. Math. (Basel)*, 102(5):401–409, 2014.
- [496] S. T. Chapman, M. Corrales, A. Miller, C. Miller, and D. Patel. The catenary and tame degrees on a numerical monoid are eventually periodic. *J. Aust. Math. Soc.*, 97(3):289–300, 2014.
- [497] S. T. Chapman, P. A. García-Sánchez, and D. Llena. The catenary and tame degree of numerical monoids. *Forum Math.*, 21(1):117–129, 2009.
- [498] S. T. Chapman, P. A. García-Sánchez, D. Llena, and J. Marshall. Elements in a numerical semigroup with factorizations of the same length. *Canad. Math. Bull.*, 54(1):39–43, 2011.
- [499] S. T. Chapman, P. A. García-Sánchez, D. Llena, V. Ponomarenko, and J. C. Rosales. The catenary and tame degree in finitely generated commutative cancellative monoids. *Manuscripta Math.*, 120(3):253–264, 2006.
- [500] S. T. Chapman, P. A. García-Sánchez, D. Llena, and J. C. Rosales. Presentations of finitely generated cancellative commutative monoids and nonnegative solutions of systems of linear equations. *Discrete Appl. Math.*, 154(14):1947–1959, 2006.

- [501] S. T. Chapman, P. A. García-Sánchez, Z. Tripp, and C. Viola. Measuring primality in numerical semigroups with embedding dimension three. *J. Algebra Appl.*, 15(1):1650007, 16, 2016.
- [502] S. T. Chapman, F. Gotti, and R. Pelayo. On delta sets and their realizable subsets in Krull monoids with cyclic class groups. *Colloq. Math.*, 137(1):137–146, 2014.
- [503] C. Charnes and U. Dempwolff. The translation planes of order 49 and their automorphism groups. *Math. Comp.*, 67(223):1207–1224, 1998.
- [504] C. Charnes and J. Pieprzyk. Attacking the SL_2 hashing scheme. In *Advances in cryptology—ASIACRYPT '94 (Wollongong, 1994)*, volume 917 of *Lecture Notes in Comput. Sci.*, pages 322–330. Springer, Berlin, 1995.
- [505] C. Charnes, M. Rötteler, and T. Beth. Homogeneous bent functions, invariants, and designs. *Des. Codes Cryptogr.*, 26(1-3):139–154, 2002. In honour of Ronald C. Mullin.
- [506] E. Chavli. Universal deformations of the finite quotients of the braid group on 3 strands. *J. Algebra*, 459:238–271, 2016.
- [507] S. K. Chebolu, J. D. Christensen, and J. Mináč. Freyd’s generating hypothesis for groups with periodic cohomology. *Canad. Math. Bull.*, 55(1):48–59, 2012.
- [508] I. A. Chel’tsov and K. A. Shramov. Sporadic simple groups and quotient singularities. *Izv. Ross. Akad. Nauk Ser. Mat.*, 77(4):215–224, 2013.
- [509] B. Chen, Y. Fan, L. Lin, and H. Liu. Constacyclic codes over finite fields. *Finite Fields Appl.*, 18(6):1217–1231, 2012.
- [510] H. Chen and G. Hiss. Projective summands in tensor products of simple modules of finite dimensional Hopf algebras. *Comm. Algebra*, 32(11):4247–4264, 2004.
- [511] W. Y. C. Chen and D. C. Torney. Equivalence classes of matchings and lattice-square designs. *Discrete Appl. Math.*, 145(3):349–357, 2005.
- [512] M. C. N. Cheng, J. F. R. Duncan, and J. A. Harvey. Umbral moonshine. *Commun. Number Theory Phys.*, 8(2):101–242, 2014.
- [513] A. Chermak, B. Oliver, and S. Shpectorov. The linking systems of the Solomon 2-local finite groups are simply connected. *Proc. Lond. Math. Soc. (3)*, 97(1):209–238, 2008.
- [514] A. A. Chesnokov and W. H. Haemers. Regularity and the generalized adjacency spectra of graphs. *Linear Algebra Appl.*, 416(2-3):1033–1037, 2006.
- [515] D. R. J. Chillingworth. Critical points and symmetries of a free energy function for biaxial nematic liquid crystals. *Nonlinearity*, 28(5):1483–1537, 2015.
- [516] I. K. Chirik. On a factorizable group with large cyclic subgroups in factors. *Ukrainian Math. J.*, 67(7):1133–1136, 2015. Translation of *Ukrain. Mat. Zh.* **67** (2015), no. 7, 1006–1008.
- [517] P. Chossat, G. Faye, and O. Faugeras. Bifurcation of hyperbolic planforms. *J. Nonlinear Sci.*, 21(4):465–498, 2011.

- [518] H. Chu, A. Hoshi, S. Hu, and M. Kang. Noether’s problem for groups of order 243. *J. Algebra*, 442:233–259, 2015.
- [519] H. Chu, S. Hu, M. Kang, and B. E. Kunyavskii. Noether’s problem and the unramified Brauer group for groups of order 64. *Int. Math. Res. Not. IMRN*, (12):2329–2366, 2010.
- [520] K. S. Chua. Extremal modular lattices, McKay Thompson series, quadratic iterations, and new series for π . *Experiment. Math.*, 14(3):343–357, 2005.
- [521] K. S. Chua, M. L. Lang, and Y. Yang. On Rademacher’s conjecture: congruence subgroups of genus zero of the modular group. *J. Algebra*, 277(1):408–428, 2004.
- [522] S. Cicalò and W. A. de Graaf. Non-associative Gröbner bases, finitely-presented Lie rings and the Engel condition. II. *J. Symbolic Comput.*, 44(7):786–800, 2009.
- [523] S. Cicalò, W. A. de Graaf, and C. Schneider. Six-dimensional nilpotent Lie algebras. *Linear Algebra Appl.*, 436(1):163–189, 2012.
- [524] S. Cicalò, W. A. de Graaf, and M. Vaughan-Lee. An effective version of the Lazard correspondence. *J. Algebra*, 352:430–450, 2012.
- [525] C. Cid and T. Schulz. Computation of five- and six-dimensional Bieberbach groups. *Experiment. Math.*, 10(1):109–115, 2001.
- [526] E. Ciolan, P. A. García-Sánchez, and P. Moree. Cyclotomic numerical semigroups. *SIAM J. Discrete Math.*, 30(2):650–668, 2016.
- [527] A. Claesson, C. D. Godsil, and D. G. Wagner. A permutation group determined by an ordered set. *Discrete Math.*, 269(1-3):273–279, 2003.
- [528] M. Clancy and G. Ellis. Homology of some Artin and twisted Artin groups. *J. K-Theory*, 6(1):171–196, 2010.
- [529] W. E. Clark, M. Elhamdadi, X. Hou, M. Saito, and T. Yeatman. Connected quandles associated with pointed abelian groups. *Pacific J. Math.*, 264(1):31–60, 2013.
- [530] W. E. Clark, M. Elhamdadi, M. Saito, and T. Yeatman. Quandle colorings of knots and applications. *J. Knot Theory Ramifications*, 23(6):1450035, 29, 2014.
- [531] A. Cohen, S. Murray, M. Pollet, and V. Sorge. Certifying solutions to permutation group problems. In *AUTOMATED DEDUCTION - CADE-19*, pages 258–273, 2003.
- [532] A. M. Cohen, H. Cuypers, and R. Gramlich. Local recognition of non-incident point-hyperplane graphs. *Combinatorica*, 25(3):271–296, 2005.
- [533] A. M. Cohen, H. Cuypers, and H. Sterk. *Algebra interactive!* Springer-Verlag, Berlin, 1999. Learning algebra in an exciting way, With 1 CD-ROM (Windows, LINUX and UNIX).
- [534] A. M. Cohen, W. A. de Graaf, and L. Rónyai. Computations in finite-dimensional Lie algebras. *Discrete Math. Theor. Comput. Sci.*, 1(1):129–138, 1997. Lie computations (Marseille, 1994).

- [535] A. M. Cohen, D. A. H. Gijssbers, and D. B. Wales. BMW algebras of simply laced type. *J. Algebra*, 286(1):107–153, 2005.
- [536] A. M. Cohen, D. A. H. Gijssbers, and D. B. Wales. The Birman-Murakami-Wenzl algebras of type D_n . *Comm. Algebra*, 42(1):22–55, 2014.
- [537] A. M. Cohen, R. L. Griess Jr., and B. Lissner. The group $L(2, 61)$ embeds in the Lie group of type E_8 . *Comm. Algebra*, 21(6):1889–1907, 1993.
- [538] A. M. Cohen, K. Magaard, and S. Shpectorov. Affine distance-transitive graphs: the cross characteristic case. *European J. Combin.*, 20(5):351–373, 1999.
- [539] A. M. Cohen, S. H. Murray, and D. E. Taylor. Computing in groups of Lie type. *Math. Comp.*, 73(247):1477–1498, 2004.
- [540] A. M. Cohen and D. Roozmond. Computing Chevalley bases in small characteristics. *J. Algebra*, 322(3):703–721, 2009.
- [541] A. M. Cohen, A. Steinbach, R. Ushirobira, and D. Wales. Lie algebras generated by extremal elements. *J. Algebra*, 236(1):122–154, 2001.
- [542] A. M. Cohen and D. B. Wales. The Birman-Murakami-Wenzl algebras of type E_n . *Transform. Groups*, 16(3):681–715, 2011.
- [543] A. R. Cohen and S. H. Murray. An automated proof theory approach to computation with permutation group, 2002. Lecture notes for the Calculemus Autumn School, Pisa, 23 Sep–4 Oct 2002).
- [544] H. Cohen. *A course in computational algebraic number theory*, volume 138 of *Graduate Texts in Mathematics*. Springer-Verlag, Berlin, 1993.
- [545] B. Colletti, J. Barnes, and D. S. A note on characterizing the k-opt neighborhood via group theory. *J HEURISTICS*, 5(1):47–51, 1999.
- [546] S. Colton. Automated conjecture making in number theory using HR, Otter and Maple. *J. Symbolic Comput.*, 39(5):593–615, 2005.
- [547] M. Conder. Hexagon-free subgraphs of hypercubes. *J. Graph Theory*, 17(4):477–479, 1993.
- [548] M. Conder. Regular maps with small parameters. *J. Austral. Math. Soc. Ser. A*, 57(1):103–112, 1994.
- [549] M. Conder, G. Exoo, and R. Jajcay. On the limitations of the use of solvable groups in Cayley graph cage constructions. *European J. Combin.*, 31(7):1819–1828, 2010.
- [550] M. Conder, C. Maclachlan, S. Todorovic Vasiljevic, and S. Wilson. Bounds for the number of automorphisms of a compact non-orientable surface. *J. London Math. Soc. (2)*, 68(1):65–82, 2003.
- [551] M. Conder and T. Tucker. Motion and distinguishing number two. *Ars Math. Contemp.*, 4(1):63–72, 2011.

- [552] M. D. E. Conder, G. A. Jones, M. Streit, and J. Wolfart. Galois actions on regular dessins of small genera. *Rev. Mat. Iberoam.*, 29(1):163–181, 2013.
- [553] M. D. E. Conder and C. G. Walker. The infinitude of 7-arc-transitive graphs. *J. Algebra*, 208(2):619–629, 1998.
- [554] J. H. Conway and T. Hsu. Quilts and T -systems. *J. Algebra*, 174(3):856–908, 1995.
- [555] J. H. Conway, A. Hulpke, and J. McKay. On transitive permutation groups. *LMS J. Comput. Math.*, 1:1–8 (electronic), 1998.
- [556] G. Cooperman. GAP/MPI: Facilitating parallelism. In *Groups and computation, II (New Brunswick, NJ, 1995)*, pages 69–84. Amer. Math. Soc., Providence, RI, 1997.
- [557] G. Cooperman. Parallel GAP: mature interactive parallel computing. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 123–138. de Gruyter, Berlin, 2001.
- [558] G. Cooperman and L. Finkelstein. A random base change algorithm for permutation groups. *J. Symbolic Comput.*, 17(6):513–528, 1994.
- [559] G. Cooperman and G. Havas. Practical parallel coset enumeration. *LECT NOTES CONTR INF*, 226:15–27, 1997.
- [560] G. Cooperman, G. Hiss, K. Lux, and J. Müller. The Brauer tree of the principal 19-block of the sporadic simple Thompson group. *Experiment. Math.*, 6(4):293–300, 1997.
- [561] G. D. Cooperman, W. Lempken, G. O. Michler, and M. Weller. A new existence proof of Janko’s simple group J_4 . In *Computational methods for representations of groups and algebras (Essen, 1997)*, volume 173 of *Progr. Math.*, pages 161–175. Birkhäuser, Basel, 1999.
- [562] R. Coquereaux and J. Zuber. Drinfeld doubles for finite subgroups of $SU(2)$ and $SU(3)$ Lie groups. *SIGMA Symmetry Integrability Geom. Methods Appl.*, 9:Paper 039, 36, 2013.
- [563] E. Cordeiro and M. Delgado. Computing relative abelian kernels of finite monoids. *J. Algebra*, 303(2):642–654, 2006.
- [564] E. Cordeiro, M. Delgado, and V. H. Fernandes. Relative abelian kernels of some classes of transformation monoids. *Bull. Austral. Math. Soc.*, 73(3):375–404, 2006.
- [565] G. Cornelissen and F. Kato. Mumford curves with maximal automorphism group. II. Lamé type groups in genus 5–8. *Geom. Dedicata*, 102:127–142, 2003.
- [566] G. Cornelissen, F. Kato, and A. Kontogeorgis. Discontinuous groups in positive characteristic and automorphisms of Mumford curves. *Math. Ann.*, 320(1):55–85, 2001.
- [567] B. P. Corr, T. Popiel, and C. E. Praeger. Nilpotent-independent sets and estimation in matrix algebras. *LMS J. Comput. Math.*, 18(1):404–418, 2015.
- [568] T. Cortadellas and S. Zarzuela. Apery and micro-invariants of a one-dimensional Cohen-Macaulay local ring and invariants of its tangent cone. *J. Algebra*, 328:94–113, 2011.

- [569] T. Cortadellas Benítez, R. Jafari, and S. Zarzuela Armengou. On the Apéry sets of monomial curves. *Semigroup Forum*, 86(2):289–320, 2013.
- [570] J. P. Cossey, Z. Halasi, A. Maróti, and H. N. Nguyen. On a conjecture of Gluck. *Math. Z.*, 279(3-4):1067–1080, 2015.
- [571] A. Cossidente and O. H. King. On caps and cap partitions of Galois projective spaces. *European J. Combin.*, 19(7):787–799, 1998.
- [572] A. Costa and B. Steinberg. A categorical invariant of flow equivalence of shifts. *Ergodic Theory Dynam. Systems*, 36(2):470–513, 2016.
- [573] G. Cousineau. Tilings as a programming exercise. *Theoret. Comput. Sci.*, 281(1-2):207–217, 2002. Selected papers in honour of Maurice Nivat.
- [574] H. Coutts. *Topics in Computational Group Theory: Primitive permutation groups and matrix group normalisers*. PhD thesis, University of St Andrews, 2010.
- [575] D. A. Craven, C. W. Eaton, R. Kessar, and M. Linckelmann. The structure of blocks with a Klein four defect group. *Math. Z.*, 268(1-2):441–476, 2011.
- [576] L. Creedon and J. Gildea. The structure of the unit group of the group algebra $\mathbb{F}_{2^k}D_8$. *Canad. Math. Bull.*, 54(2):237–243, 2011.
- [577] P. Cristofori and M. Mulazzani. Compact 3-manifolds via 4-colored graphs. *Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Math. RACSAM*, 110(2):395–416, 2016.
- [578] D. Crnković and D. Held. Some Menon designs having $U(3, 3)$ as an automorphism group. *Illinois J. Math.*, 47(1-2):129–139, 2003. Special issue in honor of Reinhold Baer (1902–1979).
- [579] D. Crnković and V. Mikulić. Unitals, projective planes and other combinatorial structures constructed from the unitary groups $U(3, q)$, $q = 3, 4, 5, 7$. *Ars Combin.*, 110:3–13, 2013.
- [580] D. Crnković, V. Mikulić, and B. G. Rodrigues. Some strongly regular graphs and self-orthogonal codes from the unitary group $U_4(3)$. *Glas. Mat. Ser. III*, 45(65)(2):307–323, 2010.
- [581] D. Crnković and V. Mikulić Crnković. On some combinatorial structures constructed from the groups $L(3, 5)$, $U(5, 2)$, and $S(6, 2)$. *Int. J. Comb.*, pages Art. ID 137356, 12, 2011.
- [582] D. Crnković and B. G. Rodrigues. Self-orthogonal codes from some Bush-type Hadamard matrices. *Quaest. Math.*, 36(3):341–352, 2013.
- [583] D. Crnković, S. Rukavina, and M. Schmidt. A classification of all symmetric block designs of order nine with an automorphism of order six. *J. Combin. Des.*, 14(4):301–312, 2006.
- [584] G. Cunningham. Mixing chiral polytopes. *J. Algebraic Combin.*, 36(2):263–277, 2012.
- [585] G. Cunningham. Mixing regular convex polytopes. *Discrete Math.*, 312(4):763–771, 2012.

- [586] G. Cunningham and D. Pellicer. Chiral extensions of chiral polytopes. *Discrete Math.*, 330:51–60, 2014.
- [587] M. J. Curran. The automorphism group of a split metacyclic 2-group. *Arch. Math. (Basel)*, 89(1):10–23, 2007.
- [588] M. J. Curran and R. J. Higgs. On minimal orders of groups with odd order automorphism groups. *Comm. Algebra*, 39(1):199–208, 2011.
- [589] M. J. Curran and D. J. McCaughan. Central automorphisms that are almost inner. *Comm. Algebra*, 29(5):2081–2087, 2001.
- [590] E. Curtin. Cubic Cayley graphs with small diameter. *Discrete Math. Theor. Comput. Sci.*, 4(2):123–131 (electronic), 2001.
- [591] G. Cutolo. On a question about automorphisms of finite p -groups. *J. Group Theory*, 9(2):231–250, 2006.
- [592] G. Cutolo, E. I. Khukhro, J. C. Lennox, J. Wiegold, S. Rinauro, and H. Smith. Finite core- p p -groups. *J. Algebra*, 188(2):701–719, 1997.
- [593] G. Cutolo, H. Smith, and J. Wiegold. On core-2 groups. *J. Algebra*, 237(2):813–841, 2001.
- [594] A. Cutting. *Todd-Coxeter Methods for inverse monoids*. PhD thesis, University of St Andrews, 2000.
- [595] H. Cuypers. The geometry of k -transvection groups. *J. Algebra*, 300(2):455–471, 2006.
- [596] H. Cuypers, M. Horn, J. in 't panhuis, and S. Shpectorov. Lie algebras and 3-transpositions. *J. Algebra*, 368:21–39, 2012.
- [597] H. Cuypers, L. H. Soicher, and H. Sterk. The small Mathieu groups. In *Some tapas of computer algebra*, volume 4 of *Algorithms Comput. Math.*, pages 323–337. Springer, Berlin, 1999.
- [598] H. Cuypers, L. H. Soicher, and H. Sterk. Working with finite groups. In *Some tapas of computer algebra*, volume 4 of *Algorithms Comput. Math.*, pages 184–207. Springer, Berlin, 1999.
- [599] V. Dabbaghian and J. D. Dixon. Computing matrix representations. *Math. Comp.*, 79(271):1801–1810, 2010.
- [600] V. Dabbaghian and J. D. Dixon. Computing characters of groups with central subgroups. *LMS J. Comput. Math.*, 16:398–406, 2013.
- [601] V. Dabbaghian-Abdoly. *An algorithm to construct representations of finite groups*. ProQuest LLC, Ann Arbor, MI, 2003. Thesis (Ph.D.)—Carleton University (Canada).
- [602] V. Dabbaghian-Abdoly. An algorithm for constructing representations of finite groups. *J. Symbolic Comput.*, 39(6):671–688, 2005.

- [603] V. Dabbaghian-Abdoly. Constructing representations of finite simple groups and covers. *Canad. J. Math.*, 58(1):23–38, 2006.
- [604] V. Dabbaghian-Abdoly. Constructing representations of the finite symplectic group $\mathrm{Sp}(4, q)$. *J. Algebra*, 303(2):618–625, 2006.
- [605] V. Dabbaghian-Abdoly. Characters of some finite groups of Lie type with a restriction containing a linear character once. *J. Algebra*, 309(2):543–558, 2007.
- [606] V. Dabbaghian-Abdoly. Constructing representations of higher degrees of finite simple groups and covers. *Math. Comp.*, 76(259):1661–1668, 2007.
- [607] M. Daberkow, C. Fieker, J. Klüners, M. Pohst, K. Roegner, M. Schörnig, and K. Wildanger. KANT V4. *J. Symbolic Comput.*, 24(3-4):267–283, 1997. Computational algebra and number theory (London, 1993).
- [608] M. K. Dabkowski, S. Jablan, N. A. Khan, and R. K. Sahi. On 4-move equivalence classes of knots and links of two components. *J. Knot Theory Ramifications*, 20(1):47–90, 2011.
- [609] P. Dai Pra, P. Louis, and I. Minelli. Monotonicity and complete monotonicity for continuous-time Markov chains. *C. R. Math. Acad. Sci. Paris*, 342(12):965–970, 2006.
- [610] P. Dai Pra, P. Louis, and I. G. Minelli. Realizable monotonicity for continuous-time Markov processes. *Stochastic Process. Appl.*, 120(6):959–982, 2010.
- [611] F. Dalla Volta, L. Di Martino, and A. Previtali. On minimally irreducible groups of degree the product of two primes. *J. Group Theory*, 6(1):11–56, 2003.
- [612] F. Dalla Volta and A. Lucchini. The smallest group with non-zero presentation rank. *J. Group Theory*, 2(2):147–155, 1999.
- [613] F. Dalla Volta, A. Lucchini, and F. Morini. Some remarks on the probability of generating an almost simple group. *Glasg. Math. J.*, 45(2):281–291, 2003.
- [614] D. Daly and P. Vojtěchovský. Enumeration of nilpotent loops via cohomology. *J. Algebra*, 322(11):4080–4098, 2009.
- [615] M. D’Anna, V. Micale, and A. Sammartano. On the associated graded ring of a semigroup ring. *J. Commut. Algebra*, 3(2):147–168, 2011.
- [616] S. Danz, H. Ellers, and J. Murray. The centralizer of a subgroup in a group algebra. *Proc. Edinb. Math. Soc. (2)*, 56(1):49–56, 2013.
- [617] S. Danz and J. Müller. The vertices and sources of the natural simple module for the alternating group in even characteristic. *Comm. Algebra*, 39(9):3187–3211, 2011.
- [618] S. Danz and J. Müller. Source algebras of blocks, sources of simple modules, and a conjecture of Feit. *J. Algebra*, 353:187–211, 2012.
- [619] B. Daoud, M. Hamitouche, and K. Merikhi. On the nilpotency class of a generalized 3-abelian group. *Mediterr. J. Math.*, 10(3):1189–1194, 2013.

- [620] M. R. Darafsheh. Designs from the group $\text{PSL}_2(q)$, q even. *Des. Codes Cryptogr.*, 39(3):311–316, 2006.
- [621] M. R. Darafsheh. On the recognition of the simple groups $L_7(3)$ and $L_8(3)$ by the spectrum. *Internat. J. Algebra Comput.*, 18(5):925–933, 2008.
- [622] M. R. Darafsheh, A. R. Ashrafi, and M. Khademi. Some designs related to group actions. *Ars Combin.*, 86:65–75, 2008.
- [623] M. R. Darafsheh, A. R. Ashrafi, and G. A. Moghani. nX -complementary generations of the sporadic group Co_1 . *Acta Math. Vietnam.*, 29(1):57–75, 2004.
- [624] M. R. Darafsheh, Y. Farjani, and A. Mahmiani. Recognition of the linear groups over the binary field by the set of their element orders. *Acta Math. Vietnam.*, 33(1):27–38, 2008.
- [625] M. R. Darafsheh and M. D. Monfared. Characterization of \mathbb{A}_{16} by a noncommuting graph. *Ukrainian Math. J.*, 62(11):1673–1679, 2011.
- [626] A. K. Das and R. K. Nath. A characterisation of certain finite groups of odd order. *Math. Proc. R. Ir. Acad.*, 111A(2):69–78, 2011.
- [627] J. H. Davenport. Equality in computer algebra and beyond. *J. Symbolic Comput.*, 34(4):259–270, 2002. Integrated reasoning and algebra systems (Siena, 2001).
- [628] A. B. D’Azevedo, G. A. Jones, and E. Schulte. Constructions of chiral polytopes of small rank. *Canad. J. Math.*, 63(6):1254–1283, 2011.
- [629] D. A. S. De Barros, A. Grishkov, and P. Vojtěchovský. Commutative automorphic loops of order p^3 . *J. Algebra Appl.*, 11(5):1250100, 15, 2012.
- [630] J. De Beule, P. Govaerts, A. Hallez, and L. Storme. Tight sets, weighted m -covers, weighted m -ovoids, and minihypers. *Des. Codes Cryptogr.*, 50(2):187–201, 2009.
- [631] J. De Beule, T. Héger, T. Szőnyi, and G. Van de Voorde. Blocking and double blocking sets in finite planes. *Electron. J. Combin.*, 23(2):Paper 2.5, 21, 2016.
- [632] J. De Beule, A. Hoogewijs, and L. Storme. On the size of minimal blocking sets of $Q(4, q)$, for $q = 5, 7$. *SIGSAM Bull.*, 38(3):67–84, 2004.
- [633] J. De Beule and K. Metsch. The maximum size of a partial spread in $H(5, q^2)$ is $q^3 + 1$. *J. Combin. Theory Ser. A*, 114(4):761–768, 2007.
- [634] J. De Beule and L. Storme. The two smallest minimal blocking sets of $Q(2n, 3)$, $n \geq 3$. *Bull. Belg. Math. Soc. Simon Stevin*, 12(5):735–742, 2005.
- [635] J. De Beule and L. Storme. Blocking all generators of $Q^+(2n + 1, 3)$, $n \geq 4$. *Des. Codes Cryptogr.*, 39(3):323–333, 2006.
- [636] B. De Bruyn. The hyperplanes of the glued near hexagon $Q(5, 2) \otimes Q(5, 2)$. *Ann. Comb.*, 16(4):661–676, 2012.

- [637] B. De Bruyn. The pseudo-hyperplanes and homogeneous pseudo-embeddings of $AG(n, 4)$ and $PG(n, 4)$. *Des. Codes Cryptogr.*, 65(1-2):127–156, 2012.
- [638] B. De Bruyn. Pseudo-embeddings and pseudo-hyperplanes. *Adv. Geom.*, 13(1):71–95, 2013.
- [639] B. De Bruyn. The pseudo-hyperplanes and homogeneous pseudo-embeddings of the generalized quadrangles of order $(3, t)$. *Des. Codes Cryptogr.*, 68(1-3):259–284, 2013.
- [640] B. De Bruyn. On hyperovals of polar Grassmannians. *Discrete Math.*, 338(4):645–654, 2015.
- [641] B. De Bruyn. The uniqueness of a certain generalized octagon of order $(2, 4)$. *Discrete Math.*, 338(12):2125–2142, 2015.
- [642] B. De Bruyn. Hyperplanes of Hermitian dual polar spaces of rank 3 containing a quad. *Des. Codes Cryptogr.*, 79(3):507–533, 2016.
- [643] B. De Bruyn and S. Shpectorov. The hyperplanes of the $U_4(3)$ near hexagon. *Graphs Combin.*, 26(5):647–671, 2010.
- [644] W. De Graaf, G. Ivanyos, and L. Rónyai. Computing Cartan subalgebras of Lie algebras. *Appl. Algebra Engrg. Comm. Comput.*, 7(5):339–349, 1996.
- [645] W. A. de Graaf. Constructing faithful matrix representations of Lie algebras. In *Proceedings of the 1997 International Symposium on Symbolic and Algebraic Computation (Kihei, HI)*, pages 54–59 (electronic). ACM, New York, 1997.
- [646] W. A. de Graaf. Using Cartan subalgebras to calculate nilradicals and Levi subalgebras of Lie algebras. *J. Pure Appl. Algebra*, 139(1-3):25–39, 1999. Effective methods in algebraic geometry (Saint-Malo, 1998).
- [647] W. A. de Graaf. *Lie algebras: theory and algorithms*, volume 56 of *North-Holland Mathematical Library*. North-Holland Publishing Co., Amsterdam, 2000.
- [648] W. A. de Graaf. Computing with quantized enveloping algebras: PBW-type bases, highest-weight modules and R -matrices. *J. Symbolic Comput.*, 32(5):475–490, 2001.
- [649] W. A. de Graaf. Constructing representations of split semisimple Lie algebras. *J. Pure Appl. Algebra*, 164(1-2):87–107, 2001. Effective methods in algebraic geometry (Bath, 2000).
- [650] W. A. de Graaf. Constructing canonical bases of quantized enveloping algebras. *Experiment. Math.*, 11(2):161–170, 2002.
- [651] W. A. de Graaf. An algorithm to compute the canonical basis of an irreducible module over a quantized enveloping algebra. *LMS J. Comput. Math.*, 6:105–118 (electronic), 2003.
- [652] W. A. de Graaf. Constructing homomorphisms between Verma modules. *J. Lie Theory*, 15(2):415–428, 2005.
- [653] W. A. de Graaf. Classification of 6-dimensional nilpotent Lie algebras over fields of characteristic not 2. *J. Algebra*, 309(2):640–653, 2007.

- [654] W. A. de Graaf. Computing representatives of nilpotent orbits of θ -groups. *J. Symbolic Comput.*, 46(4):438–458, 2011.
- [655] W. A. de Graaf. Constructing semisimple subalgebras of semisimple Lie algebras. *J. Algebra*, 325:416–430, 2011.
- [656] W. A. de Graaf and A. Elashvili. Induced nilpotent orbits of the simple Lie algebras of exceptional type. *Georgian Math. J.*, 16(2):257–278, 2009.
- [657] W. A. de Graaf and W. Nickel. Constructing faithful representations of finitely-generated torsion-free nilpotent groups. *J. Symbolic Comput.*, 33(1):31–41, 2002.
- [658] W. A. de Graaf and A. Pavan. Constructing arithmetic subgroups of unipotent groups. *J. Algebra*, 322(11):3950–3970, 2009.
- [659] W. A. de Graaf, E. B. Vinberg, and O. S. Yakimova. An effective method to compute closure ordering for nilpotent orbits of θ -representations. *J. Algebra*, 371:38–62, 2012.
- [660] W. A. de Graaf and J. Wisliceny. Constructing bases of finitely presented Lie algebras using Gröbner bases in free algebras. In *Proceedings of the 1999 International Symposium on Symbolic and Algebraic Computation (Vancouver, BC)*, pages 37–43 (electronic). ACM, New York, 1999.
- [661] W. A. de Graaf and O. S. Yakimova. Good index behaviour of θ -representations, I. *Algebr. Represent. Theory*, 15(4):613–638, 2012.
- [662] E. de Klerk, C. Dobre, and D. V. Pasechnik. Numerical block diagonalization of matrix $*$ -algebras with application to semidefinite programming. *Math. Program.*, 129(1, Ser. B):91–111, 2011.
- [663] E. de Klerk, M. E. Nagy, and R. Sotirov. On semidefinite programming bounds for graph bandwidth. *Optim. Methods Softw.*, 28(3):485–500, 2013.
- [664] E. de Klerk, J. Maharry, D. V. Pasechnik, R. B. Richter, and G. Salazar. Improved bounds for the crossing numbers of $K_{m,n}$ and K_n . *SIAM J. Discrete Math.*, 20(1):189–202, 2006.
- [665] E. de Klerk and R. Sotirov. Exploiting group symmetry in semidefinite programming relaxations of the quadratic assignment problem. *Math. Program.*, 122(2, Ser. A):225–246, 2010.
- [666] S. Decelle. The $L_2(11)$ -subalgebra of the Monster algebra. *Ars Math. Contemp.*, 7(1):83–103, 2014.
- [667] A. Degtyarev. Fundamental groups of symmetric sextics. *J. Math. Kyoto Univ.*, 48(4):765–792, 2008.
- [668] A. Degtyarev. Plane sextics via dessins d’enfants. *Geom. Topol.*, 14(1):393–433, 2010.
- [669] A. Degtyarev. Plane sextics with a type E_8 singular point. *Tohoku Math. J. (2)*, 62(3):329–355, 2010.

- [670] A. Degtyarev. Hurwitz equivalence of braid monodromies and extremal elliptic surfaces. *Proc. Lond. Math. Soc. (3)*, 103(6):1083–1120, 2011.
- [671] A. Degtyarev. Plane sextics with a type- E_6 singular point. *Michigan Math. J.*, 60(2):243–269, 2011.
- [672] A. Degtyarev. *Topology of algebraic curves*, volume 44 of *De Gruyter Studies in Mathematics*. Walter de Gruyter & Co., Berlin, 2012. An approach via dessins d’enfants.
- [673] A. Degtyarev. On plane sextics with double singular points. *Pacific J. Math.*, 265(2):327–348, 2013.
- [674] G. Dejou and X. Roblot. A Brumer-Stark conjecture for non-abelian Galois extensions. *J. Number Theory*, 142:51–88, 2014.
- [675] K. Dekimpe and B. Eick. Computational aspects of group extensions and their applications in topology. *Experiment. Math.*, 11(2):183–200, 2002.
- [676] K. Dekimpe, P. Igodt, and W. Malfait. Infra-nilmanifolds and their fundamental groups. *J. Korean Math. Soc.*, 38(5):883–914, 2001. Mathematics in the new millennium (Seoul, 2000).
- [677] A. Del Padrone and C. Mazza. Schur finiteness and nilpotency. *C. R. Math. Acad. Sci. Paris*, 341(5):283–286, 2005.
- [678] A. del Río, M. Ruiz Marín, and P. Zalesskii. Subgroup separability in integral group rings. *J. Algebra*, 347:60–68, 2011.
- [679] M. Delgado. Commutative images of rational languages and the abelian kernel of a monoid. *Theor. Inform. Appl.*, 35(5):419–435, 2001.
- [680] M. Delgado, J. I. Farrán, P. A. García-Sánchez, and D. Llena. On the generalized Feng-Rao numbers of numerical semigroups generated by intervals. *Math. Comp.*, 82(283):1813–1836, 2013.
- [681] M. Delgado, J. I. Farrán, P. A. García-Sánchez, and D. Llena. On the weight hierarchy of codes coming from semigroups with two generators. *IEEE Trans. Inform. Theory*, 60(1):282–295, 2014.
- [682] M. Delgado and V. H. Fernandes. Abelian kernels of some monoids of injective partial transformations and an application. *Semigroup Forum*, 61(3):435–452, 2000.
- [683] M. Delgado and V. H. Fernandes. Abelian kernels of monoids of order-preserving maps and of some of its extensions. *Semigroup Forum*, 68(3):335–356, 2004.
- [684] M. Delgado and V. H. Fernandes. Solvable monoids with commuting idempotents. *Internat. J. Algebra Comput.*, 15(3):547–570, 2005.
- [685] M. Delgado and V. H. Fernandes. Rees quotients of numerical semigroups. *Port. Math.*, 70(2):93–112, 2013.
- [686] M. Delgado, P. A. García-Sánchez, and A. M. Robles-Pérez. Numerical semigroups with a given set of pseudo-Frobenius numbers. *LMS J. Comput. Math.*, 19(1):186–205, 2016.

- [687] M. Delgado, P. A. García-Sánchez, J. C. Rosales, and J. M. Urbano-Blanco. Systems of proportionally modular Diophantine inequalities. *Semigroup Forum*, 76(3):469–488, 2008.
- [688] M. Delgado and P. Héam. A polynomial time algorithm to compute the abelian kernel of a finite monoid. *Semigroup Forum*, 67(1):97–110, 2003.
- [689] M. Delgado and J. C. Rosales. On the Frobenius number of a proportionally modular Diophantine inequality. *Port. Math. (N.S.)*, 63(4):415–425, 2006.
- [690] M. Delgado and B. Steinberg. On iterated Mal’cev products with a pseudovariety of groups. *Internat. J. Algebra Comput.*, 21(7):1285–1304, 2011.
- [691] O. Delgado Friedrichs and D. H. Huson. Tiling space by Platonic solids. I. *Discrete Comput. Geom.*, 21(2):299–315, 1999.
- [692] O. Delgado Friedrichs and D. H. Huson. 4-regular vertex-transitive tilings of E^3 . *Discrete Comput. Geom.*, 24(2-3):279–292, 2000. The Branko Grünbaum birthday issue.
- [693] C. Delizia, P. Moravec, and C. Nicotera. Groups with all centralizers subnormal of defect at most two. *J. Algebra*, 374:132–140, 2013.
- [694] W. DeMeo. Expansions of finite algebras and their congruence lattices. *Algebra Universalis*, 69(3):257–278, 2013.
- [695] U. Dempwolff. Automorphisms and equivalence of bent functions and of difference sets in elementary abelian 2-groups. *Comm. Algebra*, 34(3):1077–1131, 2006.
- [696] D. Denoncin. Inductive AM condition for the alternating groups in characteristic 2. *J. Algebra*, 404:1–17, 2014.
- [697] R. Dentzer. On geometric embedding problems and semiabelian groups. *Manuscripta Math.*, 86(2):199–216, 1995.
- [698] U. Derenthal, A. Elsenhans, and J. Jahnel. On the factor alpha in Peyre’s constant. *Math. Comp.*, 83(286):965–977, 2014.
- [699] D. Deriziotis, T. P. McDonough, and C. A. Pallikaros. On root subsystems and involutions in S_n . *Glasg. Math. J.*, 52(2):357–369, 2010.
- [700] L. Descalço and N. Ruškuc. Subsemigroups of the bicyclic monoid. *Internat. J. Algebra Comput.*, 15(1):37–57, 2005.
- [701] A. S. Detinko. A new GAP group library for irreducible maximal solvable subgroups of prime degree classical groups. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 258(Teor. Predst. Din. Sist. Komb. i Algoritm. Metody. 4):71–81, 355–356, 1999.
- [702] A. S. Detinko and D. L. Flannery. Classification of nilpotent primitive linear groups over finite fields. *Glasg. Math. J.*, 46(3):585–594, 2004.
- [703] A. S. Detinko and D. L. Flannery. Algorithms for computing with nilpotent matrix groups over infinite domains. *J. Symbolic Comput.*, 43(1):8–26, 2008.

- [704] A. S. Detinko and D. L. Flannery. On deciding finiteness of matrix groups. *J. Symbolic Comput.*, 44(8):1037–1043, 2009.
- [705] A. S. Detinko, D. L. Flannery, and A. Hulpke. Algorithms for arithmetic groups with the congruence subgroup property. *J. Algebra*, 421:234–259, 2015.
- [706] A. S. Detinko, D. L. Flannery, and E. A. O’Brien. Deciding finiteness of matrix groups in positive characteristic. *J. Algebra*, 322(11):4151–4160, 2009.
- [707] A. S. Detinko, D. L. Flannery, and E. A. O’Brien. Algorithms for the Tits alternative and related problems. *J. Algebra*, 344:397–406, 2011.
- [708] A. S. Detinko, D. L. Flannery, and E. A. O’Brien. Recognizing finite matrix groups over infinite fields. *J. Symbolic Comput.*, 50:100–109, 2013.
- [709] E. Detomi and A. Lucchini. Probabilistic generation of finite groups with a unique minimal normal subgroup. *J. Lond. Math. Soc. (2)*, 87(3):689–706, 2013.
- [710] S. Devadas and S. V. Sam. Representations of rational Cherednik algebras of $G(m, r, n)$ in positive characteristic. *J. Commut. Algebra*, 6(4):525–559, 2014.
- [711] O. Deveci, E. Karaduman, and C. M. Campbell. The periods of k -nacci sequences in centropolyhedral groups and related groups. *Ars Combin.*, 97A:193–210, 2010.
- [712] D. Dèvenport. Galois groups and the factorization of polynomials. *Programmirovanie*, (1):43–58, 1997.
- [713] M. Deza and M. Dutour. Zigzag structures of simple two-faced polyhedra. *Combin. Probab. Comput.*, 14(1-2):31–57, 2005.
- [714] M. Deza, M. Dutour Sikirić, and S. Shpectorov. Hypercube embeddings of Wythoffians. *Ars Math. Contemp.*, 1(1):99–111, 2008.
- [715] L. Di Martino, M. A. Pellegrini, and T. Weigel. Minimal irreducibility and the unipotent characters of groups of type B_m and C_m . *J. Algebra Appl.*, 8(3):413–451, 2009.
- [716] L. Di Martino, M. A. Pellegrini, and A. E. Zalesski. On generators and representations of the sporadic simple groups. *Comm. Algebra*, 42(2):880–908, 2014.
- [717] L. Di Martino and N. Vavilov. $(2, 3)$ -generation of $SL(n, q)$. I. Cases $n = 5, 6, 7$. *Comm. Algebra*, 22(4):1321–1347, 1994.
- [718] L. Di Martino and N. Vavilov. $(2, 3)$ -generation of $SL(n, q)$. II. Cases $n \geq 8$. *Comm. Algebra*, 24(2):487–515, 1996.
- [719] L. Di Martino and A. E. Zalesskii. Eigenvalues of unipotent elements in cross-characteristic representations of finite classical groups. *J. Algebra*, 319(7):2668–2722, 2008.
- [720] H. Dietrich and W. A. de Graaf. A computational approach to the Kostant-Sekiguchi correspondence. *Pacific J. Math.*, 265(2):349–379, 2013.
- [721] H. Dietrich and B. Eick. On the groups of cube-free order. *J. Algebra*, 292(1):122–137, 2005.

- [722] H. Dietrich, P. Faccin, and W. A. de Graaf. Computing with real Lie algebras: real forms, Cartan decompositions, and Cartan subalgebras. *J. Symbolic Comput.*, 56:27–45, 2013.
- [723] H. Dietrich, P. Faccin, and W. A. de Graaf. Regular subalgebras and nilpotent orbits of real graded Lie algebras. *J. Algebra*, 423:1044–1079, 2015.
- [724] J. Dietz. Automorphism groups of semi-direct products. *Comm. Algebra*, 40(9):3308–3316, 2012.
- [725] F. Digne and J. Michel. Parabolic Deligne-Lusztig varieties. *Adv. Math.*, 257:136–218, 2014.
- [726] A. Distler. Finite nilpotent semigroups of small coclass. *Comm. Algebra*, 42(3):1136–1150, 2014.
- [727] A. Distler and T. Kelsey. The semigroups of order 9 and their automorphism groups. *Semigroup Forum*, 88(1):93–112, 2014.
- [728] A. Distler and J. D. Mitchell. The number of nilpotent semigroups of degree 3. *Electron. J. Combin.*, 19(2):Paper 51, 19, 2012.
- [729] J. D. Dixon. Groups with a Cayley graph isomorphic to a hypercube. *Bull. Austral. Math. Soc.*, 55(3):385–393, 1997.
- [730] J. D. Dixon. Permutation representations and rational irreducibility. *Bull. Austral. Math. Soc.*, 71(3):493–503, 2005.
- [731] J. D. Dixon. Generating random elements in finite groups. *Electron. J. Combin.*, 15(1):Research Paper 94, 13, 2008.
- [732] J. D. Dixon and A. R. Barghi. Degree homogeneous subgroups. *Canad. Math. Bull.*, 48(1):41–49, 2005.
- [733] J. D. Dixon and A. Rahnamai Barghi. Irreducible characters which are zero on only one conjugacy class. *Proc. Amer. Math. Soc.*, 135(1):41–45 (electronic), 2007.
- [734] J. D. Dixon and A. E. Zalesski. Finite imprimitive linear groups of prime degree. *J. Algebra*, 276(1):340–370, 2004.
- [735] P. Dobcsányi, D. A. Preece, and L. H. Soicher. On balanced incomplete-block designs with repeated blocks. *European J. Combin.*, 28(7):1955–1970, 2007.
- [736] E. Dobson and P. Spiga. CI-groups with respect to ternary relational structures: new examples. *Ars Math. Contemp.*, 6(2):351–364, 2013.
- [737] S. Dolfi. Orbits of permutation groups on the power set. *Arch. Math. (Basel)*, 75(5):321–327, 2000.
- [738] S. Dolfi. Large orbits in coprime actions of solvable groups. *Trans. Amer. Math. Soc.*, 360(1):135–152 (electronic), 2008.

- [739] S. Dolfi, R. Guralnick, C. E. Praeger, and P. Spiga. Coprime subdegrees for primitive permutation groups and completely reducible linear groups. *Israel J. Math.*, 195(2):745–772, 2013.
- [740] S. Dolfi, M. Herzog, and E. Jabara. Finite groups whose noncentral commuting elements have centralizers of equal size. *Bull. Aust. Math. Soc.*, 82(2):293–304, 2010.
- [741] S. Dolfi, A. Moretó, and G. Navarro. The groups with exactly one class of size a multiple of p . *J. Group Theory*, 12(2):219–234, 2009.
- [742] S. Dolfi and G. Navarro. Finite groups with only one nonlinear irreducible representation. *Comm. Algebra*, 40(11):4324–4329, 2012.
- [743] S. Dolfi, G. Navarro, and P. H. Tiep. Primes dividing the degrees of the real characters. *Math. Z.*, 259(4):755–774, 2008.
- [744] S. Dolfi, G. Navarro, and P. H. Tiep. Finite groups whose same degree characters are Galois conjugate. *Israel J. Math.*, 198(1):283–331, 2013.
- [745] S. Dolfi and E. Pacifici. Zeros of Brauer characters and linear actions of finite groups: small primes. *J. Algebra*, 399:343–357, 2014.
- [746] A. F. Donaldson and A. Miller. Automatic symmetry detection for model checking using computational group theory. In *FM*, pages 481–496, 2005.
- [747] A. F. Donaldson and A. Miller. Exact and approximate strategies for symmetry reduction in model checking. In *FM*, pages 541–556, 2006.
- [748] A. F. Donaldson and A. Miller. Symmetry reduction for probabilistic model checking using generic representatives. In *AVTA*, pages 9–23, 2006.
- [749] A. F. Donaldson and A. Miller. Extending symmetry reduction techniques to a realistic model of computation. *Electr. Notes Theor. Comput. Sci.*, 185:63–76, 2007.
- [750] A. F. Donaldson, A. Miller, and M. Calder. Finding symmetry in models of concurrent systems by static channel diagram analysis. *Electr. Notes Theor. Comput. Sci.*, 128(6):161–177, 2005.
- [751] A. F. Donaldson, A. Miller, and M. Calder. Spin-to-grape: A tool for analysing symmetry in promela models. *Electr. Notes Theor. Comput. Sci.*, 139(1):3–23, 2005.
- [752] C. Dong, R. L. Griess Jr., and G. Höhn. Framed vertex operator algebras, codes and the Moonshine module. *Comm. Math. Phys.*, 193(2):407–448, 1998.
- [753] H. Dong and S. Zhou. Affine groups and flag-transitive triplanes. *Sci. China Math.*, 55(12):2557–2578, 2012.
- [754] H. Dong and S. Zhou. Flag-transitive primitive (v, k, λ) symmetric designs with λ at most 10 and alternating socle. *J. Algebra Appl.*, 13(6):1450025, 10, 2014.
- [755] J. Dong, S. Natale, and L. Vendramin. Frobenius property for fusion categories of small integral dimension. *J. Algebra Appl.*, 14(2):1550011, 17, 2015.

- [756] M. Donten. On Kummer 3-folds. *Rev. Mat. Complut.*, 24(2):465–492, 2011.
- [757] M. Donten-Bury. Cox rings of minimal resolutions of surface quotient singularities. *Glasg. Math. J.*, 58(2):325–355, 2016.
- [758] A. Dooms, E. Jespers, and A. Konovalov. From Farey symbols to generators for subgroups of finite index in integral group rings of finite groups. *J. K-Theory*, 6(2):263–283, 2010.
- [759] H. Doostie and A. Saeidi. On the degrees of the non-faithful irreducible characters in finite groups. *Extracta Math.*, 26(1):145–151, 2011.
- [760] A. Douglas, W. Joseph, and J. Repka. A classification of the embeddings of the Diamond Lie algebra into $\mathfrak{sl}(3, \mathbb{C})$ and $\mathfrak{sp}(4, \mathbb{C})$ and restrictions of irreducible modules. *J. Math. Phys.*, 52(10):103507, 10, 2011.
- [761] A. Douglas, D. Kahrobaei, and J. Repka. Classification of embeddings of abelian extensions of D_n into E_{n+1} . *J. Pure Appl. Algebra*, 217(10):1942–1954, 2013.
- [762] A. Douglas and J. Repka. Indecomposable representations of the Euclidean algebra $\mathfrak{e}(3)$ from irreducible representations of $\mathfrak{sl}(4, \mathbb{C})$. *Bull. Aust. Math. Soc.*, 83(3):439–449, 2011.
- [763] A. Douglas and J. Repka. The GraviGUT algebra is not a subalgebra of E_8 , but E_8 does contain an extended GraviCUT algebra. *SIGMA Symmetry Integrability Geom. Methods Appl.*, 10:Paper 072, 10, 2014.
- [764] A. Douglas and J. Repka. Levi decomposable algebras in the classical Lie algebras. *J. Algebra*, 428:292–314, 2015.
- [765] J. M. Douglass, G. Pfeiffer, and G. Röhrle. On reflection subgroups of finite Coxeter groups. *Comm. Algebra*, 41(7):2574–2592, 2013.
- [766] J. Draisma. Recognizing the symmetry type of O.D.E.s. *J. Pure Appl. Algebra*, 164(1-2):109–128, 2001. Effective methods in algebraic geometry (Bath, 2000).
- [767] J. Draisma. On a conjecture of Sophus Lie. In *Differential equations and the Stokes phenomenon*, pages 65–87. World Sci. Publ., River Edge, NJ, 2002.
- [768] J. Draisma. Constructing Lie algebras of first order differential operators. *J. Symbolic Comput.*, 36(5):685–698, 2003.
- [769] J. Draisma. Small maximal spaces of non-invertible matrices. *Bull. London Math. Soc.*, 38(5):764–776, 2006.
- [770] J. Draisma. Transitive Lie algebras of vector fields: an overview. *Qual. Theory Dyn. Syst.*, 11(1):39–60, 2012.
- [771] A. Drápal, T. S. Griggs, and A. R. Kozlik. Triple systems and binary operations. *Discrete Math.*, 325:1–11, 2014.
- [772] A. Drápal, T. S. Griggs, and A. R. Kozlik. Basics of DTS quasigroups: algebra, geometry and enumeration. *J. Algebra Appl.*, 14(6):1550089, 24, 2015.

- [773] A. Drápal and P. Vojtěchovský. Moufang loops that share associator and three quarters of their multiplication tables. *Rocky Mountain J. Math.*, 36(2):425–455, 2006.
- [774] A. Drápal and P. Vojtěchovský. Explicit constructions of loops with commuting inner mappings. *European J. Combin.*, 29(7):1662–1681, 2008.
- [775] A. Drápal and P. Vojtěchovský. Small loops of nilpotency class 3 with commutative inner mapping groups. *J. Group Theory*, 14(4):547–573, 2011.
- [776] C. M. Drupieski. On injective modules and support varieties for the small quantum group. *Int. Math. Res. Not. IMRN*, (10):2263–2294, 2011.
- [777] N. Du and M. L. Lewis. Groups which do not possess characters of nontrivial prime power degree. *J. Group Theory*, 17(4):649–659, 2014.
- [778] A. Dubickas and J. Jankauskas. Simple linear relations between conjugate algebraic numbers of low degree. *J. Ramanujan Math. Soc.*, 30(2):219–235, 2015.
- [779] B. Dubrovin, S. Liu, and Y. Zhang. Frobenius manifolds and central invariants for the Drinfeld-Sokolov biHamiltonian structures. *Adv. Math.*, 219(3):780–837, 2008.
- [780] O. Dudas and G. Malle. Decomposition matrices for exceptional groups at $d = 4$. *J. Pure Appl. Algebra*, 220(3):1096–1121, 2016.
- [781] J. Dumas, B. D. Saunders, and G. Villard. On efficient sparse integer matrix Smith normal form computations. *J. Symbolic Comput.*, 32(1-2):71–99, 2001. Computer algebra and mechanized reasoning (St. Andrews, 2000).
- [782] D. M. Duncan, T. R. Hoffman, and J. P. Solazzo. Equiangular tight frames and fourth root Seidel matrices. *Linear Algebra Appl.*, 432(11):2816–2823, 2010.
- [783] D. M. Duncan, T. R. Hoffman, and J. P. Solazzo. Numerical measures for two-graphs. *Rocky Mountain J. Math.*, 41(1):133–154, 2011.
- [784] N. M. Dunfield and W. P. Thurston. The virtual Haken conjecture: experiments and examples. *Geom. Topol.*, 7:399–441, 2003.
- [785] M. Dutour. The six-dimensional Delaunay polytopes. *European J. Combin.*, 25(4):535–548, 2004.
- [786] M. Dutour and M. Deza. Goldberg-Coxeter construction for 3- and 4-valent plane graphs. *Electron. J. Combin.*, 11(1):Research Paper 20, 49, 2004.
- [787] M. Dutour, R. Erdahl, and K. Rybnikov. Perfect Delaunay polytopes in low dimensions. *Integers*, 7:A39, 49, 2007.
- [788] M. Dutour Sikirić and G. Ellis. Wythoff polytopes and low-dimensional homology of Mathieu groups. *J. Algebra*, 322(11):4143–4150, 2009.
- [789] M. Dutour Sikirić, G. Ellis, and A. Schürmann. On the integral homology of $\mathrm{PSL}_4(\mathbb{Z})$ and other arithmetic groups. *J. Number Theory*, 131(12):2368–2375, 2011.

- [790] M. Dutour Sikirić, H. Gangl, P. E. Gunnells, J. Hanke, A. Schürmann, and D. Yasaki. On the cohomology of linear groups over imaginary quadratic fields. *J. Pure Appl. Algebra*, 220(7):2564–2589, 2016.
- [791] M. Dutour Sikirić, Y. Itoh, and A. Poyarkov. Cube packings, second moment and holes. *European J. Combin.*, 28(3):715–725, 2007.
- [792] M. Dutour Sikirić, A. Schürmann, and F. Vallentin. The contact polytope of the Leech lattice. *Discrete Comput. Geom.*, 44(4):904–911, 2010.
- [793] E. Dzhabara and D. V. Lytkina. On groups of exponent 36. *Sibirsk. Mat. Zh.*, 54(1):44–48, 2013.
- [794] A. Dzhumadi’daev and P. Zusmanovich. Commutative 2-cocycles on Lie algebras. *J. Algebra*, 324(4):732–748, 2010.
- [795] C. W. Eaton, R. Kessar, B. Külshammer, and B. Sambale. 2-blocks with abelian defect groups. *Adv. Math.*, 254:706–735, 2014.
- [796] C. W. Eaton, B. Külshammer, and B. Sambale. 2-blocks with minimal nonabelian defect groups II. *J. Group Theory*, 15(3):311–321, 2012.
- [797] C. W. Eaton and A. Moretó. Extending Brauer’s height zero conjecture to blocks with nonabelian defect groups. *Int. Math. Res. Not. IMRN*, (20):5581–5601, 2014.
- [798] M. Edjvet and A. Juhász. Equations of length 4 and one-relator products. *Math. Proc. Cambridge Philos. Soc.*, 129(2):217–229, 2000.
- [799] M. Edjvet and A. Juhász. One-relator quotients of free products of cyclic groups. *Comm. Algebra*, 28(2):883–902, 2000.
- [800] M. Edjvet and R. M. Thomas. The groups $(l, m|n, k)$. *J. Pure Appl. Algebra*, 114(2):175–208, 1997.
- [801] M. Edjvet and G. Williams. The cyclically presented groups with relators $x_i x_{i+k} x_{i+l}$. *Groups Geom. Dyn.*, 4(4):759–775, 2010.
- [802] A. L. Edmonds. The partition problem for equifacetal simplices. *Beiträge Algebra Geom.*, 50(1):195–213, 2009.
- [803] F. Effenberger. Stacked polytopes and tight triangulations of manifolds. *J. Combin. Theory Ser. A*, 118(6):1843–1862, 2011.
- [804] F. Effenberger and W. Kühnel. Hamiltonian submanifolds of regular polytopes. *Discrete Comput. Geom.*, 43(2):242–262, 2010.
- [805] F. Effenberger and J. Spreer. Simplicial blowups and discrete normal surfaces in simpcomp. *ACM Communications in Computer Algebra*, 45(3):173–176, 2011.
- [806] F. Effenberger and D. Weiskopf. Finding and classifying critical points of 2D vector fields: a cell-oriented approach using group theory. *Comput. Vis. Sci.*, 13(8):377–396, 2010.

- [807] S. Egner and T. Beth. How to play M_{13} ? *Des. Codes Cryptogr.*, 16(3):243–247, 1999.
- [808] S. Egner, J. Johnson, D. Padua, M. Püschel, and J. Xiong. Automatic derivation and implementation of signal processing algorithms. *SIGSAM Bulletin*, 35(2):1–19, 2001.
- [809] S. Egner and M. Püschel. Solving puzzles related to permutation groups. In O. Gloor, editor, *ISSAC 98: Proceedings of the 1998 International Symposium on Symbolic and Algebraic Computation, August 13–15, 1998, University of Rostock, Germany*, pages 186–193, New York, NY 10036, USA, 1998. ACM Press.
- [810] S. Egner and M. Püschel. Automatic generation of fast discrete signal transforms. *IEEE Trans. Signal Process.*, 49(9):1992–2002, 2001.
- [811] S. Egner and M. Püschel. Symmetry-based matrix factorization. *J. Symbolic Comput.*, 37(2):157–186, 2004.
- [812] S. Egner, M. Püschel, and T. Beth. Decomposing a permutation into a conjugated tensor product. In *Proceedings of the 1997 International Symposium on Symbolic and Algebraic Computation (Kihei, HI)*, pages 101–108 (electronic). ACM, New York, 1997.
- [813] A. Egri-Nagy. *Algebraic Hierarchical Decomposition of Finite State Automata - A Computational Approach*. PhD thesis, University of Hertfordshire, 2005.
- [814] A. Egri-Nagy and C. L. Nehaniv. Algebraic hierarchical decomposition of finite state automata: Comparison of implementations for krohn-rhodes theory. In *Implementation and Application of Automata*, volume 3317 of *Lecture Notes in Computer Science*, pages 315–316. Springer, 2005.
- [815] B. Eick. *Spezielle PAG-Systeme im Computeralgebrasystem GAP*. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1993.
- [816] B. Eick. *Charakterisierung und Konstruktion von Frattinigruppen mit Anwendungen in der Konstruktion endlicher Gruppen*. PhD thesis, RWTH, Aachen, 1996.
- [817] B. Eick. The converse of a theorem of W. Gaschütz on Frattini subgroups. *Math. Z.*, 224(1):103–111, 1997.
- [818] B. Eick. Special presentations for finite soluble groups and computing (pre-)Frattini subgroups. In *Groups and computation, II (New Brunswick, NJ, 1995)*, volume 28 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 101–112. Amer. Math. Soc., Providence, RI, 1997.
- [819] B. Eick. *Algorithms for polycyclic groups*. Habilitationsschrift, University of Kassel, 2001.
- [820] B. Eick. Computing with infinite polycyclic groups. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 139–154. de Gruyter, Berlin, 2001.
- [821] B. Eick. On the Fitting subgroup of a polycyclic-by-finite group and its applications. *J. Algebra*, 242(1):176–187, 2001.

- [822] B. Eick. Orbit-stabilizer problems and computing normalizers for polycyclic groups. *J. Symbolic Comput.*, 34(1):1–19, 2002.
- [823] B. Eick. Computing the automorphism group of a solvable Lie algebra. *Linear Algebra Appl.*, 382:195–209, 2004.
- [824] B. Eick. Computational group theory. *Jahresber. Deutsch. Math.-Verein.*, 107(3):155–170, 2005.
- [825] B. Eick. Determination of the uniserial space groups with a given coclass. *J. London Math. Soc. (2)*, 71(3):622–642, 2005.
- [826] B. Eick. Automorphism groups of 2-groups. *J. Algebra*, 300(1):91–101, 2006.
- [827] B. Eick. Computing automorphism groups and testing isomorphisms for modular group algebras. *J. Algebra*, 320(11):3895–3910, 2008.
- [828] B. Eick. Schur multipliers of finite p -groups with fixed coclass. *Israel J. Math.*, 166:157–166, 2008.
- [829] B. Eick. Schur multipliers of infinite pro- p -groups with finite coclass. *Israel J. Math.*, 166:147–156, 2008.
- [830] B. Eick. Computing p -groups with trivial Schur multiplier. *J. Algebra*, 322(3):741–751, 2009.
- [831] B. Eick. Computing nilpotent quotients of associative algebras and algebras satisfying a polynomial identity. *Internat. J. Algebra Comput.*, 21(8):1339–1355, 2011.
- [832] B. Eick and D. Feichtenschlager. Constructing CF groups by coclass. *Experiment. Math.*, 18(2):205–211, 2009.
- [833] B. Eick and D. Feichtenschlager. Computation of low-dimensional (co)homology groups for infinite sequences of p -groups with fixed coclass. *Internat. J. Algebra Comput.*, 21(4):635–649, 2011.
- [834] B. Eick, F. Gähler, and W. Nickel. Computing maximal subgroups and Wyckoff positions of space groups. *Acta Cryst. Sect. A*, 53(4):467–474, 1997.
- [835] B. Eick and B. Höfling. The solvable primitive permutation groups of degree at most 6560. *LMS J. Comput. Math.*, 6:29–39 (electronic), 2003.
- [836] B. Eick and M. Horn. The construction of finite solvable groups revisited. *J. Algebra*, 408:166–182, 2014.
- [837] B. Eick and A. Hulpke. Computing the maximal subgroups of a permutation group. I. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 155–168. de Gruyter, Berlin, 2001.
- [838] B. Eick and A. Hulpke. Computing Hall subgroups of finite groups. *LMS J. Comput. Math.*, 15:205–218, 2012.

- [839] B. Eick and S. King. The isomorphism problem for graded algebras and its application to mod- p cohomology rings of small p -groups. *J. Algebra*, 452:487–501, 2016.
- [840] B. Eick, C. R. Leedham-Green, and E. A. O’Brien. Constructing automorphism groups of p -groups. *Comm. Algebra*, 30(5):2271–2295, 2002.
- [841] B. Eick and J. Müller. On p -groups forming Brauer pairs. *J. Algebra*, 304(1):286–303, 2006.
- [842] B. Eick, M. F. Newman, and E. A. O’Brien. The class-breadth conjecture revisited. *J. Algebra*, 300(1):384–393, 2006.
- [843] B. Eick and W. Nickel. Computing the Schur multiplier and the nonabelian tensor square of a polycyclic group. *J. Algebra*, 320(2):927–944, 2008.
- [844] B. Eick and E. A. O’Brien. Enumerating p -groups. *J. Austral. Math. Soc. Ser. A*, 67(2):191–205, 1999. Group theory.
- [845] B. Eick and E. A. O’Brien. The groups of order 512. In *Algorithmic algebra and number theory (Heidelberg, 1997)*, pages 379–380. Springer, Berlin, 1999.
- [846] B. Eick and G. Ostheimer. On the orbit-stabilizer problem for integral matrix actions of polycyclic groups. *Math. Comp.*, 72(243):1511–1529 (electronic), 2003.
- [847] B. Eick and C. R. B. Wright. Computing subgroups by exhibition in finite solvable groups. *J. Symbolic Comput.*, 33(2):129–143, 2002.
- [848] F. Eisele, A. Kiefer, and I. Van Gelder. Describing units of integral group rings up to commensurability. *J. Pure Appl. Algebra*, 219(7):2901–2916, 2015.
- [849] M. Eisermann. *Knotengruppen-Darstellungen und Invarianten von endlichem Typ*. Bonner Mathematische Schriften [Bonn Mathematical Publications], 327. Universität Bonn, Mathematisches Institut, Bonn, 2000. Dissertation, Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn, 2000.
- [850] M. Eisermann. Knot colouring polynomials. *Pacific J. Math.*, 231(2):305–336, 2007.
- [851] S. El-Zanati, O. Heden, G. Seelinger, P. Sissokho, L. Spence, and C. Vanden Eynden. Partitions of the 8-dimensional vector space over $\text{GF}(2)$. *J. Combin. Des.*, 18(6):462–474, 2010.
- [852] A. G. Elashvili, V. G. Kac, and E. B. Vinberg. Cyclic elements in semisimple Lie algebras. *Transform. Groups*, 18(1):97–130, 2013.
- [853] P. Elbaz-Vincent, H. Gangl, and C. Soulé. Quelques calculs de la cohomologie de $\text{GL}_N(\mathbb{Z})$ et de la K -théorie de \mathbb{Z} . *C. R. Math. Acad. Sci. Paris*, 335(4):321–324, 2002.
- [854] P. Elbaz-Vincent, H. Gangl, and C. Soulé. Perfect forms, K -theory and the cohomology of modular groups. *Adv. Math.*, 245:587–624, 2013.
- [855] M. Elder, J. McCammond, and J. Meier. Combinatorial conditions that imply word-hyperbolicity for 3-manifolds. *Topology*, 42(6):1241–1259, 2003.
- [856] G. Ellis. Computing group resolutions. *J. Symbolic Comput.*, 38(3):1077–1118, 2004.

- [857] G. Ellis. Cohomological periodicities of crystallographic groups. *J. Algebra*, 445:537–544, 2016.
- [858] G. Ellis and F. Hegarty. Computational homotopy of finite regular CW-spaces. *J. Homotopy Relat. Struct.*, 9(1):25–54, 2014.
- [859] G. Ellis and S. King. Persistent homology of groups. *J. Group Theory*, 14(4):575–587, 2011.
- [860] G. Ellis and L. V. Le. Homotopy 2-types of low order. *Exp. Math.*, 23(4):383–389, 2014.
- [861] G. Ellis and L. V. Luyen. Computational homology of n -types. *J. Symbolic Comput.*, 47(11):1309–1317, 2012.
- [862] G. Ellis and A. McDermott. Tensor products of prime-power groups. *J. Pure Appl. Algebra*, 132(2):119–128, 1998.
- [863] G. Ellis and R. Mikhailov. A colimit of classifying spaces. *Adv. Math.*, 223(6):2097–2113, 2010.
- [864] G. Ellis and E. Sköldbberg. The $K(\pi, 1)$ conjecture for a class of Artin groups. *Comment. Math. Helv.*, 85(2):409–415, 2010.
- [865] G. Ellis and P. Smith. Computing group cohomology rings from the Lyndon-Hochschild-Serre spectral sequence. *J. Symbolic Comput.*, 46(4):360–370, 2011.
- [866] G. Ellis and G. Williams. On the cohomology of generalized triangle groups. *Comment. Math. Helv.*, 80(3):571–591, 2005.
- [867] G. Entz and H. Pahlings. The Dade conjecture for the McLaughlin group. In *Groups St. Andrews 1997 in Bath, I*, volume 260 of *London Math. Soc. Lecture Note Ser.*, pages 253–266. Cambridge Univ. Press, Cambridge, 1999.
- [868] A. Erfanian, B. Tolve, and N. H. Sarmin. Some considerations on the n -th commutativity degrees of finite groups. *Ars Combin.*, 122:257–267, 2015.
- [869] J. Essert. A geometric construction of panel-regular lattices for buildings of types A_2 and C_2 . *Algebr. Geom. Topol.*, 13(3):1531–1578, 2013.
- [870] S. Estrada, J. R. García-Rozas, J. Peralta, and E. Sánchez-García. Group convolutional codes. *Adv. Math. Commun.*, 2(1):83–94, 2008.
- [871] S. Evans-Riley, M. F. Newman, and C. Schneider. On the soluble length of groups with prime-power order. *Bull. Austral. Math. Soc.*, 59(2):343–346, 1999.
- [872] G. Exoo. Voltage graphs, group presentations and cages. *Electron. J. Combin.*, 11(1):Note 2, 7 pp. (electronic), 2004.
- [873] G. Exoo and R. Jajcay. On the girth of voltage graph lifts. *European J. Combin.*, 32(4):554–562, 2011.
- [874] W. Fehle. *Multiply Transitive Permutation Sets*. PhD thesis, The University of Texas at Dallas, 2012.

- [875] B. Fairbairn. New upper bounds on the spreads of the sporadic simple groups. *Comm. Algebra*, 40(5):1872–1877, 2012.
- [876] B. Fairbairn. Some exceptional Beauville structures. *J. Group Theory*, 15(5):631–639, 2012.
- [877] B. Fairbairn, K. Magaard, and C. Parker. Generation of finite quasisimple groups with an application to groups acting on Beauville surfaces. *Proc. Lond. Math. Soc. (3)*, 107(4):744–798, 2013.
- [878] B. Fairbairn and E. Pierro. New examples of mixed Beauville groups. *J. Group Theory*, 18(5):761–792, 2015.
- [879] J. Fan, N. Du, and J. Zeng. The classification of some modular Frobenius groups. *Bull. Aust. Math. Soc.*, 85(1):11–18, 2012.
- [880] X. Fang, X. Ma, and J. Wang. On locally primitive Cayley graphs of finite simple groups. *J. Combin. Theory Ser. A*, 118(3):1039–1051, 2011.
- [881] X. G. Fang, L. J. Jia, and J. Wang. On the automorphism groups of symmetric graphs admitting an almost simple group. *European J. Combin.*, 29(6):1467–1472, 2008.
- [882] X. G. Fang, C. H. Li, and J. Wang. Finite vertex primitive 2-arc regular graphs. *J. Algebraic Combin.*, 25(2):125–140, 2007.
- [883] A. Farooq, S. Norton, and R. A. Wilson. A presentation of the monster and a set of matrices which satisfy it. *J. Algebra*, 379:432–440, 2013.
- [884] J. I. Farrán and P. A. García-Sánchez. The second Feng-Rao number for codes coming from inductive semigroups. *IEEE Trans. Inform. Theory*, 61(9):4938–4947, 2015.
- [885] M. Farrokhi D. G. and F. Saeedi. Subgroup normality degrees of finite groups II. *J. Algebra Appl.*, 11(4):1250081, 8, 2012.
- [886] J. B. Fawcett. The base size of a primitive diagonal group. *J. Algebra*, 375:302–321, 2013.
- [887] J. B. Fawcett, E. A. O’Brien, and J. Saxl. Regular orbits of symmetric and alternating groups. *J. Algebra*, 458:21–52, 2016.
- [888] M. Fayers. An algorithm for semistandardising homomorphisms. *J. Algebra*, 364:38–51, 2012.
- [889] M. Fayers and S. Lyle. The reducible Specht modules for the Hecke algebra $\mathcal{H}_{\mathbb{C}, -1}(\mathfrak{S}_n)$. *J. Algebraic Combin.*, 37(2):201–241, 2013.
- [890] A. Feldman. Properties of subgroups of solvable groups that imply they are normally embedded. *Glasg. Math. J.*, 45(1):45–52, 2003.
- [891] A. D. Feldman and A. Dasgupta. An intersection property of Sylow 2-subgroups in non-solvable groups. *Math. Proc. Cambridge Philos. Soc.*, 122(2):261–268, 1997.

- [892] V. Felsch, D. L. Johnson, J. Neubüser, and S. V. Tsaranov. The structure of certain Coxeter groups. In *Groups '93 Galway/St. Andrews, Vol. 1 (Galway, 1993)*, volume 211 of *London Math. Soc. Lecture Note Ser.*, pages 177–190. Cambridge Univ. Press, Cambridge, 1995.
- [893] B. Feng, A. Hanany, Y. He, and N. Prezas. Discrete torsion, covering groups and quiver diagrams. *J. High Energy Phys.*, (4):Paper 37, 27, 2001.
- [894] B. Feng, A. Hanany, Y. He, and N. Prezas. Discrete torsion, non-abelian orbifolds and the Schur multiplier. *J. High Energy Phys.*, (1):Paper 33, 25, 2001.
- [895] B. Feng, A. Hanany, Y. He, and N. Prezas. Discrete torsion, non-abelian orbifolds and the Schur multiplier. In *Horizons in world physics. Vol. 245*, volume 245 of *Horiz. World Phys.*, pages 27–44. Nova Sci. Publ., New York, 2004.
- [896] V. H. Fernandes. The monoid of all injective orientation preserving partial transformations on a finite chain. *Comm. Algebra*, 28(7):3401–3426, 2000.
- [897] V. H. Fernandes. The monoid of all injective order preserving partial transformations on a finite chain. *Semigroup Forum*, 62(2):178–204, 2001.
- [898] V. H. Fernandes, G. M. S. Gomes, and M. M. Jesus. Presentations for some monoids of partial transformations on a finite chain. *Comm. Algebra*, 33(2):587–604, 2005.
- [899] V. H. Fernandes and T. M. Quinteiro. The cardinal of various monoids of transformations that preserve a uniform partition. *Bull. Malays. Math. Sci. Soc. (2)*, 35(4):885–896, 2012.
- [900] V. H. Fernandes and T. M. Quinteiro. On the ranks of certain monoids of transformations that preserve a uniform partition. *Comm. Algebra*, 42(2):615–636, 2014.
- [901] V. H. Fernandes and T. M. Quinteiro. Presentations for monoids of finite partial isometries. *Semigroup Forum*, 93(1):97–110, 2016.
- [902] G. A. Fernández-Alcober and L. Legarreta. Conjugacy classes of non-normal subgroups in finite nilpotent groups. *J. Group Theory*, 11(3):381–397, 2008.
- [903] G. A. Fernández-Alcober and A. Moretó. Groups with two extreme character degrees and their normal subgroups. *Trans. Amer. Math. Soc.*, 353(6):2171–2192 (electronic), 2001.
- [904] G. A. Fernández-Alcober and R. T. Shepherd. On the order of p -groups of abundance zero. *J. Algebra*, 201(2):392–400, 1998.
- [905] G. A. Fernández-Alcober and P. Shumyatsky. Positive laws on word values in residually- p groups. *J. Algebra*, 425:524–545, 2015.
- [906] P. Fernandez-Ferreiros and M. A. Gomez-Molleda. Deciding the nilpotency of the Galois group by computing elements in the centre. *Math. Comp.*, 73(248):2043–2060, 2004.
- [907] D. L. Ferrario. Equivariant deformations of manifolds and real representations. *Pacific J. Math.*, 196(2):353–368, 2000.

- [908] D. L. Ferrario. Self homotopy equivalences of equivariant spheres. In *Groups of homotopy self-equivalences and related topics (Gargnano, 1999)*, volume 274 of *Contemp. Math.*, pages 105–131. Amer. Math. Soc., Providence, RI, 2001.
- [909] D. L. Ferrario and S. Terracini. On the existence of collisionless equivariant minimizers for the classical n -body problem. *Invent. Math.*, 155(2):305–362, 2004.
- [910] R. A. Ferraz and P. M. Kitani. Units of $\mathbb{Z}C_{p^n}$. *Comm. Algebra*, 43(11):4936–4950, 2015.
- [911] N. C. Fiala and W. H. Haemers. 5-chromatic strongly regular graphs. *Discrete Math.*, 306(23):3083–3096, 2006.
- [912] F. Fiedler, M. H. Klin, and M. Muzychuk. Small vertex-transitive directed strongly regular graphs. *Discrete Math.*, 255(1-3):87–115, 2002. Combinatorics '98 (Palermo).
- [913] C. Fieker and J. Klüners. Minimal discriminants for fields with small Frobenius groups as Galois groups. *J. Number Theory*, 99(2):318–337, 2003.
- [914] J. E. Fields, P. Gaborit, W. C. Huffman, and V. Pless. On the classification of extremal even formally self-dual codes. *Des. Codes Cryptogr.*, 18(1-3):125–148, 1999. Designs and codes—a memorial tribute to Ed Assmus.
- [915] J. E. Fields, P. Gaborit, W. C. Huffman, and V. Pless. On the classification of extremal even formally self-dual codes of lengths 20 and 22. *Discrete Appl. Math.*, 111(1-2):75–86, 2001.
- [916] C. Fiori and B. Ruini. Infinite classes of dihedral snarks. *Mediterr. J. Math.*, 5(2):199–210, 2008.
- [917] F. Fité and J. Lario. The twisting representation of the L -function of a curve. *Rev. Mat. Iberoam.*, 29(3):749–764, 2013.
- [918] J. Fitzgerald, I. J. Hayes, and A. Tarlecki. Fm 2005: Formal methods, international symposium of formal methods europe, newcastle, uk, july 18-22, 2005, proceedings. In *FM*, volume 3582 of *Lecture Notes in Computer Science*, 2005.
- [919] D. L. Flannery and E. A. O'Brien. Computing 2-cocycles for central extensions and relative difference sets. *Comm. Algebra*, 28(4):1939–1955, 2000.
- [920] D. L. Flannery and E. A. O'Brien. Linear groups of small degree over finite fields. *Internat. J. Algebra Comput.*, 15(3):467–502, 2005.
- [921] P. Fleischmann, G. O. Michler, P. Roelse, J. Rosenboom, R. Staszewski, C. Wagner, and M. Weller. *Linear algebra over small finite fields on parallel machines*, volume 23 of *Vorlesungen aus dem Fachbereich Mathematik der Universität GH Essen [Lecture Notes in Mathematics at the University of Essen]*. Universität Essen, Fachbereich Mathematik, Essen, 1995.
- [922] T. Foguel and M. Kinyon. Uniquely 2-divisible Bol loops. *J. Algebra Appl.*, 9(4):591–601, 2010.

- [923] M. Follett, K. Kalail, E. McMahon, C. Pelland, and R. Won. Partitions of $AG(4, 3)$ into maximal caps. *Discrete Math.*, 337:1–8, 2014.
- [924] Y. Fong and C. S. Wang. On derivations of centralizer near-rings. *Taiwanese J. Math.*, 15(4):1437–1446, 2011.
- [925] E. Formanek, W. Lee, I. Sysoeva, and M. Vazirani. The irreducible complex representations of the braid group on n strings of degree $\leq n$. *J. Algebra Appl.*, 2(3):317–333, 2003.
- [926] S. Fouladi, A. R. Jamali, and R. Orfi. Some 3-generator, 3-relation finite 2-groups. *Comm. Algebra*, 37(1):40–46, 2009.
- [927] S. Fouladi and R. Orfi. Maximal subsets of pairwise noncommuting elements of some p -groups of maximal class. *Bull. Aust. Math. Soc.*, 84(3):447–451, 2011.
- [928] S. Fouladi and R. Orfi. Maximum size of subsets of pairwise noncommuting elements in finite metacyclic p -groups. *Bull. Aust. Math. Soc.*, 87(1):18–23, 2013.
- [929] S. Fouladi and R. Orfi. Noninner automorphisms of order p in finite p -groups of coclass 2, when $p > 2$. *Bull. Aust. Math. Soc.*, 90(2):232–236, 2014.
- [930] R. Fowler and G. Röhrle. Spherical nilpotent orbits in positive characteristic. *Pacific J. Math.*, 237(2):241–286, 2008.
- [931] A. Francis. Centralizers of Iwahori-Hecke algebras. II. The general case. *Algebra Colloq.*, 10(1):95–100, 2003.
- [932] A. R. Francis. An algebraic view of bacterial genome evolution. *J. Math. Biol.*, 69(6-7):1693–1718, 2014.
- [933] R. L. Fray and A. L. Prins. On the inertia groups of the maximal subgroup $2^7:Sp_6(2)$ in $Aut(Fi_{22})$. *Quaest. Math.*, 38(1):83–102, 2015.
- [934] E. Freitag and R. Salvati Manni. The Burkhardt group and modular forms. *Transform. Groups*, 9(1):25–45, 2004.
- [935] S. Freyre, M. Graña, and L. Vendramin. On Nichols algebras over $SL(2, \mathbb{F}_q)$ and $GL(2, \mathbb{F}_q)$. *J. Math. Phys.*, 48(12):123513, 11, 2007.
- [936] S. Freyre, M. Graña, and L. Vendramin. On Nichols algebras over $PGL(2, q)$ and $PSL(2, q)$. *J. Algebra Appl.*, 9(2):195–208, 2010.
- [937] M. E. Frías-Armenta, V. Neumann-Lara, and M. A. Pizaña. Dismantlings and iterated clique graphs. *Discrete Math.*, 282(1-3):263–265, 2004.
- [938] M. Friedman and D. Garber. On the structure of fundamental groups of conic-line arrangements having a cycle in their graph. *Topology Appl.*, 177:34–58, 2014.
- [939] O. D. Friedrichs. *Euclidicity criteria for three-dimensional branched triangulations*. PhD thesis, Universität Bielefeld, 1994.

- [940] E. Friese and F. Ladisch. Affine symmetries of orbit polytopes. *Adv. Math.*, 288:386–425, 2016.
- [941] H. Friepertinger. The cycle index of the symmetry group of the fullerene C_{60} . *Match*, (33):121–138, 1996.
- [942] H. Friepertinger. Enumeration of semilinear isometry classes of linear codes. *proc. of the conference on Algebraic Combinatorics and Applications, Designs and Codes*, pages 100–122, 2005.
- [943] H. Friepertinger. Enumeration of the semilinear isometry classes of linear codes. *Bayreuth. Math. Schr.*, (74):100–122, 2005.
- [944] T. Fritzsche, B. Külshammer, and C. Reiche. The depth of Young subgroups of symmetric groups. *J. Algebra*, 381:96–109, 2013.
- [945] D. Frohardt, R. Guralnick, and K. Magaard. Genus 0 actions of groups of Lie rank 1. In *Arithmetic fundamental groups and noncommutative algebra (Berkeley, CA, 1999)*, volume 70 of *Proc. Sympos. Pure Math.*, pages 449–483. Amer. Math. Soc., Providence, RI, 2002.
- [946] J. Fromentin and F. Hivert. Exploring the tree of numerical semigroups. *Math. Comp.*, 85(301):2553–2568, 2016.
- [947] M. Fuchs. Erkennungsalgorithmen für Gruppen, implementiert in GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, June 1996.
- [948] Y. Fuertes, G. González-Diez, R. A. Hidalgo, and M. Leyton. Automorphisms group of generalized Fermat curves of type $(k, 3)$. *J. Pure Appl. Algebra*, 217(10):1791–1806, 2013.
- [949] M. R. Gaberdiel, D. Persson, H. Ronellenfitsch, and R. Volpato. Generalized Mathieu Moonshine. *Commun. Number Theory Phys.*, 7(1):145–223, 2013.
- [950] S. M. Gagola III. Metabelian groups that admit triality. *J. Group Theory*, 15(6):775–783, 2012.
- [951] F. Gähler. *Computer checking of the subgroup data*, volume A1 of *International Tables for Crystallography*, pages 27–28. Kluwer Academic Publishers, 2006. Published for the International Union of Crystallography.
- [952] F. Gähler, J. Hunton, and J. Kellendonk. Integral cohomology of rational projection method patterns. *Algebr. Geom. Topol.*, 13(3):1661–1708, 2013.
- [953] I. Gal and R. Grizzard. On the compositum of all degree d extensions of a number field. *J. Théor. Nombres Bordeaux*, 26(3):655–673, 2014.
- [954] M. P. Gállego, P. Hauck, and M. D. Pérez-Ramos. 2-Engel relations between subgroups. *J. Algebra*, 447:31–55, 2016.
- [955] J. A. Gallian. *Contemporary Abstract Algebra*. Houghton-Mifflin, fifth edition, 2002.

- [956] S. Ganief and J. Moori. (p, q, r) -generations and nX -complementary generations of the sporadic groups HS and McL. *J. Algebra*, 188(2):531–546, 1997.
- [957] A. Ganesan. Automorphism groups of Cayley graphs generated by connected transposition sets. *Discrete Math.*, 313(21):2482–2485, 2013.
- [958] S. Ganief and J. Moori. $(2, 3, t)$ -generations for the Janko group J_3 . *Comm. Algebra*, 23(12):4427–4437, 1995.
- [959] S. Ganief and J. Moori. (p, q, r) -generations of the smallest Conway group Co_3 . *J. Algebra*, 188(2):516–530, 1997.
- [960] S. Ganief and J. Moori. Generating pairs for the Conway groups Co_2 and Co_3 . *J. Group Theory*, 1(3):237–256, 1998.
- [961] S. Ganief and J. Moori. 2-generations of the fourth Janko group J_4 . *J. Algebra*, 212(1):305–322, 1999.
- [962] S. Ganief and J. Moori. On the spread of the sporadic simple groups. *Comm. Algebra*, 29(8):3239–3255, 2001.
- [963] D. Garber, D. Kahrobaei, and H. T. Lam. Length-based attacks in polycyclic groups. *J. Math. Cryptol.*, 9(1):33–43, 2015.
- [964] D. Garber, M. Teicher, and U. Vishne. π_1 -classification of real arrangements with up to eight lines. *Topology*, 42(1):265–289, 2003.
- [965] J. I. García-García, M. A. Moreno-Frías, and A. Vigneron-Tenorio. Computation of the ω -primality and asymptotic ω -primality with applications to numerical semigroups. *Israel J. Math.*, 206(1):395–411, 2015.
- [966] A. García Iglesias and M. Mombelli. Representations of the category of modules over pointed Hopf algebras over \mathbb{S}_3 and \mathbb{S}_4 . *Pacific J. Math.*, 252(2):343–378, 2011.
- [967] A. García Iglesias and C. Vay. Finite-dimensional pointed or copointed Hopf algebras over affine racks. *J. Algebra*, 397:379–406, 2014.
- [968] C. García Pillado, S. González, C. Martínez, V. Markov, and A. Nechaev. Group codes over non-abelian groups. *J. Algebra Appl.*, 12(7):1350037, 20, 2013.
- [969] P. A. García-Sánchez and M. J. Leamer. Huneke-Wiegand Conjecture for complete intersection numerical semigroup rings. *J. Algebra*, 391:114–124, 2013.
- [970] P. A. García-Sánchez and I. Ojeda. Uniquely presented finitely generated commutative monoids. *Pacific J. Math.*, 248(1):91–105, 2010.
- [971] P. A. García Sánchez, I. Ojeda, and A. Sánchez-R. Navarro. Factorization invariants in half-factorial affine semigroups. *Internat. J. Algebra Comput.*, 23(1):111–122, 2013.
- [972] M. Garonzi and D. Levy. Factorizing a finite group into conjugates of a subgroup. *J. Algebra*, 418:129–141, 2014.

- [973] M. Garonzi and A. Lucchini. Covers and normal covers of finite groups. *J. Algebra*, 422:148–165, 2015.
- [974] M. Garonzi and A. Maróti. Covering certain wreath products with proper subgroups. *J. Group Theory*, 14(1):103–125, 2011.
- [975] M. Garonzi and A. Maróti. On the number of conjugacy classes of a permutation group. *J. Combin. Theory Ser. A*, 133:251–260, 2015.
- [976] D. Garrison and L. Kappe. On some subnormality conditions in metabelian groups. In *Computational group theory and the theory of groups*, volume 470 of *Contemp. Math.*, pages 89–103. Amer. Math. Soc., Providence, RI, 2008.
- [977] D. J. Garrison. *Subnormality conditions in metabelian groups*. ProQuest LLC, Ann Arbor, MI, 1995. Thesis (Ph.D.)—State University of New York at Binghamton.
- [978] K. Garsia-Pil'yado, S. Gonsales, V. T. Markov, K. Martines, and A. A. Nechaev. When are all group codes of a noncommutative group abelian (a computational approach)? *Fundam. Prikl. Mat.*, 17(2):75–85, 2011/12.
- [979] K. Gatermann and P. A. Parrilo. Symmetry groups, semidefinite programs, and sums of squares. *J. Pure Appl. Algebra*, 192(1-3):95–128, 2004.
- [980] N. Gavioli, L. Legarreta, C. Sica, and M. Tota. On the number of conjugacy classes of normalisers in a finite p -group. *Bull. Austral. Math. Soc.*, 73(2):219–230, 2006.
- [981] N. Gavioli, V. Monti, and C. M. Scoppola. Soluble normally constrained pro- p -groups. *J. Group Theory*, 10(3):321–345, 2007.
- [982] V. Gebhardt. Efficient collection in infinite polycyclic groups. *J. Symbolic Comput.*, 34(3):213–228, 2002.
- [983] V. Gebhardt. A new approach to the conjugacy problem in Garside groups. *J. Algebra*, 292(1):282–302, 2005.
- [984] V. Gebhardt and J. González-Meneses. Solving the conjugacy problem in Garside groups by cyclic sliding. *J. Symbolic Comput.*, 45(6):629–656, 2010.
- [985] M. Geck. Brauer trees of Hecke algebras. *Comm. Algebra*, 20(10):2937–2973, 1992.
- [986] M. Geck. The decomposition numbers of the Hecke algebra of type E_6^* . *Math. Comp.*, 61(204):889–899, 1993.
- [987] M. Geck. On the character values of Iwahori-Hecke algebras of exceptional type. *Proc. London Math. Soc. (3)*, 68(1):51–76, 1994.
- [988] M. Geck. *Beiträge zur Darstellungstheorie von Iwahori-Hecke-Algebren*. Number 11 in Aachener Beiträge zur Mathematik. Verlag der Augustinus Buchhandlung, Aachen, 1995. Habilitationsschrift.
- [989] M. Geck. Representations of Hecke algebras at roots of unity. *Astérisque*, (252):Exp. No. 836, 3, 33–55, 1998. Séminaire Bourbaki. Vol. 1997/98.

- [990] M. Geck and A. Halls. On the Kazhdan-Lusztig cells in type E_8 . *Math. Comp.*, 84(296):3029–3049, 2015.
- [991] M. Geck, G. Hiss, F. Lübeck, G. Malle, and G. Pfeiffer. CHEVIE—a system for computing and processing generic character tables. *Appl. Algebra Engrg. Comm. Comput.*, 7(3):175–210, 1996. Computational methods in Lie theory (Essen, 1994).
- [992] M. Geck, G. Hiss, and G. Malle. Cuspidal unipotent Brauer characters. *J. Algebra*, 168(1):182–220, 1994.
- [993] M. Geck, G. Hiss, and G. Malle. Towards a classification of the irreducible representations in non-describing characteristic of a finite group of Lie type. *Math. Z.*, 221(3):353–386, 1996.
- [994] M. Geck and S. Kim. Bases for the Bruhat-Chevalley order on all finite Coxeter groups. *J. Algebra*, 197(1):278–310, 1997.
- [995] M. Geck, S. Kim, and G. Pfeiffer. Minimal length elements in twisted conjugacy classes of finite Coxeter groups. *J. Algebra*, 229(2):570–600, 2000.
- [996] M. Geck and K. Lux. The decomposition numbers of the Hecke algebra of type F_4 . *Manuscripta Math.*, 70(3):285–306, 1991.
- [997] M. Geck and G. Malle. On special pieces in the unipotent variety. *Experiment. Math.*, 8(3):281–290, 1999.
- [998] M. Geck and G. Malle. Frobenius-Schur indicators of unipotent characters and the twisted involution module. *Represent. Theory*, 17:180–198, 2013.
- [999] M. Geck and J. Michel. “Good” elements of finite Coxeter groups and representations of Iwahori-Hecke algebras. *Proc. London Math. Soc. (3)*, 74(2):275–305, 1997.
- [1000] M. Geck and G. Pfeiffer. Unipotent characters of the Chevalley groups $D_4(q)$, q odd. *Manuscripta Math.*, 76(3-4):281–304, 1992.
- [1001] M. Geck and G. Pfeiffer. On the irreducible characters of Hecke algebras. *Adv. Math.*, 102(1):79–94, 1993.
- [1002] K. Geissler and J. Klüners. Galois group computation for rational polynomials. *J. Symbolic Comput.*, 30(6):653–674, 2000. Algorithmic methods in Galois theory.
- [1003] I. Gent, S. Kitaev, A. Konovalov, S. Linton, and P. Nightingale. S-crucial and bicrucial permutations with respect to squares. *J. Integer Seq.*, 18(6):Article 15.6.5, 22, 2015.
- [1004] I. P. Gent, W. Harvey, T. Kelsey, and S. Linton. Generic sbdd using computational group theory. In *PRINCIPLES AND PRACTICE OF CONSTRAINT PROGRAMMING - CP 2003*, pages 333–347, 2003.
- [1005] A. Geroldinger and P. Yuan. The monotone catenary degree of Krull monoids. *Results Math.*, 63(3-4):999–1031, 2013.
- [1006] N. Ghani and A. Heyworth. A rewriting alternative to reidemeister-schreier. In *REWRITING TECHNIQUES AND APPLICATIONS*, pages 452–466, 2003.

- [1007] S. M. Ghoraiishi. On noninner automorphisms of finite nonabelian p -groups. *Bull. Aust. Math. Soc.*, 89(2):202–209, 2014.
- [1008] N. D. Gilbert and M. Samman. Endomorphism seminear-rings of Brandt semigroups. *Comm. Algebra*, 38(11):4028–4041, 2010.
- [1009] J. Gildea. The structure of the unit group of the group algebra of Pauli’s group over any field of characteristic 2. *Internat. J. Algebra Comput.*, 20(5):721–729, 2010.
- [1010] J. Gildea. Zassenhaus conjecture for integral group ring of simple linear groups. *J. Algebra Appl.*, 12(6):1350016, 10, 2013.
- [1011] J. Gildea and A. Tylyshchak. Torsion units in the integral group ring of $\mathrm{PSL}(3, 4)$. *J. Algebra Appl.*, 15(1):1650013, 9, 2016.
- [1012] N. Gill, N. I. Gillespie, A. Nixon, and J. Semeraro. Generating groups using hypergraphs. *Q. J. Math.*, 67(1):29–52, 2016.
- [1013] N. I. Gillespie, C. E. Praeger, and P. Spiga. Twisted permutation codes. *J. Group Theory*, 18(3):407–433, 2015.
- [1014] M. K. Gilson and K. K. Irikura. Symmetry numbers for rigid, flexible, and fluxional molecules: Theory and applications. *J. Phys. Chem. B.*, (114):16304–16317, 2010.
- [1015] J. Ginsburg and B. Sands. On the number of elements dominated by a subgroup. *Ars Combin.*, 74:103–127, 2005.
- [1016] V. Ginzburg. Principal nilpotent pairs in a semisimple Lie algebra. I. *Invent. Math.*, 140(3):511–561, 2000.
- [1017] E. Gironde. Multiply quasiplatonic Riemann surfaces. *Experiment. Math.*, 12(4):463–475, 2003.
- [1018] M. Giudici. New constructions of groups without semiregular subgroups. *Comm. Algebra*, 35(9):2719–2730, 2007.
- [1019] M. Giudici and S. Hart. Small maximal sum-free sets. *Electron. J. Combin.*, 16(1):Research Paper 59, 17, 2009.
- [1020] M. Giudici, C. H. Li, C. E. Praeger, A. Seress, and V. I. Trofimov. On limit graphs of finite vertex-primitive graphs. *J. Combin. Theory Ser. A*, 114(1):110–134, 2007.
- [1021] M. Giudici, M. W. Liebeck, C. E. Praeger, J. Saxl, and P. H. Tiep. Arithmetic results on orbits of linear groups. *Trans. Amer. Math. Soc.*, 368(4):2415–2467, 2016.
- [1022] M. Giudici and M. R. Smith. A note on quotients of strongly regular graphs. *Ars Math. Contemp.*, 3(2):147–150, 2010.
- [1023] L. Giuzzi and A. Pasotti. Sampling complete designs. *Discrete Math.*, 312(3):488–497, 2012.
- [1024] S. P. Glasby, P. P. Pálffy, and C. Schneider. p -groups with a unique proper non-trivial characteristic subgroup. *J. Algebra*, 348:85–109, 2011.

- [1025] S. P. Glasby and C. E. Praeger. Towards an efficient Meat-Axe algorithm using f -cyclic matrices: the density of unicyclic matrices in $M(n, q)$. *J. Algebra*, 322(3):766–790, 2009.
- [1026] D. Gluck and K. Magaard. Base sizes and regular orbits for coprime affine permutation groups. *J. London Math. Soc. (2)*, 58(3):603–618, 1998.
- [1027] D. Gluck and K. Magaard. Cross-characteristic character and fixed point space ratios for groups of Lie type. *J. Algebra*, 204(1):188–201, 1998.
- [1028] D. Gluck, K. Magaard, U. Riese, and P. Schmid. The solution of the $k(GV)$ -problem. *J. Algebra*, 279(2):694–719, 2004.
- [1029] T. Gobet. Noncrossing partitions, fully commutative elements and bases of the Temperley-Lieb algebra. *J. Knot Theory Ramifications*, 25(6):1650035, 27, 2016.
- [1030] J. D. Godolphin and H. R. Warren. An efficient procedure for the avoidance of disconnected incomplete block designs. *Computational Statistics and Data Analysis*, 71(0):1134 – 1146, 2014.
- [1031] C. Godsil and K. Meagher. A new proof of the Erdős-Ko-Rado theorem for intersecting families of permutations. *European J. Combin.*, 30(2):404–414, 2009.
- [1032] C. Godsil and K. Meagher. Multiplicity-free permutation representations of the symmetric group. *Ann. Comb.*, 13(4):463–490, 2010.
- [1033] D. Goldstein, R. M. Guralnick, M. L. Lewis, A. Moretó, G. Navarro, and P. H. Tiep. Groups with exactly one irreducible character of degree divisible by p . *Algebra Number Theory*, 8(2):397–428, 2014.
- [1034] A. Golemac and T. Vučičić. New difference sets in nonabelian groups of order 100. *J. Combin. Des.*, 9(6):424–434, 2001.
- [1035] A. Golemac, T. Vučičić, and J. Mandić. One $(96, 20, 4)$ -symmetric design and related non-abelian difference sets. *Des. Codes Cryptogr.*, 37(1):5–13, 2005.
- [1036] H. W. Gollan and G. O. Michler. Construction of a 45,694-dimensional simple module of Lyons’ sporadic group over $\text{GF}(2)$. *Linear Algebra Appl.*, 256:185–197, 1997.
- [1037] G. M. S. Gomes, H. Sezinando, and J. Pin. Presentations of the Schützenberger product of n groups. *Comm. Algebra*, 34(4):1213–1235, 2006.
- [1038] J. Z. Gonçalves and A. Del Río. Bass cyclic units as factors in a free group in integral group ring units. *Internat. J. Algebra Comput.*, 21(4):531–545, 2011.
- [1039] J. Z. Gonçalves, R. M. Guralnick, and A. del Río. Bass units as free factors in integral group rings of simple groups. *J. Algebra*, 404:100–123, 2014.
- [1040] J. González-Meneses. Basic results on braid groups. *Ann. Math. Blaise Pascal*, 18(1):15–59, 2011.
- [1041] S. Goodwin. Algorithmic testing for dense orbits of Borel subgroups. *J. Pure Appl. Algebra*, 197(1-3):171–181, 2005.

- [1042] S. Goodwin and G. Röhrle. Finite orbit modules for parabolic subgroups of exceptional groups. *Indag. Math. (N.S.)*, 15(2):189–207, 2004.
- [1043] S. M. Goodwin. Relative Springer isomorphisms. *J. Algebra*, 290(1):266–281, 2005.
- [1044] S. M. Goodwin, P. Mosch, and G. Röhrle. Calculating conjugacy classes in Sylow p -subgroups of finite Chevalley groups of rank six and seven. *LMS J. Comput. Math.*, 17(1):109–122, 2014.
- [1045] S. M. Goodwin, P. Mosch, and G. Röhrle. On the coadjoint orbits of maximal unipotent subgroups of reductive groups. *Transform. Groups*, 21(2):399–426, 2016.
- [1046] S. M. Goodwin and G. Röhrle. Calculating conjugacy classes in Sylow p -subgroups of finite Chevalley groups. *J. Algebra*, 321(11):3321–3334, 2009.
- [1047] S. M. Goodwin, G. Röhrle, and G. Uibly. On 1-dimensional representations of finite W -algebras associated to simple Lie algebras of exceptional type. *LMS J. Comput. Math.*, 13:357–369, 2010.
- [1048] I. B. Gorshkov. Thompson’s conjecture for simple groups with a connected prime graph. *Algebra Logika*, 51(2):168–192, 288, 291, 2012.
- [1049] I. B. Gorshkov. Towards Thompson’s conjecture for alternating and symmetric groups. *J. Group Theory*, 19(2):331–336, 2016.
- [1050] P. Govaerts, D. Jungnickel, L. Storme, and J. A. Thas. Some new maximal sets of mutually orthogonal Latin squares. In *Proceedings of the Conference on Finite Geometries (Oberwolfach, 2001)*, volume 29, pages 141–147, 2003.
- [1051] R. Gow, M. Lavrauw, J. Sheekey, and F. Vanhove. Constant rank-distance sets of Hermitian matrices and partial spreads in Hermitian polar spaces. *Electron. J. Combin.*, 21(1):Paper 1.26, 19, 2014.
- [1052] J. Grabowski, J. Grell, and L. Zlatina. Space models of molecules based on interatomic distances and point symmetry group. *Match*, (34):123–155, 1996.
- [1053] J. E. Grabowski. Braided enveloping algebras associated to quantum parabolic subalgebras. *Comm. Algebra*, 39(10):3491–3514, 2011.
- [1054] J. E. Grabowski. Examples of quantum cluster algebras associated to partial flag varieties. *J. Pure Appl. Algebra*, 215(7):1582–1595, 2011.
- [1055] A. Gracia-Saz and K. C. H. Mackenzie. Duality functors for triple vector bundles. *Lett. Math. Phys.*, 90(1-3):175–200, 2009.
- [1056] P. Graczyk, G. Letac, and H. Massam. The complex Wishart distribution and the symmetric group. *Ann. Statist.*, 31(1):287–309, 2003.
- [1057] S. Graf and W. Zhang. Automated technology for verification and analysis, 4th international symposium, atva 2006, beijing, china, october 23-26, 2006. In *ATVA*, volume 4218 of *Lecture Notes in Computer Science*, 2006.

- [1058] R. Gramlich. *On graphs, geometries, and groups of Lie type*. ProQuest LLC, Ann Arbor, MI, 2002. Thesis (Dr.)—Technische Universiteit Eindhoven (The Netherlands).
- [1059] R. Gramlich, C. Hoffman, W. Nickel, and S. Shpectorov. Even-dimensional orthogonal groups as amalgams of unitary groups. *J. Algebra*, 284(1):141–173, 2005.
- [1060] R. Gramlich, M. Horn, and W. Nickel. The complete Phan-type theorem for $\mathrm{Sp}(2n, q)$. *J. Group Theory*, 9(5):603–626, 2006.
- [1061] R. Gramlich, M. Horn, and W. Nickel. Odd-dimensional orthogonal groups as amalgams of unitary groups. II. Machine computations. *J. Algebra*, 316(2):591–607, 2007.
- [1062] M. Graña, I. Heckenberger, and L. Vendramin. Nichols algebras of group type with many quadratic relations. *Adv. Math.*, 227(5):1956–1989, 2011.
- [1063] R. Gray and N. Ruškuc. Maximal subgroups of free idempotent-generated semigroups over the full transformation monoid. *Proc. Lond. Math. Soc. (3)*, 104(5):997–1018, 2012.
- [1064] R. Gray and N. Ruskuc. On maximal subgroups of free idempotent generated semigroups. *Israel J. Math.*, 189:147–176, 2012.
- [1065] M. A. Grechkoseeva. On element orders in covers of finite simple classical groups. *J. Algebra*, 339:304–319, 2011.
- [1066] D. J. Green, L. Héthelyi, and M. Lilienthal. On Oliver’s p -group conjecture. *Algebra Number Theory*, 2(8):969–977, 2008.
- [1067] D. J. Green, L. Héthelyi, and N. Mazza. On Oliver’s p -group conjecture. II. *Math. Ann.*, 347(1):111–122, 2010.
- [1068] D. J. Green, L. Héthelyi, and N. Mazza. On a strong form of Oliver’s p -group conjecture. *J. Algebra*, 342:1–15, 2011.
- [1069] D. J. Green and S. A. King. The computation of the cohomology rings of all groups of order 128. *J. Algebra*, 325:352–363, 2011.
- [1070] E. L. Green, L. S. Heath, and C. A. Struble. Constructing endomorphism rings via duals. In *Proceedings of the 2000 International Symposium on Symbolic and Algebraic Computation (St. Andrews)*, pages 129–136 (electronic). ACM, New York, 2000.
- [1071] E. L. Green, L. S. Heath, and C. A. Struble. Constructing homomorphism spaces and endomorphism rings. *J. Symbolic Comput.*, 32(1-2):101–117, 2001. Computer algebra and mechanized reasoning (St. Andrews, 2000).
- [1072] C. Greenhill. An algorithm for recognising the exterior square of a matrix. *Linear and Multilinear Algebra*, 46(3):213–244, 1999.
- [1073] C. Greenhill. An algorithm for recognising the exterior square of a multiset. *LMS J. Comput. Math.*, 3:96–116, 2000.
- [1074] C. S. Greenhill. Theoretical and experimental comparison of efficiency of finite field extensions. *J. Symbolic Comput.*, 20(4):419–429, 1995.

- [1075] M. Greer. A class of loops categorically isomorphic to Bruck loops of odd order. *Comm. Algebra*, 42(8):3682–3697, 2014.
- [1076] M. Greer and L. Raney. Moufang semidirect products of loops with groups and inverse property extensions. *Comment. Math. Univ. Carolin.*, 55(3):411–420, 2014.
- [1077] D. Grier. Exploring the peaks of s_n . Undergraduate senior thesis, Cornell, May 2002.
- [1078] W. Grimus and P. O. Ludl. Principal series of finite subgroups of $SU(3)$. *J. Phys. A*, 43(44):445209, 35, 2010.
- [1079] A. Grishkov, M. L. Merlini Giuliani, M. Rasskazova, and L. Sabinina. Half-isomorphisms of finite automorphic Moufang loops. *Comm. Algebra*, 44(10):4252–4261, 2016.
- [1080] A. Grishkov, R. Nunes, and S. Sidki. On groups with cubic polynomial conditions. *J. Algebra*, 437:344–364, 2015.
- [1081] A. N. Grishkov and A. V. Zavarnitsine. Lagrange’s theorem for Moufang loops. *Math. Proc. Cambridge Philos. Soc.*, 139(1):41–57, 2005.
- [1082] R. P. Grizzard. On nonprojective block components of Lefschetz characters for sporadic geometries. *Comm. Algebra*, 37(12):4489–4502, 2009.
- [1083] J. A. Grochow. Unifying known lower bounds via geometric complexity theory. *Comput. Complexity*, 24(2):393–475, 2015.
- [1084] G. Gromadzki, A. Weaver, and A. Wootton. On gonality of Riemann surfaces. *Geom. Dedicata*, 149:1–14, 2010.
- [1085] D. Gross, K. Audenaert, and J. Eisert. Evenly distributed unitaries: on the structure of unitary designs. *J. Math. Phys.*, 48(5):052104, 22, 2007.
- [1086] R. Grosse-Kunstleve. Algorithms for deriving crystallographic space-group information. *ACTA CRYSTALLOGR A*, 55(2):383–395, 1999.
- [1087] L. C. Grove. *Groups and characters*. Pure and Applied Mathematics (New York). John Wiley & Sons, Inc., New York, 1997. A Wiley-Interscience Publication.
- [1088] D. Groves. A note on nonidentical Lie relators. *J. Algebra*, 211(1):15–25, 1999.
- [1089] H. G. Grundman and T. L. Smith. Galois realizability of a central C_4 -extension of D_8 . *J. Algebra*, 322(10):3492–3498, 2009.
- [1090] H. G. Grundman and T. L. Smith. Galois realizability of groups of order 64. *Cent. Eur. J. Math.*, 8(5):846–854, 2010.
- [1091] H. G. Grundman and T. L. Smith. Realizability and automatic realizability of Galois groups of order 32. *Cent. Eur. J. Math.*, 8(2):244–260, 2010.
- [1092] H. G. Grundman and G. L. Stewart. Galois realizability of non-split group extensions of C_2 by $(C_2)^r \times (C_4)^s \times (D_4)^t$. *J. Algebra*, 272(2):425–434, 2004.

- [1093] L. Gruson and S. V. Sam. Alternating trilinear forms on a nine-dimensional space and degenerations of (3,3)-polarized Abelian surfaces. *Proc. Lond. Math. Soc. (3)*, 110(3):755–785, 2015.
- [1094] H. Guan, D. Tian, and S. Zhou. Line-transitive point-imprimitive linear spaces with Fang-Li parameter $\gcd(k, r)$ at most ten. *Front. Math. China*, 7(6):1095–1112, 2012.
- [1095] S. Guest, J. Morris, C. E. Praeger, and P. Spiga. Finite primitive permutation groups containing a permutation having at most four cycles. *J. Algebra*, 454:233–251, 2016.
- [1096] N. D. Gupta and V. D. Mazurov. On groups with small orders of elements. *Bull. Austral. Math. Soc.*, 60(2):197–205, 1999.
- [1097] R. Guralnick, F. Herzig, and P. H. Tiep. Adequate groups of low degree. *Algebra Number Theory*, 9(1):77–147, 2015.
- [1098] R. Guralnick and K. Magaard. On the minimal degree of a primitive permutation group. *J. Algebra*, 207(1):127–145, 1998.
- [1099] R. Guralnick and G. Malle. Simple groups admit Beauville structures. *J. Lond. Math. Soc. (2)*, 85(3):694–721, 2012.
- [1100] R. Guralnick and G. Malle. Variations on the Baer-Suzuki theorem. *Math. Z.*, 279(3-4):981–1006, 2015.
- [1101] R. Guralnick, T. Penttila, C. E. Praeger, and J. Saxl. Linear groups with orders having certain large prime divisors. *Proc. London Math. Soc. (3)*, 78(1):167–214, 1999.
- [1102] R. M. Guralnick and W. M. Kantor. Probabilistic generation of finite simple groups. *J. Algebra*, 234(2):743–792, 2000. Special issue in honor of Helmut Wielandt.
- [1103] R. M. Guralnick and A. Maróti. On the non-coprime $k(GV)$ -problem. *J. Algebra*, 385:80–101, 2013.
- [1104] R. M. Guralnick and D. Perkinson. Permutation polytopes and indecomposable elements in permutation groups. *J. Combin. Theory Ser. A*, 113(7):1243–1256, 2006.
- [1105] R. M. Guralnick and P. H. Tiep. Decompositions of small tensor powers and Larsen’s conjecture. *Represent. Theory*, 9:138–208 (electronic), 2005.
- [1106] R. M. Guralnick and P. H. Tiep. A problem of Kollár and Larsen on finite linear groups and crepant resolutions. *J. Eur. Math. Soc. (JEMS)*, 14(3):605–657, 2012.
- [1107] R. M. Guralnick and P. H. Tiep. Effective results on the Waring problem for finite simple groups. *Amer. J. Math.*, 137(5):1401–1430, 2015.
- [1108] v. Gyürki. Infinite families of directed strongly regular graphs using equitable partitions. *Discrete Math.*, 339(12):2970–2986, 2016.
- [1109] v. Gyürki and J. Mazák. An efficient algorithm for testing goal-minimality of graphs. *Discrete Appl. Math.*, 161(10-11):1632–1634, 2013.

- [1110] H. Haanpää and P. Kaski. The near resolvable 2-(13, 4, 3) designs and thirteen-player whist tournaments. *Des. Codes Cryptogr.*, 35(3):271–285, 2005.
- [1111] H. Haanpää and P. R. J. Östergård. Classification of whist tournaments with up to 12 players. *Discrete Appl. Math.*, 129(2-3):399–407, 2003.
- [1112] J. Haarmann, A. Kalauli, A. Moran, C. O’Neill, and R. Pelayo. Factorization properties of Leamer monoids. *Semigroup Forum*, 89(2):409–421, 2014.
- [1113] W. H. Haemers and E. Kuijken. The Hermitian two-graph and its code. *Linear Algebra Appl.*, 356:79–93, 2002. Special issue on algebraic graph theory (Edinburgh, 2001).
- [1114] W. H. Haemers and E. Spence. Enumeration of cospectral graphs. *European J. Combin.*, 25(2):199–211, 2004.
- [1115] M. Hagedorn. Schnitte und erzeugnisse rationaler matrixgruppen. Diplomarbeit, Lehrstuhl B für Mathematik, RWTH, Aachen, 1997.
- [1116] Z. Halasi, C. Hannusch, and H. N. Nguyen. The largest character degrees of the symmetric and alternating groups. *Proc. Amer. Math. Soc.*, 144(5):1947–1960, 2016.
- [1117] Z. Halasi and A. Maróti. The minimal base size for a p -solvable linear group. *Proc. Amer. Math. Soc.*, 144(8):3231–3242, 2016.
- [1118] Z. Halasi, A. Maróti, S. Sidki, and M. Bezerra. Conjugacy expansiveness in finite groups. *J. Group Theory*, 15(4):485–496, 2012.
- [1119] Z. Halasi and K. Podoski. Every coprime linear group admits a base of size two. *Trans. Amer. Math. Soc.*, 368(8):5857–5887, 2016.
- [1120] J. I. Hall and L. H. Soicher. Presentations of some 3-transposition groups. *Comm. Algebra*, 23(7):2517–2559, 1995.
- [1121] S. Haller. Entwicklung und Implementierung eines Algorithmus zur Berechnung von Kommutatoren unipotenter Elemente in Chevalley-Gruppen. Diplomarbeit, Arbeitsgruppe Algebra, Mathematisches Institut, Justus-Liebig Universität Gießen, Gießen, Germany, April 2000.
- [1122] A. Hanaki and I. Miyamoto. Classification of association schemes with 16 and 17 vertices. *Kyushu J. Math.*, 52(2):383–395, 1998.
- [1123] A. Hanany and Y. He. A monograph on the classification of the discrete subgroups of $SU(4)$. *J. High Energy Phys.*, (2):Paper 27, 12, 2001.
- [1124] J. M. Harris. The Kauffman bracket skein module of surgery on a $(2, 2b)$ torus link. *Pacific J. Math.*, 245(1):119–140, 2010.
- [1125] M. I. Hartley. Quotients of some finite universal locally projective polytopes. *Discrete Comput. Geom.*, 29(3):435–443, 2003.
- [1126] M. I. Hartley. Locally projective polytopes of type $\{4, 3, \dots, 3, p\}$. *J. Algebra*, 290(2):322–336, 2005.

- [1127] M. I. Hartley. An atlas of small regular abstract polytopes. *Period. Math. Hungar.*, 53(1-2):149–156, 2006.
- [1128] M. I. Hartley. Simpler tests for semisparsely subgroups. *Ann. Comb.*, 10(3):343–352, 2006.
- [1129] M. I. Hartley. An exploration of locally projective polytopes. *Combinatorica*, 28(3):299–314, 2008.
- [1130] M. I. Hartley. Covers \mathcal{P} for abstract regular polytopes \mathcal{Q} such that $\mathcal{Q} = \mathcal{P}/\mathbf{Z}_p^k$. *Discrete Comput. Geom.*, 44(4):844–859, 2010.
- [1131] M. I. Hartley. Eulerian abstract polytopes. *Aequationes Math.*, 82(1-2):1–23, 2011.
- [1132] M. I. Hartley and A. Hulpke. Polytopes derived from sporadic simple groups. *Contrib. Discrete Math.*, 5(2):106–118, 2010.
- [1133] M. I. Hartley and D. Leemans. Quotients of a universal locally projective polytope of type $\{5, 3, 5\}$. *Math. Z.*, 247(4):663–674, 2004.
- [1134] M. I. Hartley and D. Leemans. On locally spherical polytopes of type $\{5, 3, 5\}$. *Discrete Math.*, 309(1):247–254, 2009.
- [1135] M. Hashemi. On the automorphism of some classes of groups. *Ukrain. Mat. Zh.*, 61(12):1704–1712, 2009.
- [1136] K. Hashimoto. Finite symplectic actions on the $K3$ lattice. *Nagoya Math. J.*, 206:99–153, 2012.
- [1137] N. M. Hassan. *Dade’s Conjecture*. PhD thesis, ELTE, Budapest, 1998.
- [1138] N. M. Hassan and E. Horváth. Some remarks on Dade’s conjecture. *Math. Pannon.*, 9(2):181–194, 1998.
- [1139] N. M. Hassan and E. Horváth. Dade’s conjecture for the simple Higman-Sims group. In *Groups St. Andrews 1997 in Bath, I*, volume 260 of *London Math. Soc. Lecture Note Ser.*, pages 329–345. Cambridge Univ. Press, Cambridge, 1999.
- [1140] T. Hausel, E. Makai Jr., and A. Szűcs. Inscribing cubes and covering by rhombic dodecahedra via equivariant topology. *Mathematika*, 47(1-2):371–397 (2002), 2000.
- [1141] J. Hausen and S. Keicher. A software package for Mori dream spaces. *LMS J. Comput. Math.*, 18(1):647–659, 2015.
- [1142] G. Havas and D. F. Holt. On Coxeter’s families of group presentations. *J. Algebra*, 324(5):1076–1082, 2010.
- [1143] G. Havas, D. F. Holt, P. E. Kenne, and S. Rees. Some challenging group presentations. *J. Austral. Math. Soc. Ser. A*, 67(2):206–213, 1999. Group theory.
- [1144] G. Havas, C. R. Leedham-Green, E. A. O’Brien, and M. C. Slattery. Certain Roman and flock generalized quadrangles have nonisomorphic elation groups. *Adv. Geom.*, 6(3):389–395, 2006.

- [1145] G. Havas, C. R. Leedham-Green, E. A. O'Brien, and M. C. Slattery. Computing with elation groups. In *Finite geometries, groups, and computation*, pages 95–102. Walter de Gruyter GmbH & Co. KG, Berlin, 2006.
- [1146] G. Havas and J. X. Lian. A new problem in string searching. In *Algorithms and Computation*, volume 834 of *Lecture Notes in Computer Science*, pages 660–668. Springer, 1994.
- [1147] G. Havas, B. S. Majewski, and K. R. Matthews. Extended GCD and Hermite normal form algorithms via lattice basis reduction. *Experiment. Math.*, 7(2):125–136, 1998.
- [1148] G. Havas, M. F. Newman, A. C. Niemeyer, and C. C. Sims. Groups with exponent six. *Comm. Algebra*, 27(8):3619–3638, 1999.
- [1149] G. Havas, M. F. Newman, A. C. Niemeyer, and C. C. Sims. Computing in groups with exponent six. In *Computational and geometric aspects of modern algebra (Edinburgh, 1998)*, volume 275 of *London Math. Soc. Lecture Note Ser.*, pages 87–100. Cambridge Univ. Press, Cambridge, 2000.
- [1150] G. Havas, M. F. Newman, and E. A. O'Brien. Groups of deficiency zero. In *Geometric and computational perspectives on infinite groups (Minneapolis, MN and New Brunswick, NJ, 1994)*, volume 25 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 53–67. Amer. Math. Soc., Providence, RI, 1996.
- [1151] G. Havas, M. F. Newman, and E. A. O'Brien. On the efficiency of some finite groups. *Comm. Algebra*, 32(2):649–656, 2004.
- [1152] G. Havas and M. Ollila. Application of substring searching methods to group presentations. In *Proceedings of the Sixteenth Australian Computer Science Conference (ACSC-16) (Brisbane, 1993)*, volume 15, pages 587–593, 1993.
- [1153] G. Havas and C. Ramsay. Short balanced presentations of perfect groups. In *Groups St. Andrews 2001 in Oxford. Vol. I*, volume 304 of *London Math. Soc. Lecture Note Ser.*, pages 238–243. Cambridge Univ. Press, Cambridge, 2003.
- [1154] G. Havas and E. F. Robertson. Application of computational tools for finitely presented groups. In *Computational support for discrete mathematics (Piscataway, NJ, 1992)*, volume 15 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 29–39. Amer. Math. Soc., Providence, RI, 1994.
- [1155] G. Havas and E. F. Robertson. Central factors of deficiency zero groups. *Comm. Algebra*, 24(11):3483–3487, 1996.
- [1156] G. Havas and E. F. Robertson. Irreducible cyclic presentations of the trivial group. *Experiment. Math.*, 12(4):487–490, 2003.
- [1157] G. Havas and E. F. Robertson. The $F^{a,b,c}$ conjecture. I. *Irish Math. Soc. Bull.*, (56):75–80, 2005.
- [1158] G. Havas, E. F. Robertson, and D. C. Sutherland. The $F^{a,b,c}$ conjecture is true. II. *J. Algebra*, 300(1):57–72, 2006.

- [1159] G. Havas, E. F. Robertson, and D. C. Sutherland. Behind and beyond a theorem on groups related to trivalent graphs. *J. Aust. Math. Soc.*, 85(3):323–332, 2008.
- [1160] G. Havas and C. C. Sims. A presentation for the Lyons simple group. In *Computational methods for representations of groups and algebras (Essen, 1997)*, volume 173 of *Progr. Math.*, pages 241–249. Birkhäuser, Basel, 1999.
- [1161] G. Havas, L. H. Soicher, and R. A. Wilson. A presentation for the Thompson sporadic simple group. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 193–200. de Gruyter, Berlin, 2001.
- [1162] G. Havas and M. Vaughan-Lee. On counterexamples to the Hughes conjecture. *J. Algebra*, 322(3):791–801, 2009.
- [1163] G. Havas and M. R. Vaughan-Lee. 4-Engel groups are locally nilpotent. *Internat. J. Algebra Comput.*, 15(4):649–682, 2005.
- [1164] I. Hawthorn, S. Manoharan, and T. Stokes. Groups with fix-set quasi-order. *Algebra Universalis*, 74(3-4):229–239, 2015.
- [1165] L. He. Notes on non-vanishing elements of finite solvable groups. *Bull. Malays. Math. Sci. Soc. (2)*, 35(1):163–169, 2012.
- [1166] L. He and M. L. Lewis. Common divisor character degree graphs of solvable groups with four vertices. *Comm. Algebra*, 43(11):4916–4922, 2015.
- [1167] L. He and G. Qian. Graphs of nonsolvable groups with four degree-vertices. *Sci. China Math.*, 58(6):1305–1310, 2015.
- [1168] L. He, Y. Zhao, and J. Bi. Two applications of Lewis’ theorem on character degree graphs of solvable groups. *Bull. Korean Math. Soc.*, 52(2):363–366, 2015.
- [1169] Y. He. G_2 quivers. *J. High Energy Phys.*, (2):023, 14, 2003.
- [1170] Y. He, J. McKay, and J. Read. Modular subgroups, *dessins d’enfants* and elliptic K3 surfaces. *LMS J. Comput. Math.*, 16:271–318, 2013.
- [1171] Z. He, T. Korneffel, D. Meierling, L. Volkmann, and S. Winzen. Complementary cycles in regular multipartite tournaments, where one cycle has length five. *Discrete Math.*, 309(10):3131–3149, 2009.
- [1172] L. S. Heath and N. A. Loehr. New algorithms for generating Conway polynomials over finite fields. *J. Symbolic Comput.*, 38(2):1003–1024, 2004.
- [1173] I. Heckenberger, A. Lochmann, and L. Vendramin. Braided racks, Hurwitz actions and Nichols algebras with many cubic relations. *Transform. Groups*, 17(1):157–194, 2012.
- [1174] D. Held, M. Pavčević, and M. Schmidt. A series of finite groups and related symmetric designs. *Glas. Mat. Ser. III*, 42(62)(2):257–272, 2007.
- [1175] H. A. Helfgott. On the square-free sieve. *Acta Arith.*, 115(4):349–402, 2004.

- [1176] H. A. Helfgott. Power-free values, large deviations and integer points on irrational curves. *J. Théor. Nombres Bordeaux*, 19(2):433–472, 2007.
- [1177] G. T. Helleloid and U. Martin. The automorphism group of a finite p -group is almost always a p -group. *J. Algebra*, 312(1):294–329, 2007.
- [1178] A. Henke, G. Hiss, and J. Müller. The 7-modular decomposition matrices of the sporadic O’Nan group. *J. London Math. Soc. (2)*, 60(1):58–70, 1999.
- [1179] A. Henke and R. Paget. Brauer algebras with parameter $n = 2$ acting on tensor space. *Algebr. Represent. Theory*, 11(6):545–575, 2008.
- [1180] A. Herman and A. R. Barghi. Schur indices of association schemes. *J. Pure Appl. Algebra*, 215(5):1015–1023, 2011.
- [1181] A. Herman and G. Singh. Revisiting the Zassenhaus conjecture on torsion units for the integral group rings of small groups. *Proc. Indian Acad. Sci. Math. Sci.*, 125(2):167–172, 2015.
- [1182] S. Hermiller, D. F. Holt, and S. Rees. Groups whose geodesics are locally testable. *Internat. J. Algebra Comput.*, 18(5):911–923, 2008.
- [1183] S. Herpel and D. I. Stewart. Maximal subalgebras of Cartan type in the exceptional Lie algebras. *Selecta Math. (N.S.)*, 22(2):765–799, 2016.
- [1184] K. Herr, T. Rehn, and A. Schürmann. On lattice-free orbit polytopes. *Discrete Comput. Geom.*, 53(1):144–172, 2015.
- [1185] M. Hertweck. A note on the modular group algebras of odd p -groups of M -length three. *Publ. Math. Debrecen*, 71(1-2):83–93, 2007.
- [1186] M. Hertweck. Zassenhaus conjecture for A_6 . *Proc. Indian Acad. Sci. Math. Sci.*, 118(2):189–195, 2008.
- [1187] M. Hertweck and W. Kimmerle. Coleman automorphisms of finite groups. *Math. Z.*, 242(2):203–215, 2002.
- [1188] M. Hertweck and G. Nebe. On group ring automorphisms. *Algebr. Represent. Theory*, 7(2):189–210, 2004.
- [1189] M. Hertweck and M. Soriano. Parametrization of central Frattini extensions and isomorphisms of small group rings. *Israel J. Math.*, 157:63–102, 2007.
- [1190] L. Héthelyi and E. Horváth. Galois actions on blocks and classes of finite groups. *J. Algebra*, 320(2):660–679, 2008.
- [1191] L. Héthelyi, E. Horváth, T. M. Keller, and A. Maróti. Groups with few conjugacy classes. *Proc. Edinb. Math. Soc. (2)*, 54(2):423–430, 2011.
- [1192] L. Héthelyi, E. Horváth, and F. Petényi. The depth of subgroups of Suzuki groups. *Comm. Algebra*, 43(10):4553–4569, 2015.

- [1193] L. Héthelyi, E. Horváth, and E. Szabó. Real characters in blocks. *Osaka J. Math.*, 49(3):613–623, 2012.
- [1194] L. Héthelyi, R. Kessar, B. Külshammer, and B. Sambale. Blocks with transitive fusion systems. *J. Algebra*, 424:190–207, 2015.
- [1195] L. Héthelyi, B. Külshammer, and B. Sambale. Conjugacy classes and characters of finite p -groups. *Comm. Algebra*, 39(2):657–685, 2011.
- [1196] L. Héthelyi, B. Külshammer, and B. Sambale. A note on Olsson’s conjecture. *J. Algebra*, 398:364–385, 2014.
- [1197] L. Héthelyi and M. Szőke. On the 2 out of 3 lemma. *Comm. Algebra*, 27(6):2547–2553, 1999.
- [1198] L. Héthelyi and M. Szőke. Green correspondence and its generalisations. *Comm. Algebra*, 28(9):4463–4479, 2000.
- [1199] L. Héthelyi, M. Szőke, and K. Lux. The restriction of indecomposable modules of group algebras and the quasi-Green correspondence. *Comm. Algebra*, 26(1):83–95, 1998.
- [1200] R. J. Higgs. The bad behavior of representation groups. *J. Algebra Appl.*, 4(2):139–151, 2005.
- [1201] O. Higuchi and I. Miyamoto. The 2-generators for certain simple permutation groups of small degree. *SUT J. Math.*, 34(1):63–74, 1998.
- [1202] H. M. Hilden, M. T. Lozano, and J. M. Montesinos-Amilibia. The Chern-Simons invariants of hyperbolic manifolds via covering spaces. *Bull. London Math. Soc.*, 31(3):354–366, 1999.
- [1203] F. Himstedt. Die dade-vermutung für die sporadische suzuki-gruppe. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1999.
- [1204] F. Himstedt. Character tables of parabolic subgroups of Steinberg’s triality groups. *J. Algebra*, 281(2):774–822, 2004.
- [1205] F. Himstedt. Character tables of parabolic subgroups of Steinberg’s triality groups ${}^3D_4(2^n)$. *J. Algebra*, 316(1):254–283, 2007.
- [1206] F. Himstedt. On the decomposition numbers of the Ree groups ${}^2F_4(q^2)$ in non-defining characteristic. *J. Algebra*, 325:364–403, 2011.
- [1207] F. Himstedt and S. Huang. Dade’s invariant conjecture for Steinberg’s triality groups ${}^3D_4(2^n)$ in defining characteristic. *J. Algebra*, 316(2):802–827, 2007.
- [1208] F. Himstedt and S. Huang. Character table of a Borel subgroup of the Ree groups ${}^2F_4(q^2)$. *LMS J. Comput. Math.*, 12:1–53, 2009.
- [1209] F. Himstedt and S. Huang. Character tables of the maximal parabolic subgroups of the Ree groups ${}^2F_4(q^2)$. *LMS J. Comput. Math.*, 13:90–110, 2010.
- [1210] F. Himstedt and S. Huang. Dade’s invariant conjecture for the Ree groups ${}^2F_4(q^2)$ in defining characteristic. *Comm. Algebra*, 40(2):452–496, 2012.

- [1211] F. Himstedt and S. Huang. On the decomposition numbers of Steinberg’s triality groups ${}^3D_4(2^n)$ in odd characteristics. *Comm. Algebra*, 41(4):1484–1498, 2013.
- [1212] F. Himstedt, T. Le, and K. Magaard. Characters of the Sylow p -subgroups of the Chevalley groups $D_4(p^n)$. *J. Algebra*, 332:414–427, 2011.
- [1213] F. Himstedt and P. Symonds. Exterior and symmetric powers of modules for cyclic 2-groups. *J. Algebra*, 410:393–420, 2014.
- [1214] P. Hinow, E. A. Rietman, S. Ibrahim Omar, and J. A. Tuszyński. Algebraic and topological indices of molecular pathway networks in human cancers. *Math. Biosci. Eng.*, 12(6):1289–1302, 2015.
- [1215] G. Hiss. Decomposition matrices of the Chevalley group $F_4(2)$ and its covering group. *Comm. Algebra*, 25(8):2539–2555, 1997.
- [1216] G. Hiss. On the incidence matrix of the Ree unital. *Des. Codes Cryptogr.*, 10(1):57–62, 1997.
- [1217] G. Hiss and R. Kessar. Scopes reduction and Morita equivalence classes of blocks in finite classical groups. *J. Algebra*, 230(2):378–423, 2000.
- [1218] G. Hiss, S. Koenig, and N. Naehrig. On the socle of an endomorphism algebra. *J. Pure Appl. Algebra*, 216(6):1288–1294, 2012.
- [1219] G. Hiss and F. Lübeck. The Brauer trees of the exceptional Chevalley groups of types F_4 and 2E_6 . *Arch. Math. (Basel)*, 70(1):16–21, 1998.
- [1220] G. Hiss, F. Lübeck, and G. Malle. The Brauer trees of the exceptional Chevalley groups of type E_6 . *Manuscripta Math.*, 87(1):131–144, 1995.
- [1221] G. Hiss and K. Lux. The 5-modular characters of the sporadic simple Fischer groups Fi_{22} and Fi_{23} . *Comm. Algebra*, 22(9):3563–3590, 1994. With an appendix by Thomas Breuer.
- [1222] G. Hiss, K. Lux, and J. Müller. The 2-modular decomposition matrices of the non-principal blocks of maximal defect of the triple cover of the sporadic simple McLaughlin group. *J. Symbolic Comput.*, 19(6):585–600, 1995.
- [1223] G. Hiss and G. Malle. Low-dimensional representations of quasi-simple groups. *LMS J. Comput. Math.*, 4:22–63 (electronic), 2001.
- [1224] G. Hiss and G. Malle. Low-dimensional representations of special unitary groups. *J. Algebra*, 236(2):745–767, 2001.
- [1225] G. Hiss and J. Müller. The 5-modular characters of the sporadic simple Rudvalis group and its covering group. *Comm. Algebra*, 23(12):4633–4667, 1995.
- [1226] G. Hiss, J. Müller, F. Noeske, and J. Thackray. The Brauer characters of the sporadic simple Harada-Norton group and its automorphism group in characteristics 2 and 3. *LMS J. Comput. Math.*, 15:257–280, 2012.

- [1227] G. Hiss, M. Neunhöffer, and F. Noeske. The 2-modular characters of the Fischer group Fi_{23} . *J. Algebra*, 300(2):555–570, 2006.
- [1228] G. Hiss and A. Szczepański. Holonomy groups of Bieberbach groups with finite outer automorphism groups. *Arch. Math. (Basel)*, 65(1):8–14, 1995.
- [1229] G. Hiss and A. Szczepański. Spin structures on flat manifolds with cyclic holonomy. *Comm. Algebra*, 36(1):11–22, 2008.
- [1230] G. Hiss and D. L. White. The 5-modular characters of the covering group of the sporadic simple Fischer group Fi_{22} and its automorphism group. *Comm. Algebra*, 22(9):3591–3611, 1994.
- [1231] C. Hoffman. Cross characteristic projective representations for some classical groups. *J. Algebra*, 229(2):666–677, 2000.
- [1232] T. R. Hoffman and J. P. Solazzo. Complex equiangular tight frames and erasures. *Linear Algebra Appl.*, 437(2):549–558, 2012.
- [1233] B. Höfling. Computing projectors, injectors, residuals and radicals of finite soluble groups. *J. Symbolic Comput.*, 32(5):499–511, 2001.
- [1234] B. Höfling. Finite irreducible imprimitive nonmonomial complex linear groups of degree 4. *J. Algebra*, 236(2):419–470, 2001.
- [1235] J. Hofmann and D. van Straten. Some monodromy groups of finite index in $Sp_4(\mathbb{Z})$. *J. Aust. Math. Soc.*, 99(1):48–62, 2015.
- [1236] T. Hoge and G. Röhrle. On inductively free reflection arrangements. *J. Reine Angew. Math.*, 701:205–220, 2015.
- [1237] T. Hoge and G. Röhrle. Nice reflection arrangements. *Electron. J. Combin.*, 23(2):Paper 2.9, 24, 2016.
- [1238] C. Hohlweg and C. E. M. C. Lange. Realizations of the associahedron and cyclohedron. *Discrete Comput. Geom.*, 37(4):517–543, 2007.
- [1239] M. Holloway. Broué’s conjecture for the Hall-Janko group and its double cover. *Proc. London Math. Soc. (3)*, 86(1):109–130, 2003.
- [1240] P. E. Holmes. On minimal factorisations of sporadic groups. *Experiment. Math.*, 13(4):435–440, 2004.
- [1241] P. E. Holmes. Subgroup coverings of some sporadic groups. *J. Combin. Theory Ser. A*, 113(6):1204–1213, 2006.
- [1242] P. E. Holmes, S. A. Linton, and S. H. Murray. Product replacement in the Monster. *Experiment. Math.*, 12(1):123–126, 2003.
- [1243] P. E. Holmes and A. Maróti. Pairwise generating and covering sporadic simple groups. *J. Algebra*, 324(1):25–35, 2010.

- [1244] D. F. Holt. Computing automorphism groups of finite groups. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 201–208. de Gruyter, Berlin, 2001.
- [1245] D. F. Holt. *Theory of finite simple groups* [book review of see 2266036]. *Bull. Amer. Math. Soc. (N.S.)*, 46(1):151–156, 2009.
- [1246] D. F. Holt, C. R. Leedham-Green, E. A. O’Brien, and S. Rees. Computing matrix group decompositions with respect to a normal subgroup. *J. Algebra*, 184(3):818–838, 1996.
- [1247] D. F. Holt, C. R. Leedham-Green, E. A. O’Brien, and S. Rees. Testing matrix groups for primitivity. *J. Algebra*, 184(3):795–817, 1996.
- [1248] D. F. Holt and S. Rees. An implementation of the Neumann-Praeger algorithm for the recognition of special linear groups. *Experiment. Math.*, 1(3):237–242, 1992.
- [1249] D. F. Holt and S. Rees. Testing modules for irreducibility. *J. Austral. Math. Soc. Ser. A*, 57(1):1–16, 1994.
- [1250] D. F. Holt and S. Rees. Computing with abelian sections of finitely presented groups. *J. Algebra*, 214(2):714–728, 1999.
- [1251] S. Hong, E. Rowell, and Z. Wang. On exotic modular tensor categories. *Commun. Contemp. Math.*, 10(suppl. 1):1049–1074, 2008.
- [1252] J. Hood and D. Perkinson. Some facets of the polytope of even permutation matrices. *Linear Algebra Appl.*, 381:237–244, 2004.
- [1253] M. Horn. On the Phan system of the Schur cover of $SU(4, 3^2)$. *Des. Codes Cryptogr.*, 47(1-3):243–247, 2008.
- [1254] M. Horn, R. Nessler, and H. Van Maldeghem. Simple connectivity in polar spaces. *Forum Math.*, 28(3):491–505, 2016.
- [1255] A. G. Horváth. On a problem connected with the weight distribution of the Reed-Muller code of order R . *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.*, 38:171–176, 1995.
- [1256] E. Horváth. On some questions concerning subnormally monomial groups. In *Groups ’93 Galway/St. Andrews, Vol. 2*, volume 212 of *London Math. Soc. Lecture Note Ser.*, pages 314–321. Cambridge Univ. Press, Cambridge, 1995.
- [1257] E. Horváth. M -blocks of solvable groups. *Math. Pannon.*, 8(1):37–47, 1997.
- [1258] G. Horváth, P. Mayr, and A. Pongrácz. Characterizing translations on groups by cosets of their subgroups. *Comm. Algebra*, 40(9):3141–3168, 2012.
- [1259] A. Hoshi. On the simplest sextic fields and related Thue equations. *Funct. Approx. Comment. Math.*, 47(part 1):35–49, 2012.
- [1260] A. Hoshi. Birational classification of fields of invariants for groups of order 128. *J. Algebra*, 445:394–432, 2016.

- [1261] A. Hoshi, M. Kang, and H. Kitayama. Quasi-monomial actions and some 4-dimensional rationality problems. *J. Algebra*, 403:363–400, 2014.
- [1262] A. Hoshi, M. Kang, and B. E. Kunyavskii. Noether’s problem and unramified Brauer groups. *Asian J. Math.*, 17(4):689–713, 2013.
- [1263] A. Hoshi, H. Kitayama, and A. Yamasaki. Rationality problem of three-dimensional monomial group actions. *J. Algebra*, 341:45–108, 2011.
- [1264] A. Hoshi and K. Miyake. On the field intersection problem of solvable quintic generic polynomials. *Int. J. Number Theory*, 6(5):1047–1081, 2010.
- [1265] J. Howie and G. Williams. Free subgroups in certain generalized triangle groups of type $(2, m, 2)$. *Geom. Dedicata*, 119:181–197, 2006.
- [1266] J. Howie and G. Williams. Tadpole labelled oriented graph groups and cyclically presented groups. *J. Algebra*, 371:521–535, 2012.
- [1267] R. B. Howlett, L. J. Rylands, and D. E. Taylor. Matrix generators for exceptional groups of Lie type. *J. Symbolic Comput.*, 31(4):429–445, 2001.
- [1268] T. Hsu. *Quilts: central extensions, braid actions, and finite groups*, volume 1731 of *Lecture Notes in Mathematics*. Springer-Verlag, Berlin, 2000.
- [1269] H. Huang and Y. Li. On $B(4, 14)$ non-2-groups. *J. Algebra Appl.*, 14(8):1550118, 14, 2015.
- [1270] P. Huang, W. Ke, and G. F. Pilz. The cardinality of some symmetric differences. *Proc. Amer. Math. Soc.*, 138(3):787–797, 2010.
- [1271] S. Huczynska. Beyond sum-free sets in the natural numbers. *Electron. J. Combin.*, 21(1):Paper 1.21, 20, 2014.
- [1272] W. C. Huffman. The automorphism groups of the generalized quadratic residue codes. *IEEE Trans. Inform. Theory*, 41(2):378–386, 1995.
- [1273] W. C. Huffman. Additive cyclic codes over \mathbb{F}_4 . *Adv. Math. Commun.*, 1(4):427–459, 2007.
- [1274] W. C. Huffman. Additive self-dual codes over \mathbb{F}_4 with an automorphism of odd prime order. *Adv. Math. Commun.*, 1(3):357–398, 2007.
- [1275] W. C. Huffman. On the decomposition of self-dual codes over $\mathbb{F}_2 + u\mathbb{F}_2$ with an automorphism of odd prime order. *Finite Fields Appl.*, 13(3):681–712, 2007.
- [1276] W. C. Huffman. Additive cyclic codes over \mathbb{F}_4 . *Adv. Math. Commun.*, 2(3):309–343, 2008.
- [1277] W. C. Huffman. Self-dual codes over $\mathbb{F}_2 + u\mathbb{F}_2$ with an automorphism of odd order. *Finite Fields Appl.*, 15(3):277–293, 2009.
- [1278] W. C. Huffman. On the theory of \mathbb{F}_q -linear \mathbb{F}_{q^t} -codes. *Adv. Math. Commun.*, 7(3):349–378, 2013.

- [1279] W. C. Huffman. Self-dual \mathbb{F}_q -linear \mathbb{F}_{q^t} -codes with an automorphism of prime order. *Adv. Math. Commun.*, 7(1):57–90, 2013.
- [1280] A. Hulpke. Zur Berechnung von Charaktertafeln. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1993.
- [1281] A. Hulpke. Block systems of a Galois group. *Experiment. Math.*, 4(1):1–9, 1995.
- [1282] A. Hulpke. *Konstruktion transitiver Permutationsgruppen*. PhD thesis, RWTH, Aachen, 1996.
- [1283] A. Hulpke. Computing normal subgroups. In *Proceedings of the 1998 International Symposium on Symbolic and Algebraic Computation (Rostock)*, pages 194–198 (electronic). ACM, New York, 1998.
- [1284] A. Hulpke. Computing subgroups invariant under a set of automorphisms. *J. Symbolic Comput.*, 27(4):415–427, 1999.
- [1285] A. Hulpke. Galois groups through invariant relations. In *Groups St. Andrews 1997 in Bath, II*, volume 261 of *London Math. Soc. Lecture Note Ser.*, pages 379–393. Cambridge Univ. Press, Cambridge, 1999.
- [1286] A. Hulpke. Techniques for the computation of Galois groups. In *Algorithmic algebra and number theory (Heidelberg, 1997)*, pages 65–77. Springer, Berlin, 1999.
- [1287] A. Hulpke. Conjugacy classes in finite permutation groups via homomorphic images. *Math. Comp.*, 69(232):1633–1651, 2000.
- [1288] A. Hulpke. Representing subgroups of finitely presented groups by quotient subgroups. *Experiment. Math.*, 10(3):369–381, 2001.
- [1289] A. Hulpke. Constructing transitive permutation groups. *J. Symbolic Comput.*, 39(1):1–30, 2005.
- [1290] A. Hulpke. Computing conjugacy classes of elements in matrix groups. *J. Algebra*, 387:268–286, 2013.
- [1291] A. Hulpke. Computing generators of groups preserving a bilinear form over residue class rings. *J. Symbolic Comput.*, 50:298–307, 2013.
- [1292] A. Hulpke, P. Kaski, and P. R. J. Östergård. The number of Latin squares of order 11. *Math. Comp.*, 80(274):1197–1219, 2011.
- [1293] A. Hulpke and S. Linton. Construction of Co_3 . An example of the use of an integrated system for computational group theory. In *Groups St. Andrews 1997 in Bath, II*, volume 261 of *London Math. Soc. Lecture Note Ser.*, pages 394–409. Cambridge Univ. Press, Cambridge, 1999.
- [1294] A. Hulpke, D. Stanovský, and P. Vojtěchovský. Connected quandles and transitive groups. *J. Pure Appl. Algebra*, 220(2):735–758, 2016.

- [1295] D. J. Hunter and P. T. von Hippel. How rare is symmetry in musical 12-tone rows? *Amer. Math. Monthly*, 110(2):124–132, 2003.
- [1296] B. Hurley and T. Hurley. Systems of MDS codes from units and idempotents. *Discrete Math.*, 335:81–91, 2014.
- [1297] R. A. Idal'go and A. D. Mednykh. Geometric orbifolds with a torsion-free derived group. *Sibirsk. Mat. Zh.*, 51(1):48–61, 2010.
- [1298] J. in 't panhuis, E. Postma, and D. Roozmond. Extremal presentations for classical Lie algebras. *J. Algebra*, 322(2):295–326, 2009.
- [1299] M. Iovanov, G. Mason, and S. Montgomery. FSZ -groups and Frobenius-Schur indicators of quantum doubles. *Math. Res. Lett.*, 21(4):757–779, 2014.
- [1300] S. Irnich. Minimale vielfachheiten bei der einschränkung gewöhnlicher darstellungen auf untergruppen. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1995.
- [1301] A. A. Ivanov, S. A. Linton, K. Lux, J. Saxl, and L. H. Soicher. Distance-transitive representations of the sporadic groups. *Comm. Algebra*, 23(9):3379–3427, 1995.
- [1302] A. A. Ivanov and D. V. Pasechnik. c -extensions of the $F_4(2)$ -building. *Discrete Math.*, 264(1-3):91–110, 2003. The 2000 *Com²MaC* Conference on Association Schemes, Codes and Designs (Pohang).
- [1303] A. A. Ivanov and D. V. Pasechnik. Minimal representations of locally projective amalgams. *J. London Math. Soc. (2)*, 70(1):142–164, 2004.
- [1304] A. A. Ivanov, D. V. Pasechnik, A. Seress, and S. Shpectorov. Majorana representations of the symmetric group of degree 4. *J. Algebra*, 324(9):2432–2463, 2010.
- [1305] A. A. Ivanov, D. V. Pasechnik, and S. V. Shpectorov. Non-abelian representations of some sporadic geometries. *J. Algebra*, 181(2):523–557, 1996.
- [1306] A. A. Ivanov and A. Seress. Majorana representations of A_5 . *Math. Z.*, 272(1-2):269–295, 2012.
- [1307] A. A. Ivanov and S. Shpectorov. Majorana representations of $L_3(2)$. *Adv. Geom.*, 12(4):717–738, 2012.
- [1308] A. A. Ivanov and S. V. Shpectorov. Amalgams determined by locally projective actions. *Nagoya Math. J.*, 176:19–98, 2004.
- [1309] G. Ivanyos and K. Lux. Treating the exceptional cases of the MeatAxe. *Experiment. Math.*, 9(3):373–381, 2000.
- [1310] T. Ivenzić. Simplicialkomplexe auflösbarer untergruppen und die alperinsche gewichtsvermutung. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 2000.
- [1311] E. Jabara, D. Lytkina, and A. Mamontov. Recognizing M_{10} by spectrum in the class of all groups. *Internat. J. Algebra Comput.*, 24(2):113–119, 2014.

- [1312] E. Jabara, D. V. Lytkina, and V. D. Mazurov. Some groups of exponent 72. *J. Group Theory*, 17(6):947–955, 2014.
- [1313] M. A. Jackson. The strong symmetric genus of the hyperoctahedral groups. *J. Group Theory*, 7(4):495–505, 2004.
- [1314] M. A. Jackson. The strong symmetric genus of the finite Coxeter groups. *J. Group Theory*, 10(6):841–847, 2007.
- [1315] M. A. Jackson. The strong symmetric genus and generalized symmetric groups $G(n, 3)$. *J. Group Theory*, 13(1):131–138, 2010.
- [1316] R. Jafari and S. Zarzuela Armengou. On monomial curves obtained by gluing. *Semigroup Forum*, 88(2):397–416, 2014.
- [1317] S. H. Jafari. Categorizing finite p -groups by the order of their non-abelian tensor squares. *J. Algebra Appl.*, 15(5):1650095, 13, 2016.
- [1318] S. H. Jafari, F. Saeedi, and E. Khamseh. Characterization of finite p -groups by their non-abelian tensor square. *Comm. Algebra*, 41(5):1954–1963, 2013.
- [1319] S. M. Jafarian Amiri, H. Madadi, and H. Rostami. On the probability of generating nilpotent subgroups in a finite group. *Bull. Aust. Math. Soc.*, 93(3):447–453, 2016.
- [1320] S. M. Jafarian Amiri and H. Rostami. Groups with a few nonabelian centralizers. *Publ. Math. Debrecen*, 87(3-4):429–437, 2015.
- [1321] V. K. Jain, P. K. Rai, and M. K. Yadav. On finite p -groups with abelian automorphism group. *Internat. J. Algebra Comput.*, 23(5):1063–1077, 2013.
- [1322] V. K. Jain and M. K. Yadav. On finite p -groups whose automorphisms are all central. *Israel J. Math.*, 189:225–236, 2012.
- [1323] A. Jamali. A further class of 3-generator, 3-relation finite groups. *Comm. Algebra*, 29(2):879–887, 2001.
- [1324] A. Jamali. Deficiency zero non-metacyclic p -groups of order less than 1000. *J. Appl. Math. Comput.*, 16(1-2):303–306, 2004.
- [1325] A. Jamali. On the existence of 3-generator, 3-relation finite 2-groups with a given (co)class. *Comm. Algebra*, 40(2):444–451, 2012.
- [1326] A. Jamali and H. Mousavi. On the co-Dedekindian finite p -groups with non-cyclic abelian second centre. *Glasg. Math. J.*, 44(1):1–8, 2002.
- [1327] S. Jambor, M. Leuner, A. C. Niemeyer, and W. Plesken. Fast recognition of alternating groups of unknown degree. *J. Algebra*, 392:315–335, 2013.
- [1328] G. James and A. Mathas. Hecke algebras of type \mathbf{A} with $q = -1$. *J. Algebra*, 184(1):102–158, 1996.

- [1329] G. James and A. Mathas. A q -analogue of the Jantzen-Schaper theorem. *Proc. London Math. Soc. (3)*, 74(2):241–274, 1997.
- [1330] G. James and A. Mathas. Symmetric group blocks of small defect. *J. Algebra*, 279(2):566–612, 2004.
- [1331] J. P. James. Partition actions of symmetric groups and regular bipartite graphs. *Bull. London Math. Soc.*, 38(2):224–232, 2006.
- [1332] C. Jansen. *Ein Atlas 3-modularer Charaktertafeln*. PhD thesis, RWTH, Aachen, 1995.
- [1333] C. Jansen. The minimal degrees of faithful representations of the sporadic simple groups and their covering groups. *LMS J. Comput. Math.*, 8:122–144 (electronic), 2005.
- [1334] C. Jansen, K. Lux, R. Parker, and R. Wilson. *An atlas of Brauer characters*, volume 11 of *London Mathematical Society Monographs. New Series*. The Clarendon Press, Oxford University Press, New York, 1995. Appendix 2 by T. Breuer and S. Norton, Oxford Science Publications.
- [1335] C. Jansen and J. Müller. The 3-modular decomposition numbers of the sporadic simple Suzuki group. *Comm. Algebra*, 25(8):2437–2458, 1997.
- [1336] C. Jansen and R. A. Wilson. The minimal faithful 3-modular representation for the Lyons group. *Comm. Algebra*, 24(3):873–879, 1996.
- [1337] C. Jansen and R. A. Wilson. Two new constructions of the O’Nan group. *J. London Math. Soc. (2)*, 56(3):579–583, 1997.
- [1338] C. Jansen and R. A. Wilson. The 2-modular and 3-modular decomposition numbers for the sporadic simple O’Nan group and its triple cover. *J. London Math. Soc. (2)*, 57(1):71–90, 1998.
- [1339] P. Jedlička, M. Kinyon, and P. Vojtěchovský. Nilpotency in automorphic loops of prime power order. *J. Algebra*, 350:64–76, 2012.
- [1340] P. Jedlička, M. K. Kinyon, and P. Vojtěchovský. Constructions of commutative automorphic loops. *Comm. Algebra*, 38(9):3243–3267, 2010.
- [1341] P. Jedlička, A. Pilitowska, D. Stanovský, and A. Zamojska-Dzienio. The structure of medial quandles. *J. Algebra*, 443:300–334, 2015.
- [1342] E. Jespers, A. del Río, and I. Van Gelder. Writing units of integral group rings of finite abelian groups as a product of Bass units. *Math. Comp.*, 83(285):461–473, 2014.
- [1343] E. Jespers, G. Olteanu, A. del Río, and I. Van Gelder. Group rings of finite strongly monomial groups: central units and primitive idempotents. *J. Algebra*, 387:99–116, 2013.
- [1344] U. Jezernik. Schur multipliers of unitriangular groups. *J. Algebra*, 399:26–38, 2014.
- [1345] U. Jezernik and P. Moravec. Bogomolov multipliers of groups of order 128. *Exp. Math.*, 23(2):174–180, 2014.

- [1346] K. W. Johnson, M. K. Kinyon, G. P. Nagy, and P. Vojtěchovský. Searching for small simple automorphic loops. *LMS J. Comput. Math.*, 14:200–213, 2011.
- [1347] G. A. Jones, M. Streit, and J. Wolfart. Wilson’s map operations on regular dessins and cyclotomic fields of definition. *Proc. Lond. Math. Soc. (3)*, 100(2):510–532, 2010.
- [1348] J. W. Jones. Number fields unramified away from 2. *J. Number Theory*, 130(6):1282–1291, 2010.
- [1349] J. W. Jones. Wild ramification bounds and simple group Galois extensions ramified only at 2. *Proc. Amer. Math. Soc.*, 139(3):807–821, 2011.
- [1350] J. W. Jones. Minimal solvable nonic fields. *LMS J. Comput. Math.*, 16:130–138, 2013.
- [1351] J. W. Jones and D. P. Roberts. Octic 2-adic fields. *J. Number Theory*, 128(6):1410–1429, 2008.
- [1352] J. W. Jones and D. P. Roberts. A database of number fields. *LMS J. Comput. Math.*, 17(1):595–618, 2014.
- [1353] J. W. Jones and R. Wallington. Number fields with solvable Galois groups and small Galois root discriminants. *Math. Comp.*, 81(277):555–567, 2012.
- [1354] S. K. Jones, S. Perkins, and P. A. Roach. Properties, isomorphisms and enumeration of 2-Quasi-Magic Sudoku grids. *Discrete Math.*, 311(13):1098–1110, 2011.
- [1355] J. Jonsson. Optimal decision trees on simplicial complexes. *Electron. J. Combin.*, 12:Research Paper 3, 31 pp. (electronic), 2005.
- [1356] J. Jonsson. Simplicial complexes of graphs and hypergraphs with a bounded covering number. *SIAM J. Discrete Math.*, 19(3):633–650, 2005.
- [1357] L. K. Jørgensen. Schur rings and non-symmetric association schemes on 64 vertices. *Discrete Math.*, 310(22):3259–3266, 2010.
- [1358] L. K. Jørgensen. New mixed Moore graphs and directed strongly regular graphs. *Discrete Math.*, 338(6):1011–1016, 2015.
- [1359] L. K. Jørgensen, G. A. Jones, M. H. Klin, and S. Y. Song. Normally regular digraphs, association schemes and related combinatorial structures. *Sém. Lothar. Combin.*, 71:Art. B71c, 39, 2013/14.
- [1360] L. K. Jørgensen and M. Klin. Switching of edges in strongly regular graphs. I. A family of partial difference sets on 100 vertices. *Electron. J. Combin.*, 10:Research Paper 17, 31, 2003.
- [1361] R. Joshua and S. Van Ault. Implementation of Stanley’s algorithm for projective group imbeddings. *J. Symbolic Comput.*, 44(6):655–672, 2009.
- [1362] F. Jouve, E. Kowalski, and D. Zywina. An explicit integral polynomial whose splitting field has Galois group $W(E_8)$. *J. Théor. Nombres Bordeaux*, 20(3):761–782, 2008.

- [1363] D. Joyner. *Adventures in group theory. Rubik's cube, Merlin's machine and other mathematical toys*. Johns Hopkins University Press, Baltimore, 2002.
- [1364] D. Joyner. Toric codes over finite fields. *Appl. Algebra Engrg. Comm. Comput.*, 15(1):63–79, 2004.
- [1365] D. Joyner. A primer on computational group homology and cohomology using GAP and SAGE. In *Aspects of infinite groups*, volume 1 of *Algebra Discrete Math.*, pages 159–191. World Sci. Publ., Hackensack, NJ, 2008.
- [1366] D. Joyner and D. Kohel. Group theory in SAGE. In *Computational group theory and the theory of groups*, volume 470 of *Contemp. Math.*, pages 115–139. Amer. Math. Soc., Providence, RI, 2008.
- [1367] D. Joyner and A. Konovalov. Applications of the computer algebra system gap in coding theory. In *2nd International conference "Modern coding methods in electronic systems"*. Sumy, Ukraine, October 26–27, 2004, pages 18–19, 2004.
- [1368] D. Joyner, R. Kreminski, and J. Turisco. *Applied abstract algebra*. Johns Hopkins University Press, Baltimore, MD, 2004.
- [1369] D. Joyner and A. Ksir. Representations of finite groups on riemann-roch spaces, ii. (*submitted*), 2004. Preprint, <http://front.math.ucdavis.edu/math.AG/0312383>.
- [1370] D. Joyner and A. Ksir. Automorphism groups of some AG codes. *IEEE Trans. Inform. Theory*, 52(7):3325–3329, 2006.
- [1371] D. Joyner and A. Ksir. Decomposition representations of finite groups on Riemann-Roch spaces. *Proc. Amer. Math. Soc.*, 135(11):3465–3476 (electronic), 2007.
- [1372] D. Joyner and W. Traves. Representations of finite groups on riemann-roch spaces. (*submitted*), 2004. Preprint, <http://front.math.ucdavis.edu/math.AG/0210408>.
- [1373] D. Joyner and H. Verrill. Notes on toric varieties. (*submitted*), 2004. Preprint, <http://front.math.ucdavis.edu/math.AG/0208065>.
- [1374] X. Ju. The Smith set of the group $S_5 \times C_2 \times \dots \times C_2$. *Osaka J. Math.*, 47(1):215–236, 2010.
- [1375] U. Jürgens and G. Röhrle. MOP—algorithmic modality analysis for parabolic group actions. *Experiment. Math.*, 11(1):57–67, 2002.
- [1376] A. Jurišić and J. Koolen. Krein parameters and antipodal tight graphs with diameter 3 and 4. *Discrete Math.*, 244(1-3):181–202, 2002. Algebraic and topological methods in graph theory (Lake Bled, 1999).
- [1377] G. Jurman. A family of simple Lie algebras in characteristic two. *J. Algebra*, 271(2):454–481, 2004.
- [1378] G. Jurman. Graded Lie algebras of maximal class. III. *J. Algebra*, 284(2):435–461, 2005.
- [1379] T. Kaczynski and M. Mrozek. The cubical cohomology ring: an algorithmic approach. *Found. Comput. Math.*, 13(5):789–818, 2013.

- [1380] M. Kahnert. The t-matrix code tsym for homogeneous dielectric particles with finite symmetries. *J. Quant. Spectrosc. Radiat. Transfer*, 123:62–78, 2013.
- [1381] M. Kahnert. T-matrix computations for particles with high-order finite symmetries. *J. Quant. Spectrosc. Radiat. Transfer*, 123:79–91, 2013.
- [1382] V. Kakkar and R. P. Shukla. On the number of isomorphism classes of transversals. *Proc. Indian Acad. Sci. Math. Sci.*, 123(3):345–359, 2013.
- [1383] V. Kakkar and R. P. Shukla. On the congruences in right loops. *Comm. Algebra*, 43(12):5121–5130, 2015.
- [1384] A. Kalka, M. Teicher, and B. Tsaban. Short expressions of permutations as products and cryptanalysis of the Algebraic Eraser. *Adv. in Appl. Math.*, 49(1):57–76, 2012.
- [1385] J. Kalliongis and R. Ohashi. Classifying non-splitting fiber preserving actions on prism manifolds. *Topology Appl.*, 178:200–218, 2014.
- [1386] H. Kalra and D. Gumber. A note on conjugacy classes of finite groups. *Proc. Indian Acad. Sci. Math. Sci.*, 124(1):31–36, 2014.
- [1387] M. Kambites. Small overlap monoids. I. The word problem. *J. Algebra*, 321(8):2187–2205, 2009.
- [1388] M. Kambites and F. Otto. Uniform decision problems for automatic semigroups. *J. Algebra*, 303(2):789–809, 2006.
- [1389] W. M. Kantor. Simple groups in computational group theory. In *Proceedings of the International Congress of Mathematicians, Vol. II (Berlin, 1998)*, number Extra Vol. II, pages 77–86 (electronic), 1998.
- [1390] W. M. Kantor and A. Seress. Permutation group algorithms via black box recognition algorithms. In *Groups St. Andrews 1997 in Bath, II*, volume 261 of *London Math. Soc. Lecture Note Ser.*, pages 436–446. Cambridge Univ. Press, Cambridge, 1999.
- [1391] W. M. Kantor and A. Seress. Black box classical groups. *Mem. Amer. Math. Soc.*, 149(708):viii+168, 2001.
- [1392] W. M. Kantor and A. Seress. Large element orders and the characteristic of Lie-type simple groups. *J. Algebra*, 322(3):802–832, 2009.
- [1393] G. Kaplan and D. Levy. Solitary subgroups. *Comm. Algebra*, 37(6):1873–1883, 2009.
- [1394] G. Kaplan and D. Levy. Solvability of finite groups via conditions on products of 2-elements and odd p -elements. *Bull. Aust. Math. Soc.*, 82(2):265–273, 2010.
- [1395] L. Kappe and R. F. Morse. On commutators in p -groups. *J. Group Theory*, 8(4):415–429, 2005.
- [1396] L. Kappe and R. F. Morse. On commutators in groups. In *Groups St. Andrews 2005. Vol. 2*, volume 340 of *London Math. Soc. Lecture Note Ser.*, pages 531–558. Cambridge Univ. Press, Cambridge, 2007.

- [1397] L. Kappe and P. M. Ratchford. On centralizer-like subgroups associated with the n -Engel word. *Algebra Colloq.*, 6(1):1–8, 1999.
- [1398] L. Kappe and J. L. Redden. On the covering number of small alternating groups. In *Computational group theory and the theory of groups, II*, volume 511 of *Contemp. Math.*, pages 109–125. Amer. Math. Soc., Providence, RI, 2010.
- [1399] E. Karaarslan. Large random & prime number generation. Msc thesis, International Computer Institute, Ege University, 2001.
- [1400] E. Karaarslan. Primality testing techniques and the importance of prime numbers in security protocols. In *3rd International Conference on Mathematical & Computational Applications (ICMCA 2002) Conference*, 2004.
- [1401] J. Karabáš, P. Malický, and R. Nedela. Three-manifolds with Heegaard genus at most two represented by crystallisations with at most 42 vertices. *Discrete Math.*, 307(21):2569–2590, 2007.
- [1402] J. Karabáš and R. Nedela. Archimedean maps of higher genera. *Math. Comp.*, 81(277):569–583, 2012.
- [1403] A. Karve and S. Pauli. GiANT: graphical algebraic number theory. *J. Théor. Nombres Bordeaux*, 18(3):721–727, 2006.
- [1404] P. Kaski. Isomorph-free exhaustive generation of designs with prescribed groups of automorphisms. *SIAM J. Discrete Math.*, 19(3):664–690 (electronic), 2005.
- [1405] P. Kaski and P. R. J. Östergård. Miscellaneous classification results for 2-designs. *Discrete Math.*, 280(1-3):65–75, 2004.
- [1406] S. Kato. A homological study of Green polynomials. *Ann. Sci. Éc. Norm. Supér. (4)*, 48(5):1035–1074, 2015.
- [1407] N. M. Katz. Notes on G_2 , determinants, and equidistribution. *Finite Fields Appl.*, 10(2):221–269, 2004.
- [1408] N. M. Katz. G_2 and hypergeometric sheaves. *Finite Fields Appl.*, 13(2):175–223, 2007.
- [1409] A. Kaup. Gitterbasen und Charaktere endlicher Gruppen. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1992.
- [1410] H. Kawai. Construction of maximal ideals of commutative group algebras. *Internat. J. Algebra Comput.*, 20(3):381–389, 2010.
- [1411] L. S. Kazarin and V. V. Yanishevskii. On finite simply reducible groups. *Algebra i Analiz*, 19(6):86–116, 2007.
- [1412] K. S. Kedlaya. Mass formulas for local Galois representations. *Int. Math. Res. Not. IMRN*, (17):Art. ID rnm021, 26, 2007. With an appendix by Daniel Gulotta.
- [1413] S. Keitemeier. Graphische Darstellung von Untergruppenverbänden im Computeralgebrasystem GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, July 1995.

- [1414] G. Kemper, F. Lübeck, and K. Magaard. Matrix generators for the Ree groups ${}^2G_2(q)$. *Comm. Algebra*, 29(1):407–413, 2001.
- [1415] R. Kessar and L. Valero-Elizondo. Stable partitions and Alperin’s weight conjecture for the symmetric groups in characteristic two. *Bol. Soc. Mat. Mexicana (3)*, 10(1):53–62, 2004.
- [1416] J. D. Key, T. P. McDonough, and V. C. Mavron. Partial permutation decoding for codes from finite planes. *European J. Combin.*, 26(5):665–682, 2005.
- [1417] J. D. Key, T. P. McDonough, and V. C. Mavron. Information sets and partial permutation decoding for codes from finite geometries. *Finite Fields Appl.*, 12(2):232–247, 2006.
- [1418] J. D. Key, T. P. McDonough, and V. C. Mavron. An upper bound for the minimum weight of the dual codes of Desarguesian planes. *European J. Combin.*, 30(1):220–229, 2009.
- [1419] E. Khamseh, M. R. R. Moghaddam, and F. Saeedi. Characterization of finite p -groups by their Schur multipliers. *J. Algebra Appl.*, 12(5):1250035, 9, 2013.
- [1420] M. Khatami, B. Khosravi, and Z. Akhlaghi. NCF-distinguishability by prime graph of $PGL(2, p)$ where p is a prime. *Rocky Mountain J. Math.*, 41(5):1523–1545, 2011.
- [1421] M. Khatami, B. Khosravi, and Z. Akhlaghi. A new characterization for some linear groups. *Monatsh. Math.*, 163(1):39–50, 2011.
- [1422] H. Kiechle and G. P. Nagy. On the extension of involutorial Bol loops. *Abh. Math. Sem. Univ. Hamburg*, 72:235–250, 2002.
- [1423] C. Kiers, C. O’Neill, and V. Ponomarenko. Numerical semigroups on compound sequences. *Comm. Algebra*, 44(9):3842–3852, 2016.
- [1424] N. Kilic. On rank 2 geometries of the Mathieu group M_{23} . *Taiwanese J. Math.*, 14(2):373–387, 2010.
- [1425] H. J. Kim and D. Ruberman. Topological triviality of smoothly knotted surfaces in 4-manifolds. *Trans. Amer. Math. Soc.*, 360(11):5869–5881, 2008.
- [1426] N. Kim. Implementierung der meataxe in das computeralgebra-system `gap` unter besonderer berücksichtigung einer schnellen vektorarithmetik. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1997.
- [1427] I. Kiming, M. Schütt, and H. A. Verrill. Lifts of projective congruence groups. *J. Lond. Math. Soc. (2)*, 83(1):96–120, 2011.
- [1428] W. Kimmerle. Unit groups of integral group rings: old and new. *Jahresber. Dtsch. Math.-Ver.*, 115(2):101–112, 2013.
- [1429] W. Kimmerle and E. Kouzoudi. Doubly transitive automorphism groups of combinatorial surfaces. *Discrete Comput. Geom.*, 29(3):445–457, 2003.
- [1430] S. A. King, D. J. Green, and G. Ellis. The mod-2 cohomology ring of the third Conway group is Cohen-Macaulay. *Algebr. Geom. Topol.*, 11(2):719–734, 2011.

- [1431] M. Kinyon, K. Pula, and P. Vojtěchovský. Incidence properties of cosets in loops. *J. Combin. Des.*, 20(3):179–197, 2012.
- [1432] M. Kinyon and I. M. Wanless. Loops with exponent three in all isotopes. *Internat. J. Algebra Comput.*, 25(7):1159–1177, 2015.
- [1433] M. K. Kinyon, J. D. Phillips, and P. Vojtěchovský. C-loops: extensions and constructions. *J. Algebra Appl.*, 6(1):1–20, 2007.
- [1434] M. K. Kinyon and P. Vojtěchovský. Primary decompositions in varieties of commutative diassociative loops. *Comm. Algebra*, 37(4):1428–1444, 2009.
- [1435] H. Kitayama. Noether’s problem for four- and five-dimensional linear actions. *J. Algebra*, 324(4):591–597, 2010.
- [1436] H. Kitayama and A. Yamasaki. The rationality problem for four-dimensional linear actions. *J. Math. Kyoto Univ.*, 49(2):359–380, 2009.
- [1437] G. Klaas. *Konstruktion und Wiedererkenntnis linearer pro-p-Gruppen endlicher Weite*. PhD thesis, RWTH, Aachen, 1998.
- [1438] A. Klappenecker and M. Rötteler. Beyond stabilizer codes. I. Nice error bases. *IEEE Trans. Inform. Theory*, 48(8):2392–2395, 2002.
- [1439] A. Klappenecker and M. Rötteler. Unitary error bases: constructions, equivalence, and applications. In *Applied algebra, algebraic algorithms and error-correcting codes (Toulouse, 2003)*, volume 2643 of *Lecture Notes in Comput. Sci.*, pages 139–149. Springer, Berlin, 2003.
- [1440] S. Klavžar and S. Shpectorov. Tribes of cubic partial cubes. *Discrete Math. Theor. Comput. Sci.*, 9(1):273–291, 2007.
- [1441] A. S. Kleshchev and J. Sheth. Representations of the alternating group which are irreducible over subgroups. *Proc. London Math. Soc. (3)*, 84(1):194–212, 2002.
- [1442] I. Klimann, M. Picantin, and D. Savchuk. Orbit automata as a new tool to attack the order problem in automaton groups. *J. Algebra*, 445:433–457, 2016.
- [1443] M. Klin, J. Lauri, and M. Ziv-Av. Links between two semisymmetric graphs on 112 vertices via association schemes. *J. Symbolic Comput.*, 47(10):1175–1191, 2012.
- [1444] M. Klin, M. Meszka, S. Reichard, and A. Rosa. The smallest non-rank 3 strongly regular graphs which satisfy the 4-vertex condition. *Bayreuth. Math. Schr.*, (74):145–205, 2005.
- [1445] M. Klin, M. Muzychuk, and M. Ziv-Av. Higmanian rank-5 association schemes on 40 points. *Michigan Math. J.*, 58(1):255–284, 2009.
- [1446] M. Klin, C. Pech, S. Reichard, A. Woldar, and M. Ziv-Av. Examples of computer experimentation in algebraic combinatorics. *Ars Math. Contemp.*, 3(2):237–258, 2010.
- [1447] J. Klüners and G. Malle. Explicit Galois realization of transitive groups of degree up to 15. *J. Symbolic Comput.*, 30(6):675–716, 2000. Algorithmic methods in Galois theory.

- [1448] W. Knapp and H. Schaeffer. On the codes related to the Higman-Sims graph. *Electron. J. Combin.*, 22(1):Paper 1.19, 58, 2015.
- [1449] W. Knapp and P. Schmid. An extension theorem for integral representations. *J. Austral. Math. Soc. Ser. A*, 63(1):1–15, 1997.
- [1450] M. Kochetov, N. Parsons, and S. Sadov. Counting fine grading on matrix algebras and on classical simple Lie algebras. *Internat. J. Algebra Comput.*, 23(7):1755–1781, 2013.
- [1451] S. Kohl. Über die Anzahl der Bahnen in endlichen Gruppen unter der Operation ihrer Automorphismengruppe - Suzuki-Gruppen vs. lineare Gruppen. Diplomarbeit, Universität Stuttgart, 2000.
- [1452] S. Kohl. Counting the orbits on finite simple groups under the action of the automorphism group—Suzuki groups vs. linear groups. *Comm. Algebra*, 30(7):3515–3532, 2002.
- [1453] S. Kohl. Classifying finite simple groups with respect to the number of orbits under the action of the automorphism group. *Comm. Algebra*, 32(12):4785–4794, 2004.
- [1454] S. Kohl. *Restklassenweise affine Gruppen*. PhD thesis, Universität Stuttgart, 2005.
- [1455] S. Kohl. Wildness of iteration of certain residue-class-wise affine mappings. *Adv. in Appl. Math.*, 39(3):322–328, 2007.
- [1456] S. Kohl. Algorithms for a class of infinite permutation groups. *J. Symbolic Comput.*, 43(8):545–581, 2008.
- [1457] S. Kohl. On conjugates of Collatz-type mappings. *Int. J. Number Theory*, 4(1):117–120, 2008.
- [1458] S. Kohl. A simple group generated by involutions interchanging residue classes of the integers. *Math. Z.*, 264(4):927–938, 2010.
- [1459] T. Kohl. Groups of order $4p$, twisted wreath products and Hopf-Galois theory. *J. Algebra*, 314(1):42–74, 2007.
- [1460] T. Kohl. Regular permutation groups of order mp and hopf galois structures. *Algebra and Number Theory*, 7-9:2203–2240, 2013.
- [1461] T. Kohl. Regular permutation groups of order mp and Hopf Galois structures. *Algebra Number Theory*, 7(9):2203–2240, 2013.
- [1462] T. Kohl. Multiple holomorphs of dihedral and quaternionic groups. *Comm. Algebra*, 43(10):4290–4304, 2015.
- [1463] C. Köhler. Über das $k(GV)$ -problem. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1999.
- [1464] C. Köhler and H. Pahlings. Regular orbits and the $k(GV)$ -problem. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 209–228. de Gruyter, Berlin, 2001.

- [1465] M. Kohlhase. Omdoc: Towards an internet standard for the administration, distribution, and teaching of mathematical knowledge. *ARTIFICIAL INTELLIGENCE AND SYMBOLIC COMPUTATION*, 1930:32–52, 2001.
- [1466] S. Kolb and J. Pellegrini. Braid group actions on coideal subalgebras of quantized enveloping algebras. *Journal of Algebra*, 336(1):395 – 416, 2011.
- [1467] S. Kolb and J. Pellegrini. Braid group actions on coideal subalgebras of quantized enveloping algebras. *J. Algebra*, 336:395–416, 2011.
- [1468] A. Koloydenko. Symmetric measures via moments. *Bernoulli*, 14(2):362–390, 2008.
- [1469] A. Konovalov. On several problems in modular group algebras and their investigations using computer algebra system gap. In *Groups and group rings. Abstracts. Wisla, Poland, June 6–10*, page 25, 2000.
- [1470] A. Konovalov. Computer algebra system gap. “CHIP” Magazine, (9), 2001. Supplementary article for the GAP 4.2 distribution on the CD-appendix to the magazine.
- [1471] A. Konovalov. Computer investigations of the modular isomorphism problem. In *Algebra and Applications. Krasnoyarsk, Russia, 5–9 August 2002*, pages 141–142, 2002.
- [1472] A. Konovalov. *ISO 1.0 — The program for calculation of invariants of modular group algebras and investigation of the modular isomorphism problem.*, 2002. Preprint. Online at <http://www.mathpreprints.com/math/Preprint/drkonovalov/20030326/1/>.
- [1473] A. Konovalov. Iso 1.0 — the program for investigation of the modular isomorphism problem of group algebras. In *Algebraic Methods of Discrete Mathematics. Lugansk, Ukraine 23–27 September 2002*, pages 32–34, 2002.
- [1474] A. Konovalov. On the computer algebra system gap. “CHIP” Magazine, (9), 2003. Supplementary article for the GAP 4.3 distribution on the CD-appendix to the magazine.
- [1475] A. Konovalov. The computer algebra system gap 4.4.3 on chip-cd 9/2004. “CHIP” Magazine, (9), 2004. Supplementary article for the GAP 4.3 distribution on the CD-appendix to the magazine.
- [1476] A. Konovalov. Software news. gap 4.4. *Exponenta Pro. Mathematics in Applications*, (2(6)):87, 2004.
- [1477] A. Konovalov. The computer algebra system gap 4.4.5 on chip-cd 9/2005. “CHIP” Magazine, (9), 2005. Supplementary article for the GAP 4.4.5 distribution on the CD-appendix to the magazine.
- [1478] A. Konovalov. Computer investigations of the modular isomorphism problem. In *Groups and group rings XI. Abstracts. Bedlewo, Poland, June 4–11*, page 14, 2005.
- [1479] A. Konovalov. The library of unit groups of modular group algebras of finite p-groups of order not greater than 128 for the computational algebra system gap. In *XI International Scientific Kravchuk Conference, Kyiv, Ukraine, May 18–20, 2006*, page 469, 2006.

- [1480] A. Konovalov. Wreath products in modular group algebras of some finite 2-groups. *Acta Math. Acad. Paedagog. Nyházi. (N.S.)*, 23(2):125–127, 2007.
- [1481] A. Konovalov, V. Bovdi, C. Schneider, and R. Rossmanith. Investigations in unit groups of modular group algebras using the gap4 package laguna 3.0. In *4th International Conference on Algebra. Lviv, Ukraine, 4–9 August 2003*, pages 52–53, 2003.
- [1482] A. Konovalov and W. Kimmerle. An algorithm for the embedding of the given p -group into the normalised unit group of the modular group algebra of a finite p -group. In *Algebras, Rings and Modules. Lisboa, Portugal, 14–18 July 2003*, pages 45–46, 2003.
- [1483] A. Konovalov and E. Kostenko. Testing the conjecture about congruently adjoined clusters in the amorphous state using the computer algebra system gap. In *Proceedings of the XXXII International Conference IT +SE'2005, Autumn Session. Yalta, Ukraine, October 1–10*, pages 84–85, 2002.
- [1484] A. Konovalov and A. Krivokhata. On the isomorphism problem for unit groups of modular group algebras. *Acta Sci. Math. (Szeged)*, 73(1-2):53–59, 2007.
- [1485] A. Konovalov and D. Lysenko. Learning algebra and number theory using the computer algebra system gap. In *4th All-Ukrainian Conference "Implementation of modern information technologies in education". Zaporozhye, Ukraine, December 2004*, pages 172–179, 2004.
- [1486] A. Konovalov, D. Lysenko, and A. Sudakov. Investigation of the modular isomorphism problem using the computer algebra system gap. In *Actual problems of mathematics and computer science. 2nd regional scientific conference of young researchers. Zaporozhye, Ukraine, April 22–23, 2004*, pages 28–29, 2004.
- [1487] A. Konovalov and P. Moskalyov. Searching optimal golomb rulers with permutations groups acting on partitions. In *Actual problems of mathematics and computer science. Abstracts of the 3rd regional scientific conference of young researchers. Zaporozhye, Ukraine, April 21–22, 2005*, page 27, 2005.
- [1488] A. Konovalov and A. Tsapok. The isomorphism problem for unit groups of modular group algebras of 2-groups of orders 16 and 32. In *5th International Algebraic Conference in Ukraine. Abstracts. Odessa, Ukraine, July 20–27*, page 104, 2005.
- [1489] A. Konovalov and A. G. Tsapok. Normaliser series in finite groups and strojnowski problem. *Zaporozhye State University Herald — Physical and mathematical sciences*, (2):61–65, 2002.
- [1490] A. B. Konovalov. Computer algebra system gap. Technical report, Zaporozhye State University, 1999. 2nd edition online at <http://ukrgap.exponenta.ru/papers/MetGAP43.htm>.
- [1491] A. B. Konovalov. Computer algebra system gap. In *Ukrainian Mathematical Congress-2001. Kiev, August 21-23*, pages 29–30. Mathematical Institute of the Ukrainian National Academy of Sciences, 2001.
- [1492] A. B. Konovalov. Computer algebra system gap. *3rd Internat. Conf. on Algebra in Ukraine*, pages 194–195, 2001.

- [1493] A. B. Konovalov and A. G. Krivokhata. Symmetric subgroups in modular group algebras. *Nauk. Visn. Uzhgorod. Univ., Ser. Mat.*, (9), 2004. Available at <http://arxiv.org/abs/0801.0809> translated from the original journal publication in Russian.
- [1494] A. B. Konovalov and A. G. Tsapok. Symmetric subgroups of a normalized multiplicative group of the modular group algebra of a finite p -group. *Nauk. Visn. Uzhgorod. Univ. Ser. Mat. Inform.*, (9):20–24, 2004.
- [1495] E. Konovalov A. Kostenko and V. Savin. The modelling of the amorphous state of the fast-tempered ni-nb-(ta,v) alloys. In *Metal and foundry in Ukraine*, 2005.
- [1496] M. Konvalinka, G. Pfeiffer, and C. E. Röver. A note on element centralizers in finite Coxeter groups. *J. Group Theory*, 14(5):727–745, 2011.
- [1497] A. V. Konygin. On primitive permutation groups with nontrivial global stabilizers. *Proc. Steklov Inst. Math.*, 261(suppl. 1):S113–S116, 2008.
- [1498] J. H. Koolen and A. Munemasa. Tight 2-designs and perfect 1-codes in Doob graphs. *J. Statist. Plann. Inference*, 86(2):505–513, 2000. Special issue in honor of Professor Ralph Stanton.
- [1499] V. V. Korableva. Parabolic permutation representations of the group ${}^2E_6(q^2)$. *Mat. Zametki*, 67(6):899–912, 2000.
- [1500] G. Korchmáros and G. P. Nagy. Hermitian codes from higher degree places. *J. Pure Appl. Algebra*, 217(12):2371–2381, 2013.
- [1501] G. Korchmáros and G. P. Nagy. Lower bounds on the minimum distance in Hermitian one-point differential codes. *Sci. China Math.*, 56(7):1449–1455, 2013.
- [1502] G. Korchmáros and A. Sonnino. Doubly transitive parabolic ovals in affine planes of even order $n \leq 64$. *Ars Combin.*, 105:419–433, 2012.
- [1503] I. G. Korepanov. Relations in Grassmann algebra corresponding to three- and four-dimensional Pachner moves. *SIGMA Symmetry Integrability Geom. Methods Appl.*, 7:Paper 117, 23, 2011.
- [1504] V. V. Korniyak. Finite quantum models: a constructive approach to the description of quantum behavior. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 387(Teoriya Predstavlenii, Dinamicheskie Sistemy, Kombinatornye Metody. XIX):122–144, 191, 2011.
- [1505] C. Kościelny. Computing in $GF(2^m)$ using GAP. *Appl. Math. Comput. Sci.*, 7(3):677–688, 1997.
- [1506] H. Koshita. An example of relations on the Ext-quiver for the Suzuki group $Sz(8)$ in characteristic 2. *J. Symbolic Comput.*, 42(4):429–442, 2007.
- [1507] S. Koshitani, B. Külshammer, and B. Sambale. On Loewy lengths of blocks. *Math. Proc. Cambridge Philos. Soc.*, 156(3):555–570, 2014.

- [1508] S. Koshitani, N. Kunugi, and K. Waki. Broué’s conjecture for non-principal 3-blocks of finite groups. *J. Pure Appl. Algebra*, 173(2):177–211, 2002.
- [1509] S. Koshitani, N. Kunugi, and K. Waki. Broué’s abelian defect group conjecture for the Held group and the sporadic Suzuki group. *J. Algebra*, 279(2):638–666, 2004.
- [1510] S. Koshitani and J. Müller. Broué’s abelian defect group conjecture holds for the Harada-Norton sporadic simple group HN. *J. Algebra*, 324(3):394–429, 2010.
- [1511] S. Koshitani, J. Müller, and F. Noeske. Broué’s abelian defect group conjecture holds for the sporadic simple Conway group Co_3 . *J. Algebra*, 348:354–380, 2011.
- [1512] S. Koshitani, J. Müller, and F. Noeske. Broué’s abelian defect group conjecture holds for the double cover of the Higman-Sims sporadic simple group. *J. Algebra*, 376:152–173, 2013.
- [1513] S. Koshitani, J. Müller, and F. Noeske. Broué’s abelian defect group conjecture for the sporadic simple Janko group J_4 revisited. *J. Algebra*, 398:434–447, 2014.
- [1514] S. Koshitani, J. Müller, and F. Noeske. Broué’s abelian defect group conjecture and 3-decomposition numbers of the sporadic simple Conway group Co_1 . *J. Pure Appl. Algebra*, 219(1):142–160, 2015.
- [1515] E. Y. Kostenko. The modeling of amorphous state of the melt-quenched ni-nb alloys prepared including powdered components, 2005. Poster presented at Junior Euromat 2004 (<http://www.junior-euromat.fems.org/>).
- [1516] K. V. Kostousov. Cayley graphs of the group \mathbb{Z}^4 that are limits of minimal vertex-primitive graphs of type HA . *Proc. Steklov Inst. Math.*, 257(suppl. 1):S118–S134, 2007.
- [1517] A. Koto, M. Morimoto, and Y. Qi. The Smith sets of finite groups with normal Sylow 2-subgroups and small nilquotients. *J. Math. Kyoto Univ.*, 48(1):219–227, 2008.
- [1518] M. Kotov and A. Ushakov. Analysis of a certain polycyclic-group-based cryptosystem. *J. Math. Cryptol.*, 9(3):161–167, 2015.
- [1519] O. Krafft, H. Pahlings, and M. Schaefer. Diagonal-complete Latin squares. *European J. Combin.*, 24(3):229–237, 2003.
- [1520] M. Kramar. The structure of irreducible matrix groups with submultiplicative spectrum. *Linear Multilinear Algebra*, 53(1):13–25, 2005.
- [1521] M. Kratzer. *Konkrete Charakter tafeln und kompatible Charaktere*, volume 30 of *Vorlesungen aus dem Fachbereich Mathematik der Universität GH Essen [Lecture Notes in Mathematics at the University of Essen]*. Universität Essen, Fachbereich Mathematik, Essen, 2001. Dissertation, Universität Essen, Essen, 2001.
- [1522] M. Kratzer. Constructing pairs of compatible characters. In *Proceedings of the First Sino-German Workshop on Representation Theory and Finite Simple Groups (Beijing, 2002)*, volume 10, pages 285–302, 2003.

- [1523] M. Kratzer, W. Lempken, G. O. Michler, and K. Waki. Another existence and uniqueness proof for McLaughlin’s simple group. *J. Group Theory*, 6(4):443–459, 2003.
- [1524] M. Kratzer, G. O. Michler, and M. Weller. Harada group uniquely determined by centralizer of a 2-central involution. In *Proceedings of the First Sino-German Workshop on Representation Theory and Finite Simple Groups (Beijing, 2002)*, volume 10, pages 303–372, 2003.
- [1525] V. Krčadinac, A. Nakić, and M. O. Pavčević. The Kramer-Mesner method with tactical decompositions: some new unitals on 65 points. *J. Combin. Des.*, 19(4):290–303, 2011.
- [1526] D. S. Krotov. On calculation of the interweight distribution of an equitable partition. *J. Algebraic Combin.*, 40(2):373–386, 2014.
- [1527] D. S. Krotov. A partition of the hypercube into maximally nonparallel Hamming codes. *J. Combin. Des.*, 22(4):179–187, 2014.
- [1528] C. Y. Ku and B. B. McMillan. Independent sets of maximal size in tensor powers of vertex-transitive graphs. *J. Graph Theory*, 60(4):295–301, 2009.
- [1529] C. Y. Ku and D. B. Wales. Eigenvalues of the derangement graph. *J. Combin. Theory Ser. A*, 117(3):289–312, 2010.
- [1530] C. Y. Ku and T. W. H. Wong. Intersecting families in the alternating group and direct product of symmetric groups. *Electron. J. Combin.*, 14(1):Research Paper 25, 15 pp. (electronic), 2007.
- [1531] M. Kuhlkamp. Konzeption und Implementation von Hybridgruppen mit Rewriting System im Computeralgebrasystem GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, July 1997.
- [1532] W. Kühnel and F. H. Lutz. A census of tight triangulations. *Period. Math. Hungar.*, 39(1-3):161–183, 1999. Discrete geometry and rigidity (Budapest, 1999).
- [1533] B. Külshammer, G. Navarro, B. Sambale, and P. H. Tiep. Finite groups with two conjugacy classes of p -elements and related questions for p -blocks. *Bull. Lond. Math. Soc.*, 46(2):305–314, 2014.
- [1534] B. Külshammer and B. Sambale. The 2-blocks of defect 4. *Represent. Theory*, 17:226–236, 2013.
- [1535] M. Külzner. On representations of twisted group rings. *J. Group Theory*, 7(2):197–229, 2004.
- [1536] M. Külzner and A. Mathas. Elementary divisors of Specht modules. *European J. Combin.*, 26(6):943–964, 2005.
- [1537] J. H. Kwak and Y. S. Kwon. Regular orientable embeddings of complete bipartite graphs. *J. Graph Theory*, 50(2):105–122, 2005.
- [1538] J. H. Kwak and J. Oh. Arc-transitive elementary abelian covers of the octahedron graph. *Linear Algebra Appl.*, 429(8-9):2180–2198, 2008.

- [1539] G. Labelle and C. Lamathe. General combinatorial differential operators. *Sém. Lothar. Combin.*, 61A:Art. B61Ag, 24, 2009/11.
- [1540] F. Ladisch. Groups with anticeutral elements. *Comm. Algebra*, 36(8):2883–2894, 2008.
- [1541] M. Ladra and V. Z. Thomas. Two generalizations of the nonabelian tensor product. *J. Algebra*, 369:96–113, 2012.
- [1542] G. S. Lakeland. Dirichlet-Ford domains and arithmetic reflection groups. *Pacific J. Math.*, 255(2):417–437, 2012.
- [1543] F. Lalande. À propos de la relation galoisienne $x_1 = x_2 + x_3$. *J. Théor. Nombres Bordeaux*, 22(3):661–673, 2010.
- [1544] J. Lansky and D. Pollack. Hecke algebras and automorphic forms. *Compositio Math.*, 130(1):21–48, 2002.
- [1545] F. Larrión, V. Neumann-Lara, and M. A. Pizaña. On the homotopy type of clique graphs. *J. of the Brazilian Comp. Soc.*, 7(3):69–73, 2002.
- [1546] F. Larrión, V. Neumann-Lara, and M. A. Pizaña. Whitney triangulations, local girth and iterated clique graphs. *Discrete Math.*, 258(1-3):123–135, 2002.
- [1547] F. Larrión, V. Neumann-Lara, and M. A. Pizaña. Clique convergent surface triangulations. *Mat. Contemp.*, 25:135–143, 2003. The Latin-American Workshop on Cliques in Graphs (Rio de Janeiro, 2002).
- [1548] F. Larrión, V. Neumann-Lara, and M. A. Pizaña. Clique divergent clockwork graphs and partial orders. *Discrete Appl. Math.*, 141(1-3):195–207, 2004.
- [1549] F. Larrión, V. Neumann-Lara, and M. A. Pizaña. Graph relations, clique divergence and surface triangulations. *J. Graph Theory*, 51(2):110–122, 2006.
- [1550] F. Larrión, V. Neumann-Lara, and M. A. Pizaña. On expansive graphs. *European J. Combin.*, 30(2):372–379, 2009.
- [1551] F. Larrión, V. Neumann-Lara, M. A. Pizaña, and T. D. Porter. A hierarchy of self-clique graphs. *Discrete Math.*, 282(1-3):193–208, 2004.
- [1552] F. Larrión, M. A. Pizaña, and R. Villarroel-Flores. The clique operator on matching and chessboard graphs. *Discrete Math.*, 309(1):85–93, 2009.
- [1553] F. Larrión, M. A. Pizaña, and R. Villarroel-Flores. On self-clique shoal graphs. *Discrete Appl. Math.*, 205:86–100, 2016.
- [1554] C. Lassueur and G. Malle. Simple endotrivial modules for linear, unitary and exceptional groups. *Math. Z.*, 280(3-4):1047–1074, 2015.
- [1555] C. Lassueur, G. Malle, and E. Schulte. Simple endotrivial modules for quasi-simple groups. *J. Reine Angew. Math.*, 712:141–174, 2016.

- [1556] M. Lavrauw, A. Pavan, and C. Zanella. On the rank of $3 \times 3 \times 3$ -tensors. *Linear Multilinear Algebra*, 61(5):646–652, 2013.
- [1557] M. Lavrauw and J. Sheekey. Canonical forms of $2 \times 3 \times 3$ tensors over the real field, algebraically closed fields, and finite fields. *Linear Algebra Appl.*, 476:133–147, 2015.
- [1558] M. Lavrauw, J. Sheekey, and C. Zanella. On embeddings of minimum dimension of $\text{PG}(n, q) \times \text{PG}(n, q)$. *Des. Codes Cryptogr.*, 74(2):427–440, 2015.
- [1559] M. Lavrauw and C. Zanella. Subspaces intersecting each element of a regulus in one point, André-Bruck-Bose representation and clubs. *Electron. J. Combin.*, 23(1):Paper 1.37, 11, 2016.
- [1560] M. Law, A. C. Niemeyer, C. E. Praeger, and A. Seress. A reduction algorithm for large-base primitive permutation groups. *LMS J. Comput. Math.*, 9:159–173 (electronic), 2006.
- [1561] M. Law, C. E. Praeger, and S. Reichard. Flag-transitive symmetric 2–(96, 20, 4)-designs. *J. Combin. Theory Ser. A*, 116(5):1009–1022, 2009.
- [1562] T. Le, J. Moori, and H. P. Tong-Viet. On a generalization of M -group. *J. Algebra*, 374:27–41, 2013.
- [1563] I. J. Leary and B. Schuster. On the $\text{GL}(V)$ -module structure of $K(n)^*(BV)$. *Math. Proc. Cambridge Philos. Soc.*, 122(1):73–89, 1997.
- [1564] E. W. H. Lee. Finite basis problem for semigroups of order five or less: generalization and revisitation. *Studia Logica*, 101(1):95–115, 2013.
- [1565] E. W. H. Lee and J. R. Li. Minimal non-finitely based monoids. *Dissertationes Math. (Rozprawy Mat.)*, 475:65, 2011.
- [1566] E. W. H. Lee and J. R. Li. The variety generated by all monoids of order four is finitely based. *Glas. Mat. Ser. III*, 50(70)(2):373–396, 2015.
- [1567] E. W. H. Lee and W. T. Zhang. Finite basis problem for semigroups of order six. *LMS J. Comput. Math.*, 18(1):1–129, 2015.
- [1568] C. R. Leedham-Green. The computational matrix group project. In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 229–247. de Gruyter, Berlin, 2001.
- [1569] C. R. Leedham-Green and E. A. O’Brien. Recognising tensor products of matrix groups. *Internat. J. Algebra Comput.*, 7(5):541–559, 1997.
- [1570] C. R. Leedham-Green and L. H. Soicher. Symbolic collection using Deep Thought. *LMS J. Comput. Math.*, 1:9–24 (electronic), 1998.
- [1571] W. Lempken. On the existence and uniqueness of the sporadic simple groups J_2 and J_3 of Z. Janko. *J. Group Theory*, 4(2):223–232, 2001.
- [1572] W. Lempken. 2-local amalgams for the simple groups $\text{GL}(5, 2)$, M_{24} and He. *Illinois J. Math.*, 47(1-2):361–393, 2003. Special issue in honor of Reinhold Baer (1902–1979).

- [1573] W. Lempken, B. Schröder, and P. H. Tiep. Symmetric squares, spherical designs, and lattice minima. *J. Algebra*, 240(1):185–208, 2001. With an appendix by Christine Bachoc and Tiep.
- [1574] P. Lescot, H. N. Nguyen, and Y. Yang. On the commuting probability and supersolvability of finite groups. *Monatsh. Math.*, 174(4):567–576, 2014.
- [1575] Y. Y. Leshchenko. On the diameters of commuting graphs of permutational wreath products. *Ukrainian Math. J.*, 66(5):732–742, 2014. Translation of *Ukrain. Mat. Zh.* **66** (2014), no. 5, 656–665.
- [1576] J. Leshin. Solvable Artin representations ramified at one prime. *Bull. Lond. Math. Soc.*, 46(1):59–75, 2014.
- [1577] L. Lévai, G. Rosenberger, and B. Souvignier. All finite generalized triangle groups. *Trans. Amer. Math. Soc.*, 347(9):3625–3627, 1995.
- [1578] V. Levandovskyy, D. Pagon, M. Petkovšek, and V. Romanovski. Foreword from the editors [Symbolic computation and its applications]. *J. Symbolic Comput.*, 47(10):1137–1139, 2012.
- [1579] D. Levy. The average Sylow multiplicity character and the solvable residual. *Comm. Algebra*, 41(8):3090–3097, 2013.
- [1580] J. B. Lewis, V. Reiner, and D. Stanton. Reflection factorizations of Singer cycles. *J. Algebraic Combin.*, 40(3):663–691, 2014.
- [1581] M. L. Lewis. Generalizing a theorem of Huppert and Manz. *J. Algebra Appl.*, 6(4):687–695, 2007.
- [1582] M. L. Lewis. The vanishing-off subgroup. *J. Algebra*, 321(4):1313–1325, 2009.
- [1583] M. L. Lewis, G. Navarro, P. H. Tiep, and H. P. Tong-Viet. p -parts of character degrees. *J. Lond. Math. Soc. (2)*, 92(2):483–497, 2015.
- [1584] M. L. Lewis and S. K. Prajapati. On the existence of Johnson polynomials for nilpotent groups. *Algebr. Represent. Theory*, 18(1):205–213, 2015.
- [1585] M. L. Lewis and D. L. White. Diameters of degree graphs of nonsolvable groups. II. *J. Algebra*, 312(2):634–649, 2007.
- [1586] M. L. Lewis and D. L. White. Nonsolvable groups satisfying the one-prime hypothesis. *Algebr. Represent. Theory*, 10(4):379–412, 2007.
- [1587] M. L. Lewis and D. L. White. Nonsolvable groups all of whose character degrees are odd-square-free. *Comm. Algebra*, 39(4):1273–1292, 2011.
- [1588] A. Leykin and F. Sottile. Galois groups of Schubert problems via homotopy computation. *Math. Comp.*, 78(267):1749–1765, 2009.
- [1589] C. H. Li, L. Niu, A. Seress, and R. Solomon. The vertex primitive and vertex bi-primitive s -arc regular graphs. *J. Combin. Theory Ser. B*, 100(4):359–366, 2010.

- [1590] C. H. Li, G. Rao, and S. J. Song. On finite self-complementary metacirculants. *J. Algebraic Combin.*, 40(4):1135–1144, 2014.
- [1591] C. H. Li and A. Seress. The primitive permutation groups of squarefree degree. *Bull. London Math. Soc.*, 35(5):635–644, 2003.
- [1592] C. H. Li and A. Seress. On vertex-transitive non-Cayley graphs of square-free order. *Des. Codes Cryptogr.*, 34(2-3):265–281, 2005.
- [1593] C. H. Li and A. Seress. Symmetrical path-cycle covers of a graph and polygonal graphs. *J. Combin. Theory Ser. A*, 114(1):35–51, 2007.
- [1594] C. H. Li and H. Zhang. Finite vertex-primitive and vertex-biprimitive 2-path-transitive graphs. *J. Algebraic Combin.*, 36(2):231–246, 2012.
- [1595] T. Li. A simple example of two p -groups with the same automorphism group. *Arch. Math. (Basel)*, 92(4):287–290, 2009.
- [1596] T. Li and Y. Liu. Mersenne primes and solvable Sylow numbers. *J. Algebra Appl.*, 15(9):1650163, 16, 2016.
- [1597] Y. Li, H. E. Bell, and C. Phipps. On reversible group rings. *Bull. Austral. Math. Soc.*, 74(1):139–142, 2006.
- [1598] L. Liberti and J. Ostrowski. Stabilizer-based symmetry breaking constraints for mathematical programs. *J. Global Optim.*, 60(2):183–194, 2014.
- [1599] M. W. Liebeck, E. A. O’Brien, A. Shalev, and P. H. Tiep. The Ore conjecture. *J. Eur. Math. Soc. (JEMS)*, 12(4):939–1008, 2010.
- [1600] M. W. Liebeck, E. A. O’Brien, A. Shalev, and P. H. Tiep. Commutators in finite quasisimple groups. *Bull. Lond. Math. Soc.*, 43(6):1079–1092, 2011.
- [1601] M. W. Liebeck, E. A. O’Brien, A. Shalev, and P. H. Tiep. Products of squares in finite simple groups. *Proc. Amer. Math. Soc.*, 140(1):21–33, 2012.
- [1602] M. W. Liebeck, C. E. Praeger, and J. Saxl. Transitive subgroups of primitive permutation groups. *J. Algebra*, 234(2):291–361, 2000. Special issue in honor of Helmut Wielandt.
- [1603] M. W. Liebeck, C. E. Praeger, and J. Saxl. Primitive permutation groups with a common suborbit, and edge-transitive graphs. *Proc. London Math. Soc. (3)*, 84(2):405–438, 2002.
- [1604] R. A. Liebler and C. E. Praeger. Neighbour-transitive codes in Johnson graphs. *Des. Codes Cryptogr.*, 73(1):1–25, 2014.
- [1605] S. Lievens and J. Van der Jeugt. Invariance groups of three term transformations for basic hypergeometric series. *J. Comput. Appl. Math.*, 197(1):1–14, 2006.
- [1606] S. Lievens and J. Van der Jeugt. Symmetry groups of Bailey’s transformations for $_{10}\phi_9$ -series. *J. Comput. Appl. Math.*, 206(1):498–519, 2007.

- [1607] F. Lim, M. Fossorier, and A. Kavčić. Code automorphisms and permutation decoding of certain Reed-Solomon binary images. *IEEE Trans. Inform. Theory*, 56(10):5253–5273, 2010.
- [1608] R. C. Lindenbergh and R. W. van der Waall. Ergebnisse über Dedekind-Zeta-Funktionen, monomiale Charaktere und Konjugationsklassen endlicher Gruppen, unter Benutzung von GAP. *Bayreuth. Math. Schr.*, (56):79–148, 1999.
- [1609] V. Linek, L. H. Soicher, and B. Stevens. Cube designs. *J. Combin. Des.*, 24(5):223–233, 2016.
- [1610] S. Linton. Gap - groups, algorithms, programming. *ACM Communications in Computer Algebra*, 41(3):108–109, 2007. Issue 161.
- [1611] S. Linton, K. Hammond, A. Konovalov, C. Brown, P. W. Trinder, H. W. Loidl, P. Horn, and D. Roozmond. Easy composition of symbolic computation software using SCSCP: a new lingua franca for symbolic computation. *J. Symbolic Comput.*, 49:95–119, 2013.
- [1612] S. Linton, R. Parker, P. Walsh, and R. Wilson. Computer construction of the Monster. *J. Group Theory*, 1(4):307–337, 1998.
- [1613] S. A. Linton, K. Lux, and L. H. Soicher. The primitive distance-transitive representations of the Fischer groups. *Experiment. Math.*, 4(3):235–253, 1995.
- [1614] S. A. Linton, G. Pfeiffer, E. F. Robertson, and N. Ruškuc. Groups and actions in transformation semigroups. *Math. Z.*, 228(3):435–450, 1998.
- [1615] S. A. Linton, G. Pfeiffer, E. F. Robertson, and N. Ruškuc. Computing transformation semigroups. *J. Symbolic Comput.*, 33(2):145–162, 2002.
- [1616] S. Liu. Brauer algebras of type F_4 . *Indag. Math. (N.S.)*, 24(2):428–442, 2013.
- [1617] S. Liu. Mühlherr’s partitions for Brauer algebras of type H_3 and H_4 . *Comm. Algebra*, 44(12):5287–5298, 2016.
- [1618] Y. Liu. Finite groups whose irreducible characters of principal blocks have prime power degrees. *Monatsh. Math.*, 181(1):117–122, 2016.
- [1619] Y. Liu. Finite groups with only one p -singular Brauer character degree. *J. Pure Appl. Algebra*, 220(9):3182–3206, 2016.
- [1620] Y. Liu and Z. Q. Lu. Nonsolvable D_2 -groups. *Acta Math. Sin. (Engl. Ser.)*, 31(11):1683–1702, 2015.
- [1621] Y. Liu, X. Song, and J. Zhang. Nonsolvable groups satisfying the prime-power hypothesis. *J. Algebra*, 442:455–483, 2015.
- [1622] Y. Liu and W. Willems. Lie-type-like groups. *J. Algebra*, 447:432–444, 2016.
- [1623] E. H. Lo. A polycyclic quotient algorithm. In *Groups and computation, II (New Brunswick, NJ, 1995)*, volume 28 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 159–167. Amer. Math. Soc., Providence, RI, 1997.

- [1624] E. H. Lo. A polycyclic quotient algorithm. *J. Symbolic Comput.*, 25(1):61–97, 1998.
- [1625] P. Lopes. Permutations which make transitive groups primitive. *Cent. Eur. J. Math.*, 7(4):650–659, 2009.
- [1626] K. Lorenzen. P -localizing group extensions with a nilpotent action on the kernel. *Comm. Algebra*, 34(12):4345–4364, 2006.
- [1627] M. Lorenz. Picard groups of multiplicative invariants. *Comment. Math. Helv.*, 72(3):389–399, 1997.
- [1628] M. Lorenz. Multiplicative invariants and semigroup algebras. *Algebr. Represent. Theory*, 4(3):293–304, 2001.
- [1629] M. Lorenz. On the Cohen-Macaulay property of multiplicative invariants. *Trans. Amer. Math. Soc.*, 358(4):1605–1617, 2006.
- [1630] F. Lübeck. *Charaktertafeln für die Gruppen $CSp_6(q)$ mit ungeradem q und $Sp_6(q)$ mit geradem q* . Dissertation, Universität Heidelberg, 1993.
- [1631] F. Lübeck. Smallest degrees of representations of exceptional groups of Lie type. *Comm. Algebra*, 29(5):2147–2169, 2001.
- [1632] F. Lübeck. On the computation of elementary divisors of integer matrices. *J. Symbolic Comput.*, 33(1):57–65, 2002.
- [1633] F. Lübeck, K. Magaard, and E. A. O’Brien. Constructive recognition of $SL_3(q)$. *J. Algebra*, 316(2):619–633, 2007.
- [1634] F. Lübeck and G. Malle. $(2, 3)$ -generation of exceptional groups. *J. London Math. Soc. (2)*, 59(1):109–122, 1999.
- [1635] F. Lübeck and M. Neunhöffer. Enumerating large orbits and direct condensation. *Experiment. Math.*, 10(2):197–205, 2001.
- [1636] A. Lubotzky and I. Pak. The product replacement algorithm and Kazhdan’s property (T). *J. Amer. Math. Soc.*, 14(2):347–363 (electronic), 2001.
- [1637] A. Lucchini. The expected number of random elements to generate a finite group. *Monatsh. Math.*, 181(1):123–142, 2016.
- [1638] A. Lucchini, F. Menegazzo, and M. Morigi. Generating permutation groups. *Comm. Algebra*, 32(5):1729–1746, 2004.
- [1639] P. O. Ludl. On the finite subgroups of $U(3)$ of order smaller than 512. *J. Phys. A*, 43(39):395204, 28, 2010.
- [1640] P. O. Ludl. Comments on the classification of the finite subgroups of $SU(3)$. *J. Phys. A*, 44(25):255204, 12, 2011.
- [1641] P. O. Ludl. Corrigendum: On the finite subgroups of $U(3)$ of order smaller than 512 [mr2720062]. *J. Phys. A*, 44(13):139501, 1, 2011.

- [1642] E. M. Luks and T. Miyazaki. Polynomial-time normalizers. *Discrete Math. Theor. Comput. Sci.*, 13(4):61–96, 2011.
- [1643] E. M. Luks, F. Rákóczi, and C. R. B. Wright. Some algorithms for nilpotent permutation groups. *J. Symbolic Comput.*, 23(4):335–354, 1997.
- [1644] E. M. Luks and A. Seress. Computing the Fitting subgroup and solvable radical of small-base permutation groups in nearly linear time. In *Groups and computation, II (New Brunswick, NJ, 1995)*, volume 28 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 169–181. Amer. Math. Soc., Providence, RI, 1997.
- [1645] R. Lutowski. On symmetry of flat manifolds. *Experiment. Math.*, 18(2):201–204, 2009.
- [1646] F. H. Lutz. *Triangulated manifolds with few vertices and vertex-transitive group actions*. Berichte aus der Mathematik. [Reports from Mathematics]. Verlag Shaker, Aachen, 1999. Dissertation, Technischen Universität Berlin, Berlin, 1999.
- [1647] F. H. Lutz. Some results related to the evasiveness conjecture. *J. Combin. Theory Ser. B*, 81(1):110–124, 2001.
- [1648] F. H. Lutz. Examples of \mathbb{Z} -acyclic and contractible vertex-homogeneous simplicial complexes. *Discrete Comput. Geom.*, 27(1):137–154, 2002. Geometric combinatorics (San Francisco, CA/Davis, CA, 2000).
- [1649] F. H. Lutz. Combinatorial 3-manifolds with 10 vertices. *Beiträge Algebra Geom.*, 49(1):97–106, 2008.
- [1650] K. Lux, J. Müller, and M. Ringe. Peakword condensation and submodule lattices: an application of the MEAT-AXE. *J. Symbolic Comput.*, 17(6):529–544, 1994.
- [1651] K. Lux, F. Noeske, and A. J. E. Ryba. The 5-modular characters of the sporadic simple Harada-Norton group HN and its automorphism group HN.2. *J. Algebra*, 319(1):320–335, 2008.
- [1652] K. Lux and H. Pahlings. Computational aspects of representation theory of finite groups. In *Representation theory of finite groups and finite-dimensional algebras (Bielefeld, 1991)*, volume 95 of *Progr. Math.*, pages 37–64. Birkhäuser, Basel, 1991.
- [1653] K. Lux and H. Pahlings. Computational aspects of representation theory of finite groups. II. In *Algorithmic algebra and number theory (Heidelberg, 1997)*, pages 381–397. Springer, Berlin, 1999.
- [1654] K. Lux and M. Wiegmann. Determination of socle series using the condensation method. *J. Symbolic Comput.*, 31(1-2):163–178, 2001. Computational algebra and number theory (Milwaukee, WI, 1996).
- [1655] H. Lv, W. Zhou, and D. Yu. Some finite p -groups with bounded index of every cyclic subgroup in its normal closure. *J. Algebra*, 338:169–179, 2011.
- [1656] S. Lyle. Some results obtained by application of the LLT algorithm. *Comm. Algebra*, 34(5):1723–1752, 2006.

- [1657] Y. V. Lytkin. Groups that are critical with respect to the spectra of alternating and sporadic groups. *Sibirsk. Mat. Zh.*, 56(1):122–128, 2015.
- [1658] D. V. Lytkina and V. D. Mazurov. On groups with given properties of finite subgroups. *Algebra Logika*, 51(3):321–330, 414, 417, 2012.
- [1659] D. V. Lytkina and V. D. Mazurov. On groups with given properties of finite subgroups generated by pairs of 2-elements. *Sibirsk. Mat. Zh.*, 54(1):127–130, 2013.
- [1660] D. V. Lytkina and V. D. Mazurov. On $\{2, 3\}$ -groups in which there are no elements of order 6. *Sibirsk. Mat. Zh.*, 55(6):1345–1352, 2014.
- [1661] D. V. Lytkina and V. D. Mazurov. On groups of period 12. *Sibirsk. Mat. Zh.*, 56(3):594–599, 2015.
- [1662] D. V. Lytkina, V. D. Mazurov, A. S. Mamontov, and E. Yabara. Groups whose element orders do not exceed 6. *Algebra Logika*, 53(5):570–586, 662, 664, 2014.
- [1663] J. Ma and K. Wang. Fissioned triangular schemes via sharply 3-transitive groups. *Linear Algebra Appl.*, 436(7):2618–2629, 2012.
- [1664] X. Ma and K. Wang. On finite groups all of whose cubic Cayley graphs are integral. *J. Algebra Appl.*, 15(6):1650105, 10, 2016.
- [1665] L. A. Maas. On a construction of the basic spin representations of symmetric groups. *Comm. Algebra*, 38(12):4545–4552, 2010.
- [1666] M. Mačaj and J. Širáň. Search for properties of the missing Moore graph. *Linear Algebra Appl.*, 432(9):2381–2398, 2010.
- [1667] B. D. MacArthur, R. J. Sánchez-García, and J. W. Anderson. Symmetry in complex networks. *Discrete Appl. Math.*, 156(18):3525–3531, 2008.
- [1668] R. Maddux. Self-similarity and the species-area relationship. *AMERICAN NATURALIST*, 163(4):616–626, APR 2004.
- [1669] K. Magaard, E. A. O’Brien, and A. Seress. Recognition of small dimensional representations of general linear groups. *J. Aust. Math. Soc.*, 85(2):229–250, 2008.
- [1670] K. Magaard, T. Shaska, S. Shpectorov, and H. Völklein. The locus of curves with prescribed automorphism group. *Sūrikaisekikenkyūsho Kōkyūroku*, (1267):112–141, 2002. Communications in arithmetic fundamental groups (Kyoto, 1999/2001).
- [1671] K. Magaard, S. Shpectorov, and H. Völklein. A GAP package for braid orbit computation and applications. *Experiment. Math.*, 12(4):385–393, 2003.
- [1672] K. Magaard, K. Strambach, and H. Völklein. Finite quotients of the pure symplectic braid group. *Israel J. Math.*, 106:13–28, 1998.
- [1673] K. Magaard and H. Völklein. The monodromy group of a function on a general curve. *Israel J. Math.*, 141:355–368, 2004.

- [1674] J. Maginnis and S. Onofrei. On a homotopy relation between the 2-local geometry and the Bouc complex for the sporadic group Co_3 . *J. Algebra*, 315(1):1–17, 2007.
- [1675] J. Maginnis and S. Onofrei. On fixed point sets and Lefschetz modules for sporadic simple groups. *J. Pure Appl. Algebra*, 213(6):901–912, 2009.
- [1676] J. Maginnis and S. Onofrei. On fixed point sets of distinguished collections for groups of parabolic characteristic. *J. Combin. Theory Ser. A*, 117(7):872–883, 2010.
- [1677] B. A. Magurn. Negative K -theory of generalized quaternion groups and binary polyhedral groups. *Comm. Algebra*, 41(11):4146–4160, 2013.
- [1678] A. Mahalanobis. The Diffie-Hellman key exchange protocol and non-abelian nilpotent groups. *Israel J. Math.*, 165:161–187, 2008.
- [1679] A. Mahalanobis. A simple generalization of the ElGamal cryptosystem to non-abelian groups. *Comm. Algebra*, 36(10):3878–3889, 2008.
- [1680] A. Mahmoudifar and B. Khosravi. On quasirecognition by prime graph of the simple groups $A_n^+(p)$ and $A_n^-(p)$. *J. Algebra Appl.*, 14(1):1550006, 12, 2015.
- [1681] M. Makai. Response matrix and composition asymmetry. *Transport Theory Statist. Phys.*, 32(5-7):545–565, 2003. Special issue comprised of papers presented at the Seventeenth International Conference on Transport Theory, Part II (London, 2001).
- [1682] M. Makai and Y. Orechwa. Symmetries of boundary value problems in mathematical physics. *J. Math. Phys.*, 40(10):5247–5263, 1999.
- [1683] M. Makai and Y. Orechwa. Field reconstruction from measured values in symmetric volumes. *NUCL ENG DES*, 199(3):289–301, 2000.
- [1684] M. Makai and Y. Orechwa. Solutions of boundary-value problems in discretized volumes. *Electron. J. Differential Equations*, pages No. 01, 20 pp. (electronic), 2002.
- [1685] M. Makai and Y. Orechwa. Model calculations in reconstructions of measured fields. *CENTRAL EUROPEAN JOURNAL OF PHYSICS*, 1(1):118–131, JAN 2003.
- [1686] A. A. Makhnev and D. V. Paduchikh. Graphs in which neighborhoods of vertices are isomorphic to the Mathieu graph. *Proc. Steklov Inst. Math.*, 283(suppl. 1):S91–S99, 2013.
- [1687] A. A. Makhnev, D. V. Paduchikh, and L. Y. Tsiovkina. Edge-symmetric distance-regular coverings of cliques: the affine case. *Sibirsk. Mat. Zh.*, 54(6):1353–1367, 2013.
- [1688] A. A. Maksimenko and A. S. Mamontov. Local finiteness of some groups generated by a class of conjugate elements of order 3. *Sibirsk. Mat. Zh.*, 48(3):631–644, 2007.
- [1689] W. Malfait and A. Szczepański. The structure of the (outer) automorphism group of a Bieberbach group. *Compositio Math.*, 136(1):89–101, 2003.
- [1690] G. Malle. Almost irreducible tensor squares. *Comm. Algebra*, 27(3):1033–1051, 1999.

- [1691] G. Malle. Fast-einfache Gruppen mit langen Bahnen in absolut irreduzibler Operation. *J. Algebra*, 300(2):655–672, 2006.
- [1692] G. Malle. Extensions of unipotent characters and the inductive McKay condition. *J. Algebra*, 320(7):2963–2980, 2008.
- [1693] G. Malle. The inductive McKay condition for simple groups not of Lie type. *Comm. Algebra*, 36(2):455–463, 2008.
- [1694] A. Malnič, D. Marušič, and P. Potočnik. Elementary abelian covers of graphs. *J. Algebraic Combin.*, 20(1):71–97, 2004.
- [1695] A. Malnič and P. Potočnik. Invariant subspaces, duality, and covers of the Petersen graph. *European J. Combin.*, 27(6):971–989, 2006.
- [1696] A. S. Mamontov. Groups of exponent 12 without elements of order 12. *Sibirsk. Mat. Zh.*, 54(1):150–156, 2013.
- [1697] A. S. Mamontov. On the Baer-Suzuki theorem for groups of 2-period 4. *Algebra Logika*, 53(5):649–652, 2014.
- [1698] J. Mandić and T. Vučičić. On the existence of Hadamard difference sets in groups of order 400. *Adv. Math. Commun.*, 10(3):547–554, 2016.
- [1699] G. S. Manku, R. Hojati, and R. Brayton. Structural symmetry and model checking. In *Computer aided verification (Vancouver, BC, 1998)*, volume 1427 of *Lecture Notes in Comput. Sci.*, pages 159–171. Springer, Berlin, 1998.
- [1700] A. Mann, C. E. Praeger, and A. Seress. Extremely primitive groups. *Groups Geom. Dyn.*, 1(4):623–660, 2007.
- [1701] S. P. Mansilla. On arc-regular permutation groups using Latin squares. *J. Algebraic Combin.*, 21(1):5–22, 2005.
- [1702] M. A. Marco Buzunáriz. A description of the resonance variety of a line combinatorics via combinatorial pencils. *Graphs Combin.*, 25(4):469–488, 2009.
- [1703] M. C. Marcusanu. Complementary l_1 -graphs embeddable in the half-cube. *European J. Combin.*, 23(8):1061–1072, 2002.
- [1704] Y. Marefat, A. Iranmanesh, and A. Tehranian. On the sum of element orders of finite simple groups. *J. Algebra Appl.*, 12(7):1350026, 4, 2013.
- [1705] I. Marin. Éléments de Jucys-Murphy généralisés. *Comm. Algebra*, 33(9):2879–2898, 2005.
- [1706] S. Marinelli and P. H. Tiep. Zeros of real irreducible characters of finite groups. *Algebra Number Theory*, 7(3):567–593, 2013.
- [1707] A. Maróti. Bounding the number of conjugacy classes of a permutation group. *J. Group Theory*, 8(3):273–289, 2005.

- [1708] A. Maróti. Covering the symmetric groups with proper subgroups. *J. Combin. Theory Ser. A*, 110(1):97–111, 2005.
- [1709] A. Maróti and H. N. Nguyen. Character degree sums of finite groups. *Forum Math.*, 27(4):2453–2465, 2015.
- [1710] A. Maróti and M. C. Tamburini. Bounds for the probability of generating the symmetric and alternating groups. *Arch. Math. (Basel)*, 96(2):115–121, 2011.
- [1711] A. Maróti and M. C. Tamburini Bellani. A solution to a problem of Wiegold. *Comm. Algebra*, 41(1):34–49, 2013.
- [1712] K. Martin. A symplectic case of Artin’s conjecture. *Math. Res. Lett.*, 10(4):483–492, 2003.
- [1713] K. Martin. Modularity of hypertetrahedral representations. *C. R. Math. Acad. Sci. Paris*, 339(2):99–102, 2004.
- [1714] P. P. Martin and A. Elgamal. Ramified partition algebras. *Math. Z.*, 246(3):473–500, 2004.
- [1715] U. Martin. Stumbling around in the dark: lessons from everyday mathematics. In *Automated deduction—CADE 25*, volume 9195 of *Lecture Notes in Comput. Sci.*, pages 29–51. Springer, Cham, 2015.
- [1716] M. Mashkouri and B. Taeri. On a graph associated to groups. *Bull. Malays. Math. Sci. Soc. (2)*, 34(3):553–560, 2011.
- [1717] D. Matei and A. I. Suci. Cohomology rings and nilpotent quotients of real and complex arrangements. In *Arrangements—Tokyo 1998*, volume 27 of *Adv. Stud. Pure Math.*, pages 185–215. Kinokuniya, Tokyo, 2000.
- [1718] D. Matei and A. I. Suci. Hall invariants, homology of subgroups, and characteristic varieties. *Int. Math. Res. Not.*, (9):465–503, 2002.
- [1719] D. Matei and A. I. Suci. Counting homomorphisms onto finite solvable groups. *J. Algebra*, 286(1):161–186, 2005.
- [1720] A. Mathas. On the left cell representations of Iwahori-Hecke algebras of finite Coxeter groups. *J. London Math. Soc. (2)*, 54(3):475–488, 1996.
- [1721] A. Mathas. Murphy operators and the centre of the Iwahori-Hecke algebras of type A . *J. Algebraic Combin.*, 9(3):295–313, 1999.
- [1722] S. Mattarei. Engel conditions and symmetric tensors. *Linear Multilinear Algebra*, 59(4):441–449, 2011.
- [1723] P. C. Matthews. Automating symmetry-breaking calculations. *LMS J. Comput. Math.*, 7:101–119 (electronic), 2004.
- [1724] C. L. May and J. Zimmerman. The groups of symmetric genus three. *Houston J. Math.*, 23(4):573–590, 1997.

- [1725] C. L. May and J. Zimmerman. The group of symmetric Euler characteristic -3 . *Houston J. Math.*, 27(4):737–752, 2001.
- [1726] D. C. Mayer. The distribution of second p -class groups on coclass graphs. *J. Théor. Nombres Bordeaux*, 25(2):401–456, 2013.
- [1727] D. C. Mayer. Principalization algorithm via class group structure. *J. Théor. Nombres Bordeaux*, 26(2):415–464, 2014.
- [1728] P. Mayr. The polynomial functions on Frobenius complements. *Acta Sci. Math. (Szeged)*, 72(1-2):37–50, 2006.
- [1729] P. Mayr and F. Morini. Nearings whose set of N -subgroups is linearly ordered. *Results Math.*, 42(3-4):339–348, 2002.
- [1730] V. D. Mazurov. On the generation of sporadic simple groups by three involutions, two of which commute. *Sibirsk. Mat. Zh.*, 44(1):193–198, 2003.
- [1731] V. D. Mazurov. Unrecognizability of a finite simple group ${}^3D_4(2)$ by the spectrum. *Algebra Logika*, 52(5):601–605, 650, 652–653, 2013.
- [1732] V. D. Mazurov and A. S. Mamontov. On periodic groups with elements of small orders. *Sibirsk. Mat. Zh.*, 50(2):397–404, 2009.
- [1733] V. D. Mazurov and A. S. Mamontov. Involutions in groups of exponent 12. *Algebra Logika*, 52(1):92–98, 124, 126–127, 2013.
- [1734] V. D. Mazurov and W. Shi. A note to the characterization of sporadic simple groups. *Algebra Colloq.*, 5(3):285–288, 1998.
- [1735] G. Mazzuocolo. Primitive 2-factorizations of the complete graph. *Discrete Math.*, 308(2-3):175–179, 2008.
- [1736] J. Mccarron. *Residual nilpotence and one relator groups*. ProQuest LLC, Ann Arbor, MI, 1995. Thesis (Ph.D.)—University of Waterloo (Canada).
- [1737] L. McCarthy. Typing for interactive symbolic computation. Synthesis project, Dept. of Computer Science, University of Massachusetts at Amherst, 1995.
- [1738] D. McCullough and M. Wanderley. Writing elements of $\mathrm{PSL}(2, q)$ as commutators. *Comm. Algebra*, 39(4):1234–1241, 2011.
- [1739] A. McDermott. *The nonabelian tensor product of groups: computations and structural results*. PhD thesis, Department of Mathematics, National University of Ireland, Galway, 1998.
- [1740] T. P. McDonough, V. C. Mavron, and H. N. Ward. Amalgams of designs and nets. *Bull. Lond. Math. Soc.*, 41(5):841–852, 2009.
- [1741] T. P. McDonough and C. A. Pallikaros. On the irreducible representations of the specializations of the generic Hecke algebra of type F_4^* . *J. Algebra*, 218(2):654–671, 1999.

- [1742] T. P. McDonough and C. A. Pallikaros. On the irreducible representations of the specializations in characteristics 2 and 3 of the generic Hecke algebra of type F_4^1 . *J. Algebra*, 226(2):857–864, 2000.
- [1743] T. P. McDonough and C. A. Pallikaros. On relations between the classical and the Kazhdan-Lusztig representations of symmetric groups and associated Hecke algebras. *J. Pure Appl. Algebra*, 203(1-3):133–144, 2005.
- [1744] T. P. McDonough and C. A. Pallikaros. On subsequences and certain elements which determine various cells in S_n . *J. Algebra*, 319(3):1249–1263, 2008.
- [1745] J. McInroy and S. Shpectorov. On the simple connectedness of hyperplane complements in dual polar spaces. II. *Discrete Math.*, 310(8):1381–1388, 2010.
- [1746] I. McLoughlin. A group ring construction of the [48,24,12] type II linear block code. *Des. Codes Cryptogr.*, 63(1):29–41, 2012.
- [1747] I. McLoughlin and T. Hurley. A group ring construction of the extended binary Golay code. *IEEE Trans. Inform. Theory*, 54(9):4381–4383, 2008.
- [1748] P. McMullen. Realizations of regular polytopes, IV. *Aequationes Math.*, 87(1-2):1–30, 2014.
- [1749] J.P. McSorley and L. H. Soicher. Constructing t -designs from t -wise balanced designs. *European J. Combin.*, 28(2):567–571, 2007.
- [1750] K. Meagher and P. Spiga. An Erdős-Ko-Rado theorem for the derangement graph of $\text{PGL}(2, q)$ acting on the projective line. *J. Combin. Theory Ser. A*, 118(2):532–544, 2011.
- [1751] A. Meier, M. Pollet, and V. Sorge. Classifying isomorphic residue classes. *COMPUTER AIDED SYSTEMS THEORY - EUROCAST 2001*, 2178:494–508, 2001.
- [1752] A. Meier, M. Pollet, and V. Sorge. Comparing approaches to the exploration of the domain of residue classes. *J. Symbolic Comput.*, 34(4):287–306, 2002. Integrated reasoning and algebra systems (Siena, 2001).
- [1753] J. Meier. Ein Interpreter einer Programmiersprache für die Gruppentheorie. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, January 1987.
- [1754] E. Melis, J. Budenbender, G. Gogvadze, P. Libbrecht, and C. Ullrich. Knowledge representation and management in activemath. *ANNALS OF MATHEMATICS AND ARTIFICIAL INTELLIGENCE*, 38:47–64, MAY 2003.
- [1755] N. E. Menezes, M. Quick, and C. M. Roney-Dougal. The probability of generating a finite simple group. *Israel J. Math.*, 198(1):371–392, 2013.
- [1756] T. Merkwitz. Markentafeln endlicher gruppen. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1998.
- [1757] W. W. Merkwitz. Symbolische Multiplikation in nilpotenten Gruppen mit Deep Thought. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, April 1997.

- [1758] H. Meyer. Konjugationsklassensummen in endlichen Gruppenringen. *Bayreuth. Math. Schr.*, (66):viii+160, 2002. Dissertation, Universität Bayreuth, Bayreuth, 2002.
- [1759] H. Meyer. On a subalgebra of the centre of a group ring. *J. Algebra*, 295(1):293–302, 2006.
- [1760] H. Meyer. On a subalgebra of the centre of a group ring. II. *Arch. Math. (Basel)*, 90(2):112–122, 2008.
- [1761] H. Meyer. Primitive central idempotents of finite group rings of symmetric groups. *Math. Comp.*, 77(263):1801–1821, 2008.
- [1762] H. Meyer. Primitive central idempotents of finite group rings of symmetric groups. In *Proceedings of the International Conference on Modules and Representation Theory*, pages 133–147. Presa Univ. Clujeană, Cluj-Napoca, 2009.
- [1763] I. M. Michailov. On Galois cohomology and realizability of 2-groups as Galois groups. *Cent. Eur. J. Math.*, 9(2):403–419, 2011.
- [1764] I. M. Michailov. The rationality problem for three- and four-dimensional permutational group actions. *Internat. J. Algebra Comput.*, 21(8):1317–1337, 2011.
- [1765] M. Michałek. Toric varieties in phylogenetics. *Dissertationes Math. (Rozprawy Mat.)*, 511:86, 2015.
- [1766] J. Michel. Calculs en théorie des groupes et introduction au langage GAP (groups, algorithms and programming). In *Groupes finis*, pages 71–95. Ed. Éc. Polytech., Palaiseau, 2000.
- [1767] J. Michel. The development version of the `chevie` package of `gap3`. *J. Algebra*, 435:308–336, 2015.
- [1768] J. Michel. Deligne-Lusztig theoretic derivation for Weyl groups of the number of reflection factorizations of a Coxeter element. *Proc. Amer. Math. Soc.*, 144(3):937–941, 2016.
- [1769] P. Michel. Homology of groups and third busy beaver function. *Internat. J. Algebra Comput.*, 20(6):769–791, 2010.
- [1770] G. O. Michler. On the construction of the finite simple groups with a given centralizer of a 2-central involution. *J. Algebra*, 234(2):668–693, 2000. Special issue in honor of Helmut Wielandt.
- [1771] G. O. Michler. The character values of multiplicity-free irreducible constituents of a transitive permutation representation. *Kyushu J. Math.*, 55(1):75–106, 2001.
- [1772] G. O. Michler. On the uniqueness of the finite simple groups with a given centralizer of a 2-central involution. *Illinois J. Math.*, 47(1-2):419–444, 2003. Special issue in honor of Reinhold Baer (1902–1979).
- [1773] G. O. Michler and A. Previtali. O’Nan group uniquely determined by the centralizer of a 2-central involution. *J. Algebra Appl.*, 6(1):135–171, 2007.
- [1774] G. O. Michler and O. Solberg. Testing modules of groups of even order for simplicity. *J. Algebra*, 202(1):229–242, 1998.

- [1775] G. O. Michler and M. Weller. The character values of the irreducible constituents of a transitive permutation representation. *Arch. Math. (Basel)*, 78(6):417–429, 2002.
- [1776] G. O. Michler, M. Weller, and K. Waki. Natural existence proof for Lyons simple group. *J. Algebra Appl.*, 2(3):277–315, 2003.
- [1777] F. Migliorini. Some topics and a classification in the theory of sm-representation of finite groups. *Pure Math. Appl.*, 11(3):521–532, 2000.
- [1778] A. Miller, M. Calder, and A. F. Donaldson. A template-based approach for the generation of abstractable and reducible models of featured networks. *Computer Networks*, 51(2):439–455, 2007.
- [1779] A. Miller, A. F. Donaldson, and M. Calder. Symmetry in temporal logic model checking. *ACM Comput. Surv.*, 38(3), 2006.
- [1780] A. A. Miller and C. E. Praeger. Non-Cayley vertex-transitive graphs of order twice the product of two odd primes. *J. Algebraic Combin.*, 3(1):77–111, 1994.
- [1781] M. Minchenko and I. M. Wanless. Quartic integral Cayley graphs. *Ars Math. Contemp.*, 8(2):381–408, 2015.
- [1782] T. Minkwitz. An algorithm for solving the factorization problem in permutation groups. *J. Symbolic Comput.*, 26(1):89–95, 1998.
- [1783] A. Miri, M. Nevins, and T. Niyomsataya. Applications of representation theory to wireless communications. *Des. Codes Cryptogr.*, 41(3):307–318, 2006.
- [1784] J. Misra, T. Nipkow, and E. Sekerinski. Fm 2006: Formal methods, 14th international symposium on formal methods, hamilton, canada, august 21-27, 2006, proceedings. In *FM*, volume 4085 of *Lecture Notes in Computer Science*, 2006.
- [1785] E. Mistretta and F. Polizzi. Standard isotrivial fibrations with $p_g = q = 1$. II. *J. Pure Appl. Algebra*, 214(4):344–369, 2010.
- [1786] I. Miyamoto. Computing isomorphisms of association schemes and its applications. *J. Symbolic Comput.*, 32(1-2):133–141, 2001. Computer algebra and mechanized reasoning (St. Andrews, 2000).
- [1787] I. Miyamoto. Computation of isomorphisms of coherent configurations. *Ars Math. Contemp.*, 3(1):59–67, 2010.
- [1788] J. Mnich. Untergruppenverbände und auflösbare Gruppen in GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1992.
- [1789] M. R. R. Moghaddam and P. Niroomand. Some properties of certain subgroups of tensor squares of p -groups. *Comm. Algebra*, 40(3):1188–1193, 2012.
- [1790] M. R. R. Moghaddam and M. A. Rostamyari. 2-Engelizer subgroup of a 2-Engel transitive groups. *Bull. Korean Math. Soc.*, 53(3):657–665, 2016.

- [1791] M. R. R. Moghaddam and M. J. Sadeghifard. Non-abelian tensor analogues of 2-auto Engel groups. *Bull. Korean Math. Soc.*, 52(4):1097–1105, 2015.
- [1792] M. R. R. Moghaddam, H. Safa, and A. K. Mousavi. Autocommutators and auto-Bell groups. *Bull. Korean Math. Soc.*, 51(4):923–931, 2014.
- [1793] A. R. Moghaddamfar. On spectrum of linear groups over the binary field and recognizability of $L_{12}(2)$. *Internat. J. Algebra Comput.*, 16(2):341–349, 2006.
- [1794] V. S. Monakhov and V. N. Kniahina. Finite groups with \mathbb{P} -subnormal subgroups. *Ric. Mat.*, 62(2):307–322, 2013.
- [1795] V. S. Monakhov and A. A. Trofimuk. On a finite group having a normal series whose factors have bicyclic Sylow subgroups. *Comm. Algebra*, 39(9):3178–3186, 2011.
- [1796] B. Monson and A. Ivić Weiss. Cayley graphs and symmetric 4-polytopes. *Ars Math. Contemp.*, 1(2):185–205, 2008.
- [1797] B. Monson, D. Pellicer, and G. Williams. The tomatope. *Ars Math. Contemp.*, 5(2):355–370, 2012.
- [1798] B. Monson, D. Pellicer, and G. Williams. Mixing and monodromy of abstract polytopes. *Trans. Amer. Math. Soc.*, 366(5):2651–2681, 2014.
- [1799] B. Monson, T. Pisanski, E. Schulte, and A. I. Weiss. Semisymmetric graphs from polytopes. *J. Combin. Theory Ser. A*, 114(3):421–435, 2007.
- [1800] B. Monson and E. Schulte. Reflection groups and polytopes over finite fields. I. *Adv. in Appl. Math.*, 33(2):290–317, 2004.
- [1801] B. Monson and E. Schulte. Reflection groups and polytopes over finite fields. II. *Adv. in Appl. Math.*, 38(3):327–356, 2007.
- [1802] B. Monson and E. Schulte. Reflection groups and polytopes over finite fields. III. *Adv. in Appl. Math.*, 41(1):76–94, 2008.
- [1803] B. Monson and E. Schulte. Locally toroidal polytopes and modular linear groups. *Discrete Math.*, 310(12):1759–1771, 2010.
- [1804] B. Monson and E. Schulte. Semiregular polytopes and amalgamated C-groups. *Adv. Math.*, 229(5):2767–2791, 2012.
- [1805] B. Monson and E. Schulte. Finite polytopes have finite regular covers. *J. Algebraic Combin.*, 40(1):75–82, 2014.
- [1806] B. Monson and A. I. Weiss. Medial layer graphs of equivelar 4-polytopes. *European J. Combin.*, 28(1):43–60, 2007.
- [1807] A. Montinaro. Large 2-transitive arcs. *J. Combin. Theory Ser. A*, 114(6):993–1023, 2007.
- [1808] E. H. Moore and H. Pollatsek. Looking for difference sets in groups with dihedral images. *Des. Codes Cryptogr.*, 28(1):45–50, 2003.

- [1809] J. Moori. $(2, 3, p)$ -generations for the Fischer group F_{22} . *Comm. Algebra*, 22(11):4597–4610, 1994.
- [1810] J. Moori and Z. Mpono. Fischer-Clifford matrices and the character table of a maximal subgroup of \overline{F}_{22} . *Int. J. Math. Game Theory Algebra*, 10(1):1–12, 2000.
- [1811] J. Moori and B. G. Rodrigues. On Frattini extensions. *Sci. Math. Jpn.*, 55(2):215–221, 2002.
- [1812] J. Moori and T. Seretlo. On 2 nonsplit extension groups associated with HS and $HS:2$. *Turkish J. Math.*, 38(1):60–78, 2014.
- [1813] J. Moori and K. Zimba. Permutation actions of the symmetric group S_n on the groups Z_m^n and \overline{Z}_m^n . *Quaest. Math.*, 28(2):179–193, 2005.
- [1814] J. Moori and K. Zimba. Fischer-Clifford matrices of $B(2, n)$. *Quaest. Math.*, 29(1):9–37, 2006.
- [1815] P. Moravec. Some groups with n -central normal closures. *Publ. Math. Debrecen*, 67(3-4):355–372, 2005.
- [1816] P. Moravec. On power endomorphisms of n -central groups. *J. Group Theory*, 9(4):519–536, 2006.
- [1817] P. Moravec. Schur multipliers and power endomorphisms of groups. *J. Algebra*, 308(1):12–25, 2007.
- [1818] P. Moravec. Schur multipliers and power endomorphisms of groups. *Journal of Algebra*, 308(1):12–25, 2007.
- [1819] P. Moravec. The exponents of nonabelian tensor products of groups. *J. Pure Appl. Algebra*, 212(7):1840–1848, 2008.
- [1820] P. Moravec. On the exponent semigroups of finite p -groups. *J. Group Theory*, 11(4):511–524, 2008.
- [1821] P. Moravec. Schur multipliers of n -Engel groups. *Internat. J. Algebra Comput.*, 18(6):1101–1115, 2008.
- [1822] P. Moravec. On the Schur multipliers of finite p -groups of given coclass. *Israel J. Math.*, 185:189–205, 2011.
- [1823] A. Moreau. Indice du normalisateur du centralisateur d'un élément nilpotent dans une algèbre de Lie semi-simple. *Bull. Soc. Math. France*, 134(1):83–117, 2006.
- [1824] I. Moreno Mejía. The trace of an automorphism on $H^0(J, \mathcal{O}(n\Theta))$. *Michigan Math. J.*, 53(1):57–69, 2005.
- [1825] I. Moreno-Mejía. The quadrics through the Hurwitz curves of genus 14. *J. Lond. Math. Soc. (2)*, 81(2):374–388, 2010.
- [1826] I. Moreno-Mejía. A canonical curve of genus 17. *Results Math.*, 66(1-2):65–86, 2014.

- [1827] A. Moretó and H. N. Nguyen. Variations of Landau’s theorem for p -regular and p -singular conjugacy classes. *Israel J. Math.*, 212(2):961–987, 2016.
- [1828] J. P. Morgan. Optimal incomplete block designs. *J. Amer. Statist. Assoc.*, 102(478):655–663, 2007.
- [1829] M. Morimoto. Smith equivalent $\text{Aut}(A_6)$ -representations are isomorphic. *Proc. Amer. Math. Soc.*, 136(10):3683–3688, 2008.
- [1830] M. Morimoto. Nontrivial $\mathcal{P}(G)$ -matched \mathfrak{S} -related pairs for finite gap Oliver groups. *J. Math. Soc. Japan*, 62(2):623–647, 2010.
- [1831] J. Morris, P. Spiga, and K. Webb. Balanced Cayley graphs and balanced planar graphs. *Discrete Math.*, 310(22):3228–3235, 2010.
- [1832] R. F. Morse. Advances in computing the nonabelian tensor square of polycyclic groups. *Irish Math. Soc. Bull.*, (56):115–123, 2005.
- [1833] R. F. Morse. On the Rosenberger monster. In *Combinatorial group theory, discrete groups, and number theory*, volume 421 of *Contemp. Math.*, pages 251–260. Amer. Math. Soc., Providence, RI, 2006.
- [1834] A. Moscariello. On the type of an almost Gorenstein monomial curve. *J. Algebra*, 456:266–277, 2016.
- [1835] P. Moskalev. Group-theoretical methods in optimal golomb ruler search. In *Actual problems of mathematics and computer science. 2nd regional scientific conference of young researchers. Zaporozhye, Ukraine, April 22–23, 2004*, pages 29–30, 2004.
- [1836] H. Mühle. EL-shellability and noncrossing partitions associated with well-generated complex reflection groups. *European J. Combin.*, 43:249–278, 2015.
- [1837] J. Müller. 5-modulare Zerlegungszahlen für die sporadische einfache Gruppe Co_3 . Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1992.
- [1838] J. Müller. *Zerlegungszahlen für generische Iwahori-Hecke-Algebren von exzeptionellem Typ*. PhD thesis, RWTH, Aachen, 1995.
- [1839] J. Müller. Decomposition numbers for generic Iwahori-Hecke algebras of noncrystallographic type. *J. Algebra*, 189(1):125–149, 1997.
- [1840] J. Müller. The 5-modular decomposition matrix of the sporadic simple Conway group Co_3 . In *Proceedings of the 1998 International Symposium on Symbolic and Algebraic Computation (Rostock)*, pages 179–185 (electronic). ACM, New York, 1998.
- [1841] J. Müller. The 2-modular decomposition matrices of the symmetric groups S_{15} , S_{16} , and S_{17} . *Comm. Algebra*, 28(10):4997–5005, 2000.
- [1842] J. Müller. Brauer trees for the Schur cover of the symmetric group. *J. Algebra*, 266(2):427–445, 2003.

- [1843] J. Müller. A note on applications of the ‘Vector Enumerator’ algorithm. *Linear Algebra Appl.*, 365:291–300, 2003. Special issue on linear algebra methods in representation theory.
- [1844] J. Müller. On endomorphism rings and character tables. Habilitationsschrift, RWTH Aachen, 2003.
- [1845] J. Müller. On the action of the sporadic simple Baby Monster group on its conjugacy class 2B. *LMS J. Comput. Math.*, 11:15–27, 2008.
- [1846] J. Müller. On the multiplicity-free actions of the sporadic simple groups. *J. Algebra*, 320(2):910–926, 2008.
- [1847] J. Müller. On low-degree representations of the symmetric group. *J. Algebra*, 465:356–398, 2016.
- [1848] J. Müller and M. Neunhöffer. Some computations regarding Foulkes’ conjecture. *Experiment. Math.*, 14(3):277–283, 2005.
- [1849] J. Müller, M. Neunhöffer, F. Röhr, and R. Wilson. Completing the Brauer trees for the sporadic simple Lyons group. *LMS J. Comput. Math.*, 5:18–33 (electronic), 2002.
- [1850] J. Müller, M. Neunhöffer, and R. A. Wilson. Enumerating big orbits and an application: B acting on the cosets of Fi_{23} . *J. Algebra*, 314(1):75–96, 2007.
- [1851] J. Müller and C. Ritzenthaler. On the ring of invariants of ordinary quartic curves in characteristic 2. *J. Algebra*, 303(2):530–542, 2006.
- [1852] J. Müller and J. Rosenboom. Condensation of induced representations and an application: the 2-modular decomposition numbers of Co_2 . In *Computational methods for representations of groups and algebras (Essen, 1997)*, volume 173 of *Progr. Math.*, pages 309–321. Birkhäuser, Basel, 1999.
- [1853] J. Müller and M. Schaps. The Broué conjecture for the faithful 3-blocks of $4.M_{22}$. *J. Algebra*, 319(9):3588–3602, 2008.
- [1854] J. Müller and R. Zimmermann. Green vertices and sources of simple modules of the symmetric group labelled by hook partitions. *Arch. Math. (Basel)*, 89(2):97–108, 2007.
- [1855] P. Müller. Kronecker conjugacy of polynomials. *Trans. Amer. Math. Soc.*, 350(5):1823–1850, 1998.
- [1856] P. Müller. Permutation groups with a cyclic two-orbits subgroup and monodromy groups of Laurent polynomials. *Ann. Sc. Norm. Super. Pisa Cl. Sci. (5)*, 12(2):369–438, 2013.
- [1857] P. Müller and G. P. Nagy. A note on the group of projectivities of finite projective planes. *Innov. Incidence Geom.*, 6/7:291–294, 2007/08.
- [1858] T. W. Müller and J. Schlage-Puchta. Character theory of symmetric groups, subgroup growth of Fuchsian groups, and random walks. *Adv. Math.*, 213(2):919–982, 2007.
- [1859] T. W. Müller and J. Schlage-Puchta. Statistics of isomorphism types in free products. *Adv. Math.*, 224(2):707–730, 2010.

- [1860] S. H. Murray and E. A. O'Brien. Selecting base points for the Schreier-Sims algorithm for matrix groups. *J. Symbolic Comput.*, 19(6):577–584, 1995.
- [1861] Q. Mushtaq and S. Asif. A_5 as a homomorphic image of a subgroup of Picard group. *Comm. Algebra*, 38(10):3897–3912, 2010.
- [1862] A. Mutlu. Application of Peiffer commutators in the Moore complex of a simplicial group its given with GAP program. *Bull. Pure Appl. Sci. Sect. E Math. Stat.*, 18(1):89–100, 1999.
- [1863] V. I. Mysovskikh. Testing subgroups of a finite group on embedding properties like pronormality. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 236(Vopr. Teor. Predst. Algebr i Grupp. 5):119–123, 218, 1997.
- [1864] V. I. Mysovskikh. Burnside marks and a solution of two problems of Z. I. Borevich on polynormal subgroups. *Dokl. Akad. Nauk*, 367(4):445–446, 1999.
- [1865] V. I. Mysovskikh. Investigation of subgroup embeddings by the computer algebra package GAP. In *Computer algebra in scientific computing—CASC'99 (Munich)*, pages 309–315. Springer, Berlin, 1999.
- [1866] V. I. Mysovskikh. Subnormalizers and embedding properties of subgroups of finite groups. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 265(Vopr. Teor. Predst. Algebr i Grupp. 6):258–280, 328–329 (2000), 1999.
- [1867] V. I. Mysovskikh. Burnside matrices and subgroup embeddings in finite groups. In *Formal power series and algebraic combinatorics (Moscow, 2000)*, pages 528–533. Springer, Berlin, 2000.
- [1868] V. I. Mysovskikh. Computer algebra systems and symbolic computations. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 281(Vopr. Teor. Predst. Algebr. i Grupp. 8):227–236, 283–284, 2001.
- [1869] V. I. Mysovskikh and A. I. Skopin. Embedding properties of nonprimary subgroups of the symmetric group of degree eight. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 236(Vopr. Teor. Predst. Algebr i Grupp. 5):124–128, 218–219, 1997.
- [1870] V. I. Mysovskikh and A. I. Skopin. Embeddings of subgroups in the symmetric group of degree nine. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 265(Vopr. Teor. Predst. Algebr i Grupp. 6):281–284, 329 (2000), 1999.
- [1871] V. I. Mysovskikh and A. I. Skopin. Embedding of nonprimary subgroups in the symmetric group S_9 . *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 281(Vopr. Teor. Predst. Algebr. i Grupp. 8):237–252, 284, 2001.
- [1872] N. Naehrig. Endomorphism rings of permutation modules. *J. Algebra*, 324(5):1044–1075, 2010.
- [1873] M. Nagel and B. Owens. Unlinking information from 4-manifolds. *Bull. Lond. Math. Soc.*, 47(6):964–979, 2015.

- [1874] G. P. Nagy. On the tangent algebra of algebraic commutative Moufang loops. *Mathematica*, 45(68)(2):147–160, 2003.
- [1875] G. P. Nagy. Direct construction of code loops. *Discrete Math.*, 308(23):5349–5357, 2008.
- [1876] G. P. Nagy. A class of finite simple Bol loops of exponent 2. *Trans. Amer. Math. Soc.*, 361(10):5331–5343, 2009.
- [1877] G. P. Nagy. On the multiplication groups of semifields. *European J. Combin.*, 31(1):18–24, 2010.
- [1878] G. P. Nagy. On centerless commutative automorphic loops. *Comment. Math. Univ. Carolin.*, 55(4):485–491, 2014.
- [1879] G. P. Nagy and P. Vojtěchovský. The Moufang loops of order 64 and 81. *J. Symbolic Comput.*, 42(9):871–883, 2007.
- [1880] A. Nakić and M. O. Pavčević. Tactical decompositions of designs over finite fields. *Des. Codes Cryptogr.*, 77(1):49–60, 2015.
- [1881] L. Naughton and G. Pfeiffer. Computing the table of marks of a cyclic extension. *Math. Comp.*, 81(280):2419–2438, 2012.
- [1882] L. Naughton and G. Pfeiffer. Integer sequences realized by the subgroup pattern of the symmetric group. *J. Integer Seq.*, 16(5):Article 13.5.8, 23, 2013.
- [1883] G. Navarro. The McKay conjecture and Galois automorphisms. *Ann. of Math. (2)*, 160(3):1129–1140, 2004.
- [1884] G. Navarro. The set of conjugacy class sizes of a finite group does not determine its solvability. *J. Algebra*, 411:47–49, 2014.
- [1885] G. Navarro and N. Rizo. Nilpotent and perfect groups with the same set of character degrees. *J. Algebra Appl.*, 13(8):1450061, 3, 2014.
- [1886] G. Navarro, L. Sanus, and P. H. Tiep. Real characters and degrees. *Israel J. Math.*, 171:157–173, 2009.
- [1887] G. Navarro, R. Solomon, and P. H. Tiep. Abelian Sylow subgroups in a finite group, II. *J. Algebra*, 421:3–11, 2015.
- [1888] G. Navarro and P. H. Tiep. Rational Brauer characters. *Math. Ann.*, 335(3):675–686, 2006.
- [1889] G. Navarro and P. H. Tiep. Degrees of rational characters of finite groups. *Adv. Math.*, 224(3):1121–1142, 2010.
- [1890] G. Nebe. *Endliche rationale Matrixgruppen vom Grad 24*. PhD thesis, RWTH, Aachen, 1993.
- [1891] G. Nebe. *Orthogonale Darstellungen endlicher Gruppen und Gruppenringe*. Habilitationsschrift, RWTH, Aachen, 1993.

- [1892] G. Nebe. Finite subgroups of $GL_n(Q)$ for $25 \leq n \leq 31$. *Comm. Algebra*, 24(7):2341–2397, 1996.
- [1893] G. Nebe. Finite quaternionic matrix groups. *Represent. Theory*, 2:106–223 (electronic), 1998.
- [1894] G. Nebe. The structure of maximal finite primitive matrix groups. In *Algorithmic algebra and number theory (Heidelberg, 1997)*, pages 417–422. Springer, Berlin, 1999.
- [1895] G. Nebe. Invariants of orthogonal G -modules from the character table. *Experiment. Math.*, 9(4):623–629, 2000.
- [1896] G. Nebe and W. Plesken. Finite rational matrix groups. *Mem. Amer. Math. Soc.*, 116(556):viii+144, 1995.
- [1897] D. Nett and F. Noeske. The imprimitive faithful complex characters of the Schur covers of the symmetric and alternating groups. *J. Group Theory*, 14(3):413–435, 2011.
- [1898] J. M. Neuberger, N. Sieben, and J. W. Swift. Symmetry and automated branch following for a semilinear elliptic PDE on a fractal region. *SIAM J. Appl. Dyn. Syst.*, 5(3):476–507 (electronic), 2006.
- [1899] J. M. Neuberger, N. Sieben, and J. W. Swift. Newton’s method and symmetry for semilinear elliptic PDE on the cube. *SIAM J. Appl. Dyn. Syst.*, 12(3):1237–1279, 2013.
- [1900] J. Neubüser. An invitation to computational group theory. In *Groups ’93 Galway/St. Andrews, Vol. 2*, volume 212 of *London Math. Soc. Lecture Note Ser.*, pages 457–475. Cambridge Univ. Press, Cambridge, 1995.
- [1901] M. Neunhöffer and C. E. Praeger. Computing minimal polynomials of matrices. *LMS J. Comput. Math.*, 11:252–279, 2008.
- [1902] M. Neunhöffer and C. E. Praeger. Sporadic neighbour-transitive codes in Johnson graphs. *Des. Codes Cryptogr.*, 72(1):141–152, 2014.
- [1903] M. F. Newman. On a family of cyclically-presented fundamental groups. *J. Aust. Math. Soc.*, 71(2):235–241, 2001. Special issue on group theory.
- [1904] M. F. Newman, W. Nickel, and A. C. Niemeyer. Descriptions of groups of prime-power order. *J. Symbolic Comput.*, 25(5):665–682, 1998.
- [1905] M. F. Newman and A. C. Niemeyer. On complexity of multiplication in finite soluble groups. *J. Algebra*, 421:425–430, 2015.
- [1906] M. F. Newman and E. A. O’Brien. Application of computers to questions like those of Burnside. II. *Internat. J. Algebra Comput.*, 6(5):593–605, 1996.
- [1907] M. F. Newman and E. A. O’Brien. Classifying 2-groups by coclass. *Trans. Amer. Math. Soc.*, 351(1):131–169, 1999.
- [1908] M. F. Newman, E. A. O’Brien, and M. R. Vaughan-Lee. Groups and nilpotent Lie rings whose order is the sixth power of a prime. *J. Algebra*, 278(1):383–401, 2004.

- [1909] H. N. Nguyen. Quasisimple classical groups and their complex group algebras. *Israel J. Math.*, 195(2):973–998, 2013.
- [1910] H. N. Nguyen and H. P. Tong-Viet. Characterizing finite quasisimple groups by their complex group algebras. *Algebr. Represent. Theory*, 17(1):305–320, 2014.
- [1911] X. Ni, O. Buerschaper, and M. Van den Nest. A non-commuting stabilizer formalism. *J. Math. Phys.*, 56(5):052201, 32, 2015.
- [1912] W. Nickel. Endliche Körper im gruppentheoretischen Programmsystem GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, August 1988.
- [1913] W. Nickel. *Central extensions of polycyclic groups*. PhD thesis, Australian National University, 1993.
- [1914] W. Nickel. Computation of nilpotent Engel groups. *J. Austral. Math. Soc. Ser. A*, 67(2):214–222, 1999. Group theory.
- [1915] W. Nickel. Matrix representations for torsion-free nilpotent groups by Deep Thought. *J. Algebra*, 300(1):376–383, 2006.
- [1916] S. J. Nickerson and R. A. Wilson. Semi-presentations for the sporadic simple groups. *Experiment. Math.*, 14(3):359–371, 2005.
- [1917] C. Nicotera. A note on rewritability of commutators in nilpotent groups. *Comm. Algebra*, 26(9):2967–2970, 1998.
- [1918] M. Niebrzydowski. On colored quandle longitudes and its applications to tangle embeddings and virtual knots. *J. Knot Theory Ramifications*, 15(8):1049–1059, 2006.
- [1919] M. Niebrzydowski. Coloring invariants of spatial graphs. *J. Knot Theory Ramifications*, 19(6):829–841, 2010.
- [1920] M. Niebrzydowski and J. H. Przytycki. Burnside kei. *Fund. Math.*, 190:211–229, 2006.
- [1921] M. Niebrzydowski and J. H. Przytycki. Homology of dihedral quandles. *J. Pure Appl. Algebra*, 213(5):742–755, 2009.
- [1922] M. Niebrzydowski and J. H. Przytycki. Homology operations on homology of quandles. *J. Algebra*, 324(7):1529–1548, 2010.
- [1923] M. Niebrzydowski and J. H. Przytycki. The second quandle homology of the Takasaki quandle of an odd abelian group is an exterior square of the group. *J. Knot Theory Ramifications*, 20(1):171–177, 2011.
- [1924] M. Niebrzydowski and J. H. Przytycki. Entropic magmas, their homology and related invariants of links and graphs. *Algebr. Geom. Topol.*, 13(6):3223–3243, 2013.
- [1925] M. Niemenmaa and M. Rytty. On finite loops with nilpotent inner mapping groups. *Arch. Math. (Basel)*, 95(4):319–324, 2010.

- [1926] A. Niemeyer. Algorithmen für Permutationsgruppen in GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, August 1988.
- [1927] A. C. Niemeyer. *Computing Presentations for Soluble Groups*. PhD thesis, Australian National University, 1993.
- [1928] A. C. Niemeyer. A finite soluble quotient algorithm. *J. Symbolic Comput.*, 18(6):541–561, 1994.
- [1929] A. C. Niemeyer. Computing finite soluble quotients. In *Computational algebra and number theory (Sydney, 1992)*, volume 325 of *Math. Appl.*, pages 75–82. Kluwer Acad. Publ., Dordrecht, 1995.
- [1930] A. C. Niemeyer. Constructive recognition of normalizers of small extra-special matrix groups. *Internat. J. Algebra Comput.*, 15(2):367–394, 2005.
- [1931] A. C. Niemeyer, T. Popiel, and C. E. Praeger. Algorithms to identify abundant p -singular elements in finite classical groups. *Bull. Aust. Math. Soc.*, 86(1):50–63, 2012.
- [1932] A. C. Niemeyer and C. E. Praeger. Implementing a recognition algorithm for classical groups. In *Groups and computation, II (New Brunswick, NJ, 1995)*, volume 28 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 273–296. Amer. Math. Soc., Providence, RI, 1997.
- [1933] A. C. Niemeyer and C. E. Praeger. A recognition algorithm for classical groups over finite fields. *Proc. London Math. Soc. (3)*, 77(1):117–169, 1998.
- [1934] A. C. Niemeyer and C. E. Praeger. On the frequency of permutations containing a long cycle. *J. Algebra*, 300(1):289–304, 2006.
- [1935] A. C. Niemeyer and C. E. Praeger. On the proportion of permutations of order a multiple of the degree. *J. Lond. Math. Soc. (2)*, 76(3):622–632, 2007.
- [1936] A. C. Niemeyer and C. E. Praeger. Elements in finite classical groups whose powers have large 1-eigenspaces. *Discrete Math. Theor. Comput. Sci.*, 16(1):303–312, 2014.
- [1937] M. Niepert. Markov chains on orbits of permutation groups. In *Proceedings of the Twenty-Eighth Conference Annual Conference on Uncertainty in Artificial Intelligence (UAI-12)*, pages 624–633, Corvallis, Oregon, 2012. AUAI Press.
- [1938] R. Nikkuni and K. Onda. A characterization of knots in a spatial graph. II. *J. Knot Theory Ramifications*, 11(7):1133–1154, 2002.
- [1939] V. V. Nikulin. Degenerations of Kählerian K3 surfaces with finite symplectic automorphism groups. *Izv. Ross. Akad. Nauk Ser. Mat.*, 79(4):103–158, 2015.
- [1940] P. Niroomand and R. Rezaei. On the exterior degree of finite groups. *Comm. Algebra*, 39(1):335–343, 2011.
- [1941] P. Niroomand and R. Rezaei. The exterior degree of a pair of finite groups. *Mediterr. J. Math.*, 10(3):1195–1206, 2013.

- [1942] P. Niroomand and F. G. Russo. An improvement of a bound of Green. *J. Algebra Appl.*, 11(6):1250116, 11, 2012.
- [1943] F. Noeske. Zur darstellungstheorie schurscher erweiterungen symmetrischer gruppen. Diploma thesis, Aachen University, 2002.
- [1944] F. Noeske. The 2- and 3-modular characters of the sporadic simple Fischer group Fi_{22} and its cover. *J. Algebra*, 309(2):723–743, 2007.
- [1945] A. Nomura. A note on the 3-class field tower of a cyclic cubic field. *Proc. Japan Acad. Ser. A Math. Sci.*, 83(2):14–15, 2007.
- [1946] A. Nomura. Notes on the minimal number of ramified primes in some l -extensions of \mathbf{Q} . *Arch. Math. (Basel)*, 90(6):501–510, 2008.
- [1947] M. Norooz-Abadian and H. Sharifi. Frobenius \mathbb{Q}_1 -groups. *Arch. Math. (Basel)*, 105(6):509–517, 2015.
- [1948] S. Norton. Computing in the Monster. *J. Symbolic Comput.*, 31(1-2):193–201, 2001. Computational algebra and number theory (Milwaukee, WI, 1996).
- [1949] S. P. Norton. The string of nets. *Proc. Edinb. Math. Soc. (2)*, 56(1):223–262, 2013.
- [1950] S. P. Norton and R. A. Wilson. Anatomy of the Monster. II. *Proc. London Math. Soc. (3)*, 84(3):581–598, 2002.
- [1951] S. P. Norton and R. A. Wilson. A correction to the 41-structure of the Monster, a construction of a new maximal subgroup $L_2(41)$ and a new Moonshine phenomenon. *J. Lond. Math. Soc. (2)*, 87(3):943–962, 2013.
- [1952] V. Núñez and J. Rodríguez-Viorato. Dihedral coverings of Montesinos knots. *Bol. Soc. Mat. Mexicana (3)*, 10(Special Issue):423–449, 2004.
- [1953] P. Ó Catháin and M. Röder. The cocyclic Hadamard matrices of order less than 40. *Des. Codes Cryptogr.*, 58(1):73–88, 2011.
- [1954] E. A. O’Brien. The groups of order 256. *J. Algebra*, 143(1):219–235, 1991.
- [1955] E. A. O’Brien. Isomorphism testing for p -groups. *J. Symbolic Comput.*, 16(3):305–320, 1993.
- [1956] E. A. O’Brien. Computing automorphism groups of p -groups. In *Computational algebra and number theory (Sydney, 1992)*, volume 325 of *Math. Appl.*, pages 83–90. Kluwer Acad. Publ., Dordrecht, 1995.
- [1957] E. A. O’Brien and M. R. Vaughan-Lee. The groups with order p^7 for odd prime p . *J. Algebra*, 292(1):243–258, 2005.
- [1958] A. Odabaş, E. O. Uslu, and E. Ilgaz. Isoclinism of crossed modules. *J. Symbolic Comput.*, 74:408–424, 2016.
- [1959] J. Oh. Arc-transitive elementary abelian covers of the Pappus graph. *Discrete Math.*, 309(23-24):6590–6611, 2009.

- [1960] J. Oh. A classification of cubic s -regular graphs of order $14p$. *Discrete Math.*, 309(9):2721–2726, 2009.
- [1961] J. Oh. A classification of cubic s -regular graphs of order $16p$. *Discrete Math.*, 309(10):3150–3155, 2009.
- [1962] C. Okay. Homotopy colimits of classifying spaces of abelian subgroups of a finite group. *Algebr. Geom. Topol.*, 14(4):2223–2257, 2014.
- [1963] D. v. Đoković. Poincaré series of some pure and mixed trace algebras of two generic matrices. *J. Algebra*, 309(2):654–671, 2007.
- [1964] D. v. Đoković and D. Doniz. The complex indecomposable representations of $\text{Aut}(F_2)$ of degree less than six. *Internat. J. Algebra Comput.*, 10(2):229–260, 2000.
- [1965] D. v. Đoković and V. P. Platonov. Low-dimensional representations of $\text{Aut}(F_2)$. *Manuscripta Math.*, 89(4):475–509, 1996.
- [1966] R. N. Oliveira and S. N. Sidki. On commutativity and finiteness in groups. *Bull. Braz. Math. Soc. (N.S.)*, 40(2):149–180, 2009.
- [1967] A. Olivieri and A. del Río. An algorithm to compute the primitive central idempotents and the Wedderburn decomposition of a rational group algebra. *J. Symbolic Comput.*, 35(6):673–687, 2003.
- [1968] A. Olivieri, A. del Río, and J. J. Simón. On monomial characters and central idempotents of rational group algebras. *Comm. Algebra*, 32(4):1531–1550, 2004.
- [1969] M. A. Ollis. Protection against premature termination of experiments based on Williams squares with circular structure. *Util. Math.*, 63:143–149, 2003.
- [1970] M. A. Ollis and P. Spiga. Every abelian group of odd order has a narcissistic terrace. *Ars Combin.*, 76:161–168, 2005.
- [1971] G. Olteanu. Computing the Wedderburn decomposition of group algebras by the Brauer-Witt theorem. *Math. Comp.*, 76(258):1073–1087 (electronic), 2007.
- [1972] G. Olteanu and A. del Río. Group algebras of Kleinian type and groups of units. *J. Algebra*, 318(2):856–870, 2007.
- [1973] G. Olteanu and A. del Río. An algorithm to compute the Wedderburn decomposition of semisimple group algebras implemented in the GAP package `wedderga`. *J. Symbolic Comput.*, 44(5):507–516, 2009.
- [1974] G. Olteanu and I. Van Gelder. Construction of minimal non-abelian left group codes. *Des. Codes Cryptogr.*, 75(3):359–373, 2015.
- [1975] M. Omidali. The catenary and tame degree of numerical monoids generated by generalized arithmetic sequences. *Forum Math.*, 24(3):627–640, 2012.
- [1976] A. Omrani and A. Shokrollahi. Computing irreducible representations of supersolvable groups over small finite fields. *Math. Comp.*, 66(218):779–786, 1997.

- [1977] C. O’Neill and R. Pelayo. On the linearity of ω -primality in numerical monoids. *J. Pure Appl. Algebra*, 218(9):1620–1627, 2014.
- [1978] C. O’Neill and R. Pelayo. How do you measure primality? *Amer. Math. Monthly*, 122(2):121–137, 2015.
- [1979] J. Opgenorth, W. Plesken, and T. Schulz. Crystallographic algorithms and tables. *Acta Cryst. Sect. A*, 54(5):517–531, 1998.
- [1980] E. O’Reilly Regueiro. Biplanes with flag-transitive automorphism groups of almost simple type, with alternating or sporadic socle. *European J. Combin.*, 26(5):577–584, 2005.
- [1981] A. S. Osifodunrin. On the existence of $(400, 57, 8)$ non-abelian difference sets. *Turkish J. Math.*, 37(3):375–390, 2013.
- [1982] P. R. J. Östergård. Classifying subspaces of Hamming spaces. *Des. Codes Cryptogr.*, 27(3):297–305, 2002.
- [1983] J. Ostrowski, J. Linderoth, F. Rossi, and S. Smriglio. Constraint orbital branching. In *Integer programming and combinatorial optimization*, volume 5035 of *Lecture Notes in Comput. Sci.*, pages 225–239. Springer, Berlin, 2008.
- [1984] D. E. Otera and F. G. Russo. Subgroup S-commutativity degrees of finite groups. *Bull. Belg. Math. Soc. Simon Stevin*, 19(2):373–382, 2012.
- [1985] M. Ottensmann. Vervollständigung der brauerbäume von 3 on in charakteristik 11, 19 und 31 mit methoden der kondensation. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 2000.
- [1986] M. Oura. The dimension formula for the ring of code polynomials in genus 4. *Osaka J. Math.*, 34(1):53–72, 1997.
- [1987] B. Owren and A. Marthinsen. Integration methods based on canonical coordinates of the second kind. *Numer. Math.*, 87(4):763–790, 2001.
- [1988] N. Pace. New ternary linear codes from projectivity groups. *Discrete Math.*, 331:22–26, 2014.
- [1989] H. Pahlings. Character polynomials and the Möbius function. *Arch. Math. (Basel)*, 65(2):111–118, 1995.
- [1990] H. Pahlings. The character table of $2_+^{1+22}.Co_2$. *J. Algebra*, 315(1):301–325, 2007.
- [1991] I. Pak. What do we know about the product replacement algorithm? In *Groups and computation, III (Columbus, OH, 1999)*, volume 8 of *Ohio State Univ. Math. Res. Inst. Publ.*, pages 301–347. de Gruyter, Berlin, 2001.
- [1992] P. P. Pálffy. The number of conjugacy classes in some quotients of the Nottingham group. *Proc. Edinburgh Math. Soc. (2)*, 41(2):369–384, 1998.

- [1993] P. P. Pálffy and C. Szabó. Congruence varieties of groups and abelian groups. In *Lattice theory and its applications (Darmstadt, 1991)*, volume 23 of *Res. Exp. Math.*, pages 163–183. Heldermann, Lemgo, 1995.
- [1994] S. Papadima and A. I. Suciuc. Algebraic invariants for right-angled Artin groups. *Math. Ann.*, 334(3):533–555, 2006.
- [1995] H. Park, K. Park, and Y. Cho. Analysis of the variable length nonzero window method for exponentiation. *Comput. Math. Appl.*, 37(7):21–29, 1999.
- [1996] S. Park and S. Kwon. Class number one problem for normal CM-fields. *J. Number Theory*, 125(1):59–84, 2007.
- [1997] C. Parker and P. Rowley. Quadratic functions and $\text{GF}(q)$ -groups. *Proc. Amer. Math. Soc.*, 125(8):2227–2237, 1997.
- [1998] C. Parker and P. Rowley. Sporadic simple groups which are completions of the Goldschmidt G_3 -amalgam. *J. Algebra*, 235(1):131–153, 2001.
- [1999] D. V. Pasechnik. Extended generalized octagons and the group He. *Geom. Dedicata*, 56(1):85–101, 1995.
- [2000] D. V. Pasechnik. Extending polar spaces of rank at least 3. *J. Combin. Theory Ser. A*, 72(2):232–242, 1995.
- [2001] D. V. Pasechnik. The triangular extensions of a generalized quadrangle of order $(3, 3)$. *Bull. Belg. Math. Soc. Simon Stevin*, 2(5):509–518, 1995.
- [2002] D. V. Pasechnik. The extensions of the generalized quadrangle of order $(3, 9)$. *European J. Combin.*, 17(8):751–755, 1996.
- [2003] A. Pasini and S. Yoshiara. New distance regular graphs arising from dimensional dual hyperovals. *European J. Combin.*, 22(4):547–560, 2001.
- [2004] A. Pasotti and M. A. Pellegrini. Symmetric 1-factorizations of the complete graph. *European J. Combin.*, 31(5):1410–1418, 2010.
- [2005] S. Pasotti and E. Zizioli. Slid product of loops: a generalization. *Results Math.*, 65(1-2):193–212, 2014.
- [2006] J. Paulhus. Decomposing Jacobians of curves with extra automorphisms. *Acta Arith.*, 132(3):231–244, 2008.
- [2007] W. Paulsen. *Abstract Algebra: An Interactive Approach*. CRC Press, 2009.
- [2008] K. Pawałowski and T. Sumi. The Laitinen conjecture for finite solvable Oliver groups. *Proc. Amer. Math. Soc.*, 137(6):2147–2156, 2009.
- [2009] K. Pawałowski and T. Sumi. The Laitinen conjecture for finite non-solvable groups. *Proc. Edinb. Math. Soc. (2)*, 56(1):303–336, 2013.

- [2010] O. Payne and S. Rees. Computing subgroup presentations, using the coherence arguments of McCammond and Wise. *J. Algebra*, 300(1):109–133, 2006.
- [2011] A. Pêcher. Partitionable graphs arising from near-factorizations of finite groups. *Discrete Math.*, 269(1-3):191–218, 2003.
- [2012] A. Pêcher. Cayley partitionable graphs and near-factorizations of finite groups. *Discrete Math.*, 276(1-3):295–311, 2004. 6th International Conference on Graph Theory.
- [2013] M. A. Pellegrini. 2-coverings for exceptional and sporadic simple groups. *Arch. Math. (Basel)*, 101(3):201–206, 2013.
- [2014] D. Pellicer. A construction of higher rank chiral polytopes. *Discrete Math.*, 310(6-7):1222–1237, 2010.
- [2015] D. Pellicer. Vertex-transitive maps with Schläfli type $\{3, 7\}$. *Discrete Math.*, 317:53–74, 2014.
- [2016] D. Pellicer and A. I. Weiss. Generalized CPR-graphs and applications. *Contrib. Discrete Math.*, 5(2):76–105, 2010.
- [2017] M. Penegini. The classification of isotrivially fibred surfaces with $p_g = q = 2$. *Collect. Math.*, 62(3):239–274, 2011. With an appendix by Sönke Rollenske.
- [2018] M. Penegini and F. Polizzi. Surfaces with $p_g = q = 2$, $K^2 = 6$, and Albanese map of degree 2. *Canad. J. Math.*, 65(1):195–221, 2013.
- [2019] C. Pernet and W. Stein. Fast computation of Hermite normal forms of random integer matrices. *J. Number Theory*, 130(7):1675–1683, 2010.
- [2020] F. Petényi. Comparing estimates on the number of zeros of irreducible characters in symmetric groups. *Sém. Lothar. Combin.*, 72:Art. B72c, 14, 2014/15.
- [2021] K. E. Petrie and B. M. Smith. Symmetry breaking in graceful graphs. In *PRINCIPLES AND PRACTICE OF CONSTRAINT PROGRAMMING - CP 2003*, pages 930–934, 2003.
- [2022] G. Pfeiffer. Von Permutationscharakteren und Markentafeln. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1991.
- [2023] G. Pfeiffer. Character tables of Weyl groups in GAP. *Bayreuth. Math. Schr.*, (47):165–222, 1994.
- [2024] G. Pfeiffer. Young characters on Coxeter basis elements of Iwahori-Hecke algebras and a Murnaghan-Nakayama formula. *J. Algebra*, 168(2):525–535, 1994.
- [2025] G. Pfeiffer. *Charakterwerte von Iwahori-Hecke-Algebren von klassischem Typ*. PhD thesis, RWTH, Aachen, 1995.
- [2026] G. Pfeiffer. Character values of Iwahori-Hecke algebras of type B . In *Finite reductive groups (Luminy, 1994)*, volume 141 of *Progr. Math.*, pages 333–360. Birkhäuser Boston, Boston, MA, 1997.

- [2027] G. Pfeiffer. The subgroups of M_{24} , or how to compute the table of marks of a finite group. *Experiment. Math.*, 6(3):247–270, 1997.
- [2028] G. Pfeiffer. Counting transitive relations. *J. Integer Seq.*, 7(3):Article 04.3.2, 11, 2004.
- [2029] G. Pfeiffer. A quiver presentation for Solomon’s descent algebra. *Adv. Math.*, 220(5):1428–1465, 2009.
- [2030] J. D. Phillips and P. Vojtěchovský. Linear groupoids and the associated wreath products. *J. Symbolic Comput.*, 40(3):1106–1125, 2005.
- [2031] M. Picantin. Explicit presentations for the dual braid monoids. *C. R. Math. Acad. Sci. Paris*, 334(10):843–848, 2002.
- [2032] D. Pinto. The duality index of oriented regular hypermaps. *European J. Combin.*, 32(8):1236–1243, 2011.
- [2033] M. A. Pizaña. *Gráficas Iteradas de Clanes*. PhD thesis, Universidad Autónoma Metropolitana, Mexico, 2002.
- [2034] M. A. Pizaña. The icosahedron is clique divergent. *Discrete Math.*, 262(1-3):229–239, 2003.
- [2035] T. E. Plambeck. Taming the wild in impartial combinatorial games. *Integers*, 5(1):G5, 36, 2005.
- [2036] M. Pleger. Orbits of low codimension on irreducible representations of simple algebraic groups. *Comm. Algebra*, 40(8):3021–3035, 2012.
- [2037] W. Plesken and T. Bächler. Counting polynomials for linear codes, hyperplane arrangements, and matroids. *Doc. Math.*, 19:285–312, 2014.
- [2038] W. Plesken and M. Pohst. Constructing integral lattices with prescribed minimum. II. *Math. Comp.*, 60(202):817–825, 1993.
- [2039] W. Plesken and D. Robertz. Constructing invariants for finite groups. *Experiment. Math.*, 14(2):175–188, 2005.
- [2040] W. Plesken and B. Souvignier. Constructing rational representations of finite groups. *Experiment. Math.*, 5(1):39–47, 1996.
- [2041] C. Polcino Milies and F. D. de Melo. On cyclic and abelian codes. *IEEE Trans. Inform. Theory*, 59(11):7314–7319, 2013.
- [2042] U. Polis. Algorithmen für Permutationsgruppen. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1993.
- [2043] F. Polizzi. Standard isotrivial fibrations with $p_g = q = 1$. *J. Algebra*, 321(6):1600–1631, 2009.
- [2044] F. Polizzi. Numerical properties of isotrivial fibrations. *Geom. Dedicata*, 147:323–355, 2010.

- [2045] I. Ponomarenko and A. Vasil'ev. On non-abelian Schur groups. *J. Algebra Appl.*, 13(8):1450055, 22, 2014.
- [2046] I. N. Ponomarenko. Bases of Schurian antisymmetric coherent configurations and isomorphism test for Schurian tournaments. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 402(Kombinatorika i Teoriya Grafov. IV):108–147, 219–220, 2012.
- [2047] C. E. Praeger. Computers in algebra: new answers, new questions. *J. Korean Math. Soc.*, 38(4):763–780, 2001. Mathematics in the new millennium (Seoul, 2000).
- [2048] C. E. Praeger. The flag-transitive symmetric designs with 45 points, blocks of size 12, and 3 blocks on every point pair. *Des. Codes Cryptogr.*, 44(1-3):115–132, 2007.
- [2049] C. E. Praeger, A. Seress, and c. Yalçinkaya. Generation of finite classical groups by pairs of elements with large fixed point spaces. *J. Algebra*, 421:56–101, 2015.
- [2050] C. E. Praeger and L. H. Soicher. *Low rank representations and graphs for sporadic groups*, volume 8 of *Australian Mathematical Society Lecture Series*. Cambridge University Press, Cambridge, 1997.
- [2051] C. E. Praeger and S. Zhou. Imprimitive flag-transitive symmetric designs. *J. Combin. Theory Ser. A*, 113(7):1381–1395, 2006.
- [2052] H. Pralle. The hyperplanes of $DW(5, 2)$. *Experiment. Math.*, 14(3):373–384, 2005.
- [2053] A. Previtali. Maps behaving like exponentials and maximal unipotent subgroups of groups of Lie type. *Comm. Algebra*, 27(5):2511–2519, 1999.
- [2054] A. Previtali. Irreducible constituents of monomial representations. *J. Symbolic Comput.*, 41(12):1345–1359, 2006.
- [2055] A. L. Prins. The character table of an involution centralizer in the Dempwolff group $2^5GL_5(2)$. *Quaest. Math.*, 39(4):561–576, 2016.
- [2056] N. P. Puliymbalath, A. Seress, and I. Weisz. All λ -designs with small λ are type-1. *J. Combin. Des.*, 20(9):408–431, 2012.
- [2057] M. Püschel. Decomposing monomial representations of solvable groups. *J. Symbolic Comput.*, 34(6):561–596, 2002.
- [2058] M. Püschel and J. M. F. Moura. The algebraic approach to the discrete cosine and sine transforms and their fast algorithms. *SIAM J. Comput.*, 32(5):1280–1316 (electronic), 2003.
- [2059] M. Puschel, J. M. F. Moura, B. Singer, J. X. Xiong, J. Johnson, D. Padua, M. Veloso, and R. W. Johnson. Spiral: A generator for platform-adapted libraries of signal processing algorithms. *INTERNATIONAL JOURNAL OF HIGH PERFORMANCE COMPUTING APPLICATIONS*, 18(1):21–45, APR 2004.
- [2060] M. Püschel, M. Rötteler, and T. Beth. Fast quantum Fourier transforms for a class of non-abelian groups. In *Applied algebra, algebraic algorithms and error-correcting codes (Honolulu, HI, 1999)*, volume 1719 of *Lecture Notes in Comput. Sci.*, pages 148–159. Springer, Berlin, 1999.

- [2061] M. Püschel, B. Singer, M. Veloso, and J. M. F. Moura. Fast Automatic Generation of DSP Algorithms. In *Proc. ICCS 2001*, LNCS 2073, pages 97–106. Springer, 2001.
- [2062] B. Putrycz. Commutator subgroups of Hantzsche-Wendt groups. *J. Group Theory*, 10(3):401–409, 2007.
- [2063] B. Putrycz and A. Szczepański. Existence of spin structures on flat four-manifolds. *Adv. Geom.*, 10(2):323–332, 2010.
- [2064] A. Quadrat. Grade filtration of linear functional systems. *Acta Appl. Math.*, 127:27–86, 2013.
- [2065] S. G. Quek, K. B. Wong, and P. C. Wong. On certain pairs of non-Engel elements in finite groups. *J. Algebra Appl.*, 12(5):1250213, 9, 2013.
- [2066] S. G. Quek, K. B. Wong, and P. C. Wong. On n -Engel pair satisfying certain conditions. *J. Algebra Appl.*, 13(4):1350135, 8, 2014.
- [2067] M. I. Qureshi and B. Szendrői. Constructing projective varieties in weighted flag varieties. *Bull. Lond. Math. Soc.*, 43(4):786–798, 2011.
- [2068] A. Raggi-Cárdenas and L. Valero-Elizondo. Two nonisomorphic groups of order 96 with isomorphic tables of marks and noncorresponding centres and abelian subgroups. *Comm. Algebra*, 37(1):209–212, 2009.
- [2069] A. G. Raggi-Cárdenas and L. Valero-Elizondo. Groups with isomorphic Burnside rings. *Arch. Math. (Basel)*, 84(3):193–197, 2005.
- [2070] M. F. Ragland. Generalizations of groups in which normality is transitive. *Comm. Algebra*, 35(10):3242–3252, 2007.
- [2071] P. K. Rai. On commuting automorphisms of finite p -groups. *Proc. Japan Acad. Ser. A Math. Sci.*, 91(5):57–60, 2015.
- [2072] P. K. Rai and M. K. Yadav. On Sh-rigidity of groups of order p^6 . *J. Algebra*, 428:26–42, 2015.
- [2073] I. Raievska. *The additive groups of finite local nearrings*. PhD thesis, Institute of Mathematics, National Academy of Sciences of Ukraine, Kyiv, 2012.
- [2074] I. Raievska, M. Raievska, and Y. P. Sysak. Local nearrings on non-metacyclic miller-moreno groups. *Bulletin of Taras Shevchenko National University of Kyiv. Series: Physics and Mathematics*, 3:39–46, 2012.
- [2075] M. Raievska. *Multiplicative groups of finite local nearrings*. PhD thesis, Institute of Mathematics, National Academy of Sciences of Ukraine, Kyiv, 2012.
- [2076] A. Ram and A. V. Shepler. Classification of graded Hecke algebras for complex reflection groups. *Comment. Math. Helv.*, 78(2):308–334, 2003.
- [2077] S. Rashid, N. H. Sarmin, A. Erfanian, N. M. M. Ali, and R. Zainal. On the nonabelian tensor square and capability of groups of order $8q$. *Indag. Math. (N.S.)*, 24(3):581–588, 2013.

- [2078] D. Rattaggi. Anti-tori in square complex groups. *Geom. Dedicata*, 114:189–207, 2005.
- [2079] D. Rattaggi. A finitely presented torsion-free simple group. *J. Group Theory*, 10(3):363–371, 2007.
- [2080] D. Rattaggi. Three amalgams with remarkable normal subgroup structures. *J. Pure Appl. Algebra*, 210(2):537–541, 2007.
- [2081] N. Reading. Order dimension, strong Bruhat order and lattice properties for posets. *Order*, 19(1):73–100, 2002.
- [2082] M. Reeder. Formal degrees and L -packets of unipotent discrete series representations of exceptional p -adic groups. *J. Reine Angew. Math.*, 520:37–93, 2000. With an appendix by Frank Lübeck.
- [2083] S. Rees. Automatic groups associated with word orders other than shortlex. *Internat. J. Algebra Comput.*, 8(5):575–598, 1998.
- [2084] S. Rees and L. H. Soicher. An algorithmic approach to fundamental groups and covers of combinatorial cell complexes. *J. Symbolic Comput.*, 29(1):59–77, 2000.
- [2085] E. O. Regueiro. Flag-transitive automorphism groups of almost simple type, with alternating or sporadic socle. *European Journal of Combinatorics*, 2004. Submitted.
- [2086] E. O. Regueiro. On primitivity and reduction for flag-transitive symmetric designs. *J. Combin. Theory Ser. A*, 109(1):135–148, 2005.
- [2087] M. Reid. Tile homotopy groups. *Enseign. Math. (2)*, 49(1-2):123–155, 2003.
- [2088] V. Reiner, F. Saliola, and V. Welker. Spectra of symmetrized shuffling operators. *Mem. Amer. Math. Soc.*, 228(1072):vi+109, 2014.
- [2089] V. Reiner and D. I. Stamate. Koszul incidence algebras, affine semigroups, and Stanley-Reisner ideals. *Adv. Math.*, 224(6):2312–2345, 2010.
- [2090] B. Reinert and D. Zeckzer. Coset enumeration using prefix Gröbner bases: an experimental approach. *LMS J. Comput. Math.*, 4:74–134 (electronic), 2001.
- [2091] N. Rennert. A parallel multi-modular algorithm for computing Lagrange resolvents. *J. Symbolic Comput.*, 37(5):547–556, 2004.
- [2092] N. Rennert and A. Valibouze. Calcul de résolvantes avec les modules de Cauchy. *Experiment. Math.*, 8(4):351–366, 1999.
- [2093] D. O. Revin and E. P. Vdovin. Hall subgroups of finite groups. In *Ischia group theory 2004*, volume 402 of *Contemp. Math.*, pages 229–263. Amer. Math. Soc., Providence, RI, 2006.
- [2094] D. O. Revin and E. P. Vdovin. On the number of classes of conjugate Hall subgroups in finite simple groups. *J. Algebra*, 324(12):3614–3652, 2010.
- [2095] C. Riener, T. Theobald, L. J. Andrén, and J. B. Lasserre. Exploiting symmetries in SDP-relaxations for polynomial optimization. *Math. Oper. Res.*, 38(1):122–141, 2013.

- [2096] U. Riese. The quasisimple case of the $k(GV)$ -conjecture. *J. Algebra*, 235(1):45–65, 2001.
- [2097] U. Riese. Counting conjugacy classes of certain semidirect products. *J. Group Theory*, 7(2):143–165, 2004.
- [2098] J. Roberts. An algorithm for low dimensional group homology. *Homology, Homotopy Appl.*, 12(1):27–37, 2010.
- [2099] G. R. Robinson. On simple endotrivial modules. *Bull. Lond. Math. Soc.*, 43(4):712–716, 2011.
- [2100] N. R. Rocco. A crossed embedding of groups and the computation of certain invariants of finite solvable groups. *Mat. Contemp.*, 7:19–24, 1994. XII School of Algebra, Part II (Portuguese) (Diamantina, 1992).
- [2101] N. R. Rocco. A presentation for a crossed embedding of finite solvable groups. *Comm. Algebra*, 22(6):1975–1998, 1994.
- [2102] M. Röder. The quasiregular projective planes of order 16. *Glas. Mat. Ser. III*, 43(63)(2):231–242, 2008.
- [2103] F. Röhr. Die brauer-charaktere der sporadisch einfachen rudvalis-gruppe in den charakteristiken 13 und 29. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 2000.
- [2104] A. M. Rojas. Group actions on Jacobian varieties. *Rev. Mat. Iberoam.*, 23(2):397–420, 2007.
- [2105] A. Romero and J. Rubio. Computing the homology of groups: the geometric way. *J. Symbolic Comput.*, 47(7):752–770, 2012.
- [2106] A. Romero and J. Rubio. Homotopy groups of suspended classifying spaces: an experimental approach. *Math. Comp.*, 82(284):2237–2244, 2013.
- [2107] N. Romero. Computing Whitehead groups using genetic bases. *J. Algebra*, 450:646–666, 2016.
- [2108] C. M. Roney-Dougal. Conjugacy of subgroups of the general linear group. *Experiment. Math.*, 13(2):151–163, 2004.
- [2109] C. M. Roney-Dougal. The primitive permutation groups of degree less than 2500. *J. Algebra*, 292(1):154–183, 2005.
- [2110] C. M. Roney-Dougal and W. R. Unger. The affine primitive permutation groups of degree less than 1000. *J. Symbolic Comput.*, 35(4):421–439, 2003.
- [2111] D. Roozmond. *Algorithms for Lie Algebras of Algebraic Groups*. PhD thesis, Technische Universiteit Eindhoven, 2010.
- [2112] J. C. Rosales, M. B. Branco, and D. Torrão. On the enumeration of the set of saturated numerical semigroups of a given genus. *Semigroup Forum*, 88(3):621–630, 2014.

- [2113] J. C. Rosales and P. A. García-Sánchez. Constructing almost symmetric numerical semi-groups from irreducible numerical semigroups. *Comm. Algebra*, 42(3):1362–1367, 2014.
- [2114] S. Rosebrock. *Geometrische Gruppentheorie - Ein Einstieg mit dem Computer*. Basiswissen für Studium und Mathematikunterricht. Vieweg, Wiesbaden, 2004.
- [2115] J. Rosenboom. On the computation of Kazhdan-Lusztig polynomials and representations of Hecke algebras. *Arch. Math. (Basel)*, 66(1):35–50, 1996.
- [2116] J. Rosenboom. A distributed algorithm for the construction of invariant subspaces. *LECT NOTES CONTR INF*, 226:138–142, 1997.
- [2117] R. Rossmanith. Lie centre-by-metabelian group algebras in even characteristic. I, II. *Israel J. Math.*, 115:51–75, 77–99, 2000.
- [2118] T. Rossmann. Computing topological zeta functions of groups, algebras, and modules, II. *J. Algebra*, 444:567–605, 2015.
- [2119] B. Rothe. Konjugiertenklassen in Gruppen von Primzahlpotenzordnung. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1993.
- [2120] E. C. Rowell and I. Tuba. Finite linear quotients of \mathcal{B}_3 of low dimension. *J. Knot Theory Ramifications*, 19(5):587–600, 2010.
- [2121] P. Rowley and P. Taylor. Normalizers of 2-subgroups in black-box groups. *LMS J. Comput. Math.*, 13:307–319, 2010.
- [2122] P. Rowley and P. Taylor. Involutions in Janko’s simple group J_4 . *LMS J. Comput. Math.*, 14:238–253, 2011.
- [2123] P. Rowley and B. Wright. Structure of the Fi'_{24} maximal 2-local geometry point-line collinearity graph. *LMS J. Comput. Math.*, 19(1):105–154, 2016.
- [2124] P. J. Rowley. Plane-line collinearity graph of the M_{24} minimal parabolic geometry. *Ars Combin.*, 73:257–262, 2004.
- [2125] D. Ruberman. Isospectrality and 3-manifold groups. *Proc. Amer. Math. Soc.*, 129(8):2467–2471 (electronic), 2001.
- [2126] A. S. Rufino Ferreira and M. Arcak. A graph partitioning approach to predicting patterns in lateral inhibition systems. *SIAM J. Appl. Dyn. Syst.*, 12(4):2012–2031, 2013.
- [2127] F. G. Russo. On a problem of P. Hall for Engel words II. *Bull. Aust. Math. Soc.*, 90(2):237–246, 2014.
- [2128] L. J. Rylands and D. E. Taylor. Matrix generators for the orthogonal groups. *J. Symbolic Comput.*, 25(3):351–360, 1998.
- [2129] L. J. Rylands and D. E. Taylor. Constructions for octonion and exceptional Jordan algebras. *Des. Codes Cryptogr.*, 21(1-3):191–203, 2000. Special issue dedicated to Dr. Jaap Seidel on the occasion of his 80th birthday (Oisterwijk, 1999).

- [2130] A. Sadeghieh and K. Ahmadidelir. n -th roots in finite polyhedral and centro-polyhedral groups. *Proc. Indian Acad. Sci. Math. Sci.*, 125(4):487–499, 2015.
- [2131] F. Saeedi and M. Farrokhi D. G. Factorization numbers of some finite groups. *Glasg. Math. J.*, 54(2):345–354, 2012.
- [2132] F. Saeedi, M. Farrokhi D. G., and S. H. Jafari. Subgroup normality degrees of finite groups. I. *Arch. Math. (Basel)*, 96(3):215–224, 2011.
- [2133] M. A. M. Salim. Torsion units in the integral group ring of the alternating group of degree 6. *Comm. Algebra*, 35(12):4198–4204, 2007.
- [2134] B. Sambale. Cartan matrices and Brauer’s $k(B)$ -conjecture II. *J. Algebra*, 337:345–362, 2011.
- [2135] B. Sambale. Blocks with central product defect group $D_{2^n} * C_{2^m}$. *Proc. Amer. Math. Soc.*, 141(12):4057–4069, 2013.
- [2136] B. Sambale. Blocks with defect group $Q_{2^n} \times C_{2^m}$ and $SD_{2^n} \times C_{2^m}$. *Algebr. Represent. Theory*, 16(6):1717–1732, 2013.
- [2137] B. Sambale. Further evidence for conjectures in block theory. *Algebra Number Theory*, 7(9):2241–2273, 2013.
- [2138] B. Sambale. Exponent and p -rank of finite p -groups and applications. *Arch. Math. (Basel)*, 103(1):11–20, 2014.
- [2139] B. Sambale. On the Brauer-Feit bound for abelian defect groups. *Math. Z.*, 276(3-4):785–797, 2014.
- [2140] M. Sampels. Visualization of automorphisms and vertex-symmetry. *PARALLEL PROCESSING APPLIED MATHEMATICS*, pages 35–41, 2002.
- [2141] R. Sánchez-García. Bredon homology and equivariant K -homology of $SL(3, \mathbb{Z})$. *J. Pure Appl. Algebra*, 212(5):1046–1059, 2008.
- [2142] R. J. Sánchez-García. Equivariant K -homology for some Coxeter groups. *J. Lond. Math. Soc. (2)*, 75(3):773–790, 2007.
- [2143] R. Sandling. Presentations for unit groups of modular group algebras of groups of order 16. *Math. Comp.*, 59(200):689–701, 1992.
- [2144] J. Sangroniz and J. Tent. 2-groups with few rational conjugacy classes. *J. Algebra*, 338:114–121, 2011.
- [2145] J. Sangroniz and J. Tent. 2-groups with a fixed number of real conjugacy classes. *J. Algebra*, 392:42–51, 2013.
- [2146] A. D. Sankey. Weighted association schemes, fusions, and minimal coherent closures. *J. Algebraic Combin.*, 41(3):785–815, 2015.

- [2147] J. Sarmiento. Resolutions of $PG(5, 2)$ with point-cyclic automorphism group. *J. Combin. Des.*, 8(1):2–14, 2000.
- [2148] J. F. Sarmiento. On point-cyclic resolutions of the $2-(63, 7, 15)$ design associated with $PG(5, 2)$. *Graphs Combin.*, 18(3):621–632, 2002.
- [2149] N. Sarmin. *On two-generator groups of nilpotency class two and their nonabelian tensor squares*. ProQuest LLC, Ann Arbor, MI, 1998. Thesis (Ph.D.)—State University of New York at Binghamton.
- [2150] H. Sasaki. Mod 7 cohomology algebra of Held simple group. *Algebr. Represent. Theory*, 6(4):369–392, 2003.
- [2151] D. M. Savchuk and S. N. Sidki. Affine automorphisms of rooted trees. *Geom. Dedicata*, 183:195–213, 2016.
- [2152] M. Sawa. Optical orthogonal signature pattern codes with maximum collision parameter 2 and weight 4. *IEEE Trans. Inform. Theory*, 56(7):3613–3620, 2010.
- [2153] H. Sawada. On a certain algebraic property of block ciphers. *IEICE T FUND ELECTR E*, 84A(5):1130–1134, 2001.
- [2154] P. Schauenburg. Computing higher Frobenius-Schur indicators in fusion categories constructed from inclusions of finite groups. *Pacific J. Math.*, 280(1):177–201, 2016.
- [2155] M. Scherner. Erweiterung einer Arithmetik von Kreisteilungskörpern und deren Implementation in GAP. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1992.
- [2156] J. Schlage-Puchta. The subgroup growth spectrum of virtually free groups. *Israel J. Math.*, 177:229–251, 2010.
- [2157] J. Schlage-Puchta and J. Wolfart. How many quasiplatonic surfaces? *Arch. Math. (Basel)*, 86(2):129–132, 2006.
- [2158] R. Schmied and K. K. Lehmann. Computer-generated character tables and nuclear spin statistical weights: Application to benzene dimer and methane dimer. *Journal of Molecular Spectroscopy*, 2004. To appear.
- [2159] R. Schmitt-Hartmann. Zerlegung von modularen Matrixdarstellungen der Kleinschen Vierergruppe und von Kroneckermoduln über endlichen Körpern. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1993.
- [2160] C. Schneider. Groups of prime-power order with a small second derived quotient. *J. Algebra*, 266(2):539–551, 2003.
- [2161] C. Schneider. A computer-based approach to the classification of nilpotent Lie algebras. *Experiment. Math.*, 14(2):153–160, 2005.
- [2162] C. Schneider. Small derived quotients in finite p -groups. *Publ. Math. Debrecen*, 69(3):373–378, 2006.

- [2163] C. Schneider and H. Usefi. The isomorphism problem for universal enveloping algebras of nilpotent Lie algebras. *J. Algebra*, 337:126–140, 2011.
- [2164] C. Schneider and H. Van Maldeghem. Primitive flag-transitive generalized hexagons and octagons. *J. Combin. Theory Ser. A*, 115(8):1436–1455, 2008.
- [2165] M. Schönert. Konzeption und Implementation des Programmiersystems GAP für die Algorithmische Gruppentheorie. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, March 1987.
- [2166] M. Schönert. An invitation to GAP. *Comp. Sci. J. of Moldova*, 3, 1994.
- [2167] M. Schönert and A. Seress. Finding blocks of imprimitivity in small base groups in nearly linear time. In *Proc. ISSAC 94*, 1994.
- [2168] E. Schulte. The inductive blockwise Alperin weight condition for $G_2(q)$ and ${}^3D_4(q)$. *J. Algebra*, 466:314–369, 2016.
- [2169] A. Schürmann. Perfect, strongly eutactic lattices are periodic extreme. *Adv. Math.*, 225(5):2546–2564, 2010.
- [2170] K. See and S. Y. Song. Association schemes of small order. *J. Statist. Plann. Inference*, 73(1-2):225–271, 1998. R. C. Bose Memorial Conference (Fort Collins, CO, 1995).
- [2171] U. Seidel. Exceptional sequences for quivers of Dynkin type. *Comm. Algebra*, 29(3):1373–1386, 2001.
- [2172] A. Seress. The minimal base size of primitive solvable permutation groups. *J. London Math. Soc. (2)*, 53(2):243–255, 1996.
- [2173] A. Seress. Primitive groups with no regular orbits on the set of subsets. *Bull. London Math. Soc.*, 29(6):697–704, 1997.
- [2174] A. Seress. Nearly linear time algorithms for permutation groups: an interplay between theory and practice. *Acta Appl. Math.*, 52(1-3):183–207, 1998. Algebra and combinatorics: interactions and applications (Königstein, 1994).
- [2175] A. Seress. On vertex-transitive, non-Cayley graphs of order pqr . *Discrete Math.*, 182(1-3):279–292, 1998. Graph theory (Lake Bled, 1995).
- [2176] A. Seress. All lambda-designs with $\lambda = 2p$ are type-1. *Des. Codes Cryptogr.*, 22(1):5–17, 2001.
- [2177] A. Seress. *Permutation group algorithms*, volume 152 of *Cambridge Tracts in Mathematics*. Cambridge University Press, Cambridge, 2003.
- [2178] A. Seress and E. Swartz. A family of near-polygonal graphs of valency 10. *Ann. Comb.*, 16(4):891–903, 2012.
- [2179] A. Seress, T. Wong, and X. Zhu. Distinguishing labeling of the actions of almost simple groups. *Combinatorica*, 31(4):489–506, 2011.

- [2180] M. Sezer and O. Ünlü. Hilbert ideals of vector invariants of s_2 and S_3 . *J. Lie Theory*, 22(4):1181–1196, 2012.
- [2181] T. Shaska. Some special families of hyperelliptic curves. *J. Algebra Appl.*, 3(1):75–89, 2004.
- [2182] T. Shaska. Subvarieties of the hyperelliptic moduli determined by group actions. *Serdica Math. J.*, 32(4):355–374, 2006.
- [2183] R. Shaw. Subsets of $PG(n, 2)$ and maximal partial spreads in $PG(4, 2)$. *Des. Codes Cryptogr.*, 21(1-3):209–222, 2000. Special issue dedicated to Dr. Jaap Seidel on the occasion of his 80th birthday (Oisterwijk, 1999).
- [2184] R. Shen. On groups with given same-order types. *Comm. Algebra*, 40(6):2140–2150, 2012.
- [2185] Y. Shen. Tangent cone of numerical semigroup rings of embedding dimension three. *Comm. Algebra*, 39(5):1922–1940, 2011.
- [2186] J. Shi and L. Wang. Automorphism groups of the imprimitive complex reflection groups. *J. Aust. Math. Soc.*, 86(1):123–138, 2009.
- [2187] T. Shiina. Rigid braid orbits related to $PSL_2(p^2)$ and some simple groups. *Tohoku Math. J. (2)*, 55(2):271–282, 2003.
- [2188] M. W. Short. *The primitive soluble permutation groups of degree less than 256*, volume 1519 of *Lecture Notes in Mathematics*. Springer-Verlag, Berlin, 1992.
- [2189] M. W. Short. A conjecture about free Lie algebras. *Comm. Algebra*, 23(8):3051–3057, 1995.
- [2190] S. Siciliano. Cartan subalgebras in Lie algebras of associative algebras. *Comm. Algebra*, 34(12):4513–4522, 2006.
- [2191] S. N. Sidki. Functionally recursive rings of matrices—two examples. *J. Algebra*, 322(12):4408–4429, 2009.
- [2192] J. Siekmann, C. Benz Müller, A. Fiedler, A. Meier, I. Normann, and M. Pollet. Proof development with Ω mega: the irrationality of $\sqrt{2}$. In *Thirty-five years of automating mathematics*, volume 28 of *Appl. Log. Ser.*, pages 271–314. Kluwer Acad. Publ., Dordrecht, 2003.
- [2193] J. Siekmann, C. Benz Müller, A. Fiedler, A. Meier, and M. Pollet. Proof development with ω mega: root 2 is irrational. *LOGIC FOR PROGRAMMING, ARTIFICIAL INTELLIGENCE, AND REASONING*, pages 367–387, 2002.
- [2194] M. D. Sikirić, Y. Itoh, and A. Poyarkov. Cube packings, second moment and holes. *European Journal of Combinatorics*, 28(3):715–725, 2007.
- [2195] M. D. Sikirić, A. Schürmann, and F. Vallentin. Classification of eight-dimensional perfect forms. *Electron. Res. Announc. Amer. Math. Soc.*, 13:21–32 (electronic), 2007.
- [2196] A. Silverberg and Y. G. Zarhin. Inertia groups and abelian surfaces. *J. Number Theory*, 110(1):178–198, 2005.

- [2197] I. I. Simion. Double centralizers of unipotent elements in simple algebraic groups of type G_2 , F_4 and E_6 . *J. Algebra*, 382:335–367, 2013.
- [2198] I. I. Simion. Double centralizers of unipotent elements in simple algebraic groups of type E_7 and E_8 . *J. Pure Appl. Algebra*, 219(4):930–977, 2015.
- [2199] J. Simonis. The $[23, 14, 5]$ Wagner code is unique. *Discrete Math.*, 213(1-3):269–282, 2000. Selected topics in discrete mathematics (Warsaw, 1996).
- [2200] C. C. Sims. *Computation with finitely presented groups*, volume 48 of *Encyclopedia of Mathematics and its Applications*. Cambridge University Press, Cambridge, 1994.
- [2201] G. Skersys. Computing permutation groups of error-correcting codes. *Liet. Mat. Rink.*, 40(Special Issue):320–328, 2000.
- [2202] M. Skotiniotis, A. Roy, and B. C. Sanders. On the epistemic view of quantum states. *J. Math. Phys.*, 49(8):082103, 13, 2008.
- [2203] E. Skrzypczyk. Charaktertafeln von p -Gruppen. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1992.
- [2204] M. C. Slattery. Generation of groups of square-free order. *J. Symbolic Comput.*, 42(6):668–677, 2007.
- [2205] M. C. Slattery and A. L. Zenisek. Moufang loops of order 243. *Comment. Math. Univ. Carolin.*, 53(3):423–428, 2012.
- [2206] J. D. H. Smith. Sylow theory for quasigroups. *J. Combin. Des.*, 23(3):115–133, 2015.
- [2207] J. P. Smith. Intervals of permutations with a fixed number of descents are shellable. *Discrete Math.*, 339(1):118–126, 2016.
- [2208] M. Smith. Computing automorphisms of finite soluble groups. *B AUST MATH SOC*, 53(1):169–171, 1996.
- [2209] S. D. Smith and K. L. Umland. Stability of cohomology via double-coset products and suborbit diagrams. *J. Algebra*, 182(3):627–652, 1996.
- [2210] B. Sodaigui. Classes de Steinitz d’extensions galoisiennes à groupe de Galois un 2-groupe. *Funct. Approx. Comment. Math.*, 48(part 2):183–196, 2013.
- [2211] L. H. Soicher. GRAPE: a system for computing with graphs and groups. In *Groups and computation (New Brunswick, NJ, 1991)*, volume 11 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 287–291. Amer. Math. Soc., Providence, RI, 1993.
- [2212] L. H. Soicher. Three new distance-regular graphs. *European J. Combin.*, 14(5):501–505, 1993. Algebraic combinatorics (Vladimir, 1991).
- [2213] L. H. Soicher. Coset enumeration, permutation group algorithms, and applications to graphs and geometries. In *EIDMA Minicourse: Computer Algebra with Emphasis on Discrete Algebra and Geometry*, Eindhoven, 1994. Euler Institute for Discrete Mathematics and its Applications.

- [2214] L. H. Soicher. Yet another distance-regular graph related to a Golay code. *Electron. J. Combin.*, 2:Note 1, approx. 4 pp. (electronic), 1995.
- [2215] L. H. Soicher. On the structure and classification of SOMAs: generalizations of mutually orthogonal Latin squares. *Electron. J. Combin.*, 6:Research Paper 32, 15 pp. (electronic), 1999.
- [2216] L. H. Soicher. Is there a McLaughlin geometry? *J. Algebra*, 300(1):248–255, 2006.
- [2217] L. H. Soicher. More on block intersection polynomials and new applications to graphs and block designs. *J. Combin. Theory Ser. A*, 117(7):799–809, 2010.
- [2218] L. H. Soicher. On generalised t -designs and their parameters. *Discrete Math.*, 311(13):1136–1141, 2011.
- [2219] L. H. Soicher. Uniform semi-Latin squares and their Schur-optimality. *J. Combin. Des.*, 20(6):265–277, 2012.
- [2220] L. H. Soicher. Optimal and efficient semi-Latin squares. *J. Statist. Plann. Inference*, 143(3):573–582, 2013.
- [2221] L. H. Soicher. On cliques in edge-regular graphs. *J. Algebra*, 421:260–267, 2015.
- [2222] E. Sonnenschein. Designs in gruppen und homogenen raeumen. Diplomarbeit, Lehrstuhl B für Mathematik, RWTH, Aachen, 1993.
- [2223] A. Sonnino. Transitive hyperovals in finite projective planes. *Australas. J. Combin.*, 33:335–347, 2005.
- [2224] A. Sonnino. Transitive $PSL(2, 7)$ -invariant 42-arcs in 3-dimensional projective spaces. *Des. Codes Cryptogr.*, 72(2):455–463, 2014.
- [2225] V. Sorge. Non-trivial symbolic computations in proof planning. In *Frontiers of combining systems (Nancy, 2000)*, volume 1794 of *Lecture Notes in Comput. Sci.*, pages 121–135. Springer, Berlin, 2000.
- [2226] V. Sorge, S. Colton, R. McCasland, and A. Meier. Classification results in quasigroup and loop theory via a combination of automated reasoning tools. *Comment. Math. Univ. Carolin.*, 49(2):319–339, 2008.
- [2227] N. Sottocornola. Simple homoclinic cycles in low-dimensional spaces. *J. Differential Equations*, 210(1):135–154, 2005.
- [2228] B. Souvignier. Irreducible finite integral matrix groups of degree 8 and 10. *Math. Comp.*, 63(207):335–350, 1994. With microfiche supplement.
- [2229] B. Souvignier. *Erweiterungen von analytischen pro-p-Gruppen mit endlichen Gruppen vom klassischem Typ*. PhD thesis, RWTH, Aachen, 1995.
- [2230] H. Spence. Character relations. Senior thesis, Eastern Illinois, 2002.

- [2231] P. Spiga. Permutation characters and fixed-point-free elements in permutation groups. *J. Algebra*, 299(1):1–7, 2006.
- [2232] P. Spiga. Elementary abelian p -groups of rank greater than or equal to $4p - 2$ are not CI-groups. *J. Algebraic Combin.*, 26(3):343–355, 2007.
- [2233] P. Spiga. CI-property of elementary abelian 3-groups. *Discrete Math.*, 309(10):3393–3398, 2009.
- [2234] P. Spiga. Enumerating groups acting regularly on a d -dimensional cube. *Comm. Algebra*, 37(7):2540–2545, 2009.
- [2235] P. Spiga. Automorphism groups of tetravalent Cayley graphs on regular 5-groups. *Ars Combin.*, 105:33–43, 2012.
- [2236] E. L. Spitznagel. Review of mathematical software, GAP. *Notices Amer. Math. Soc.*, 41(7):780–782, September 1994.
- [2237] J. Spreer. Combinatorial 3-manifolds with transitive cyclic symmetry. *Discrete Comput. Geom.*, 51(2):394–426, 2014.
- [2238] B. Srinivasan. On CRDAHA and finite general linear and unitary groups. *Pacific J. Math.*, 279(1-2):465–480, 2015.
- [2239] D. Stanovský and P. Vojtěchovský. Abelian extensions and solvable loops. *Results Math.*, 66(3-4):367–384, 2014.
- [2240] D. Stanovský and P. Vojtěchovský. Commutator theory for loops. *J. Algebra*, 399:290–322, 2014.
- [2241] A. M. Staroletov. Groups isospectral to the alternating group of degree 10. *Sibirsk. Mat. Zh.*, 51(3):638–648, 2010.
- [2242] R. Staszewski. Matrix multiplication over small finite fields on mimd architectures. *LECT NOTES CONTR INF*, 226:183–201, 1997.
- [2243] A. Stoimenow. Tabulating and distinguishing mutants. *Internat. J. Algebra Comput.*, 20(4):525–559, 2010.
- [2244] A. Stoimenow and T. Tanaka. Mutation and the colored Jones polynomial. *J. Gökova Geom. Topol. GGT*, 3:44–78, 2009.
- [2245] K. Stokes. Patterns of ideals of numerical semigroups. *Semigroup Forum*, 93(1):180–200, 2016.
- [2246] D. S. Stones. The many formulae for the number of Latin rectangles. *Electron. J. Combin.*, 17(1):Article 1, 46, 2010.
- [2247] D. S. Stones. The parity of the number of quasigroups. *Discrete Math.*, 310(21):3033–3039, 2010.

- [2248] D. S. Stones. Symmetries of partial Latin squares. *European J. Combin.*, 34(7):1092–1107, 2013.
- [2249] D. S. Stones, P. Vojtěchovský, and I. M. Wanless. Cycle structure of autotopisms of quasi-groups and Latin squares. *J. Combin. Des.*, 20(5):227–263, 2012.
- [2250] M. Stroppel. Locally compact groups with few orbits under automorphisms. In *Proceedings of the 16th Summer Conference on General Topology and its Applications (New York)*, volume 26, pages 819–842, 2001/02.
- [2251] O. Šuch. On families of additive exponential sums. *Finite Fields Appl.*, 11(4):700–723, 2005.
- [2252] A. I. Suciú. Fundamental groups of line arrangements: enumerative aspects. In *Advances in algebraic geometry motivated by physics (Lowell, MA, 2000)*, volume 276 of *Contemp. Math.*, pages 43–79. Amer. Math. Soc., Providence, RI, 2001.
- [2253] A. I. Suciú. Translated tori in the characteristic varieties of complex hyperplane arrangements. *Topology Appl.*, 118(1-2):209–223, 2002. Arrangements in Boston: a Conference on Hyperplane Arrangements (1999).
- [2254] I. A. I. Suleiman, P. G. Walsh, and R. A. Wilson. Conjugacy classes in sporadic simple groups. *Comm. Algebra*, 28(7):3209–3222, 2000.
- [2255] I. A. I. Suleiman and R. A. Wilson. The 2-modular characters of Conway’s group Co_2 . *Math. Proc. Cambridge Philos. Soc.*, 116(2):275–283, 1994.
- [2256] I. A. I. Suleiman and R. A. Wilson. The 2-modular characters of Conway’s third group Co_3 . *J. Symbolic Comput.*, 24(3-4):493–506, 1997. Computational algebra and number theory (London, 1993).
- [2257] I. A. I. Suleiman and R. A. Wilson. Covering and automorphism groups of $\text{U}_6(2)$. *Quart. J. Math. Oxford Ser. (2)*, 48(192):511–517, 1997.
- [2258] I. A. I. Suleiman and R. A. Wilson. Construction of exceptional covers of generic groups. *Math. Proc. Cambridge Philos. Soc.*, 125(1):31–38, 1999.
- [2259] R. Suter. Quantum affine Cartan matrices, Poincaré series of binary polyhedral groups, and reflection representations. *Manuscripta Math.*, 122(1):1–21, 2007.
- [2260] D. Sutherland. *Computer-assisted proofs and the $F^{a,b,c}$ conjecture*. PhD thesis, University of St Andrews, 2006.
- [2261] J. R. Swallow. Quadratic descent for quaternion algebras. *Comm. Algebra*, 29(10):4523–4544, 2001.
- [2262] J. R. Swallow and F. N. Thiem. Quadratic corestriction, C_2 -embedding problems, and explicit construction. *Comm. Algebra*, 30(7):3227–3258, 2002.
- [2263] C. Szántó and I. Szöllösi. Hall polynomials and the Gabriel-Roiter submodules of simple homogeneous modules. *Bull. Lond. Math. Soc.*, 47(2):206–216, 2015.

- [2264] M. Szóke. *Examining Green Correspondents of Weight Modules*. PhD thesis, RWTH, Aachen, 1998.
- [2265] I. Szöllösi. Computing the extensions of preinjective and preprojective Kronecker modules. *J. Algebra*, 408:205–221, 2014.
- [2266] B. Taeri. On a permutability problem for groups. *J. Appl. Math. Comput.*, 20(1-2):75–96, 2006.
- [2267] B. Taeri. On finite groups with some conditions on subsets. *Bull. Malays. Math. Sci. Soc. (2)*, 32(1):63–73, 2009.
- [2268] F. Taherkhani. The Kazhdan property of the mapping class group of closed surfaces and the first cohomology group of its cofinite subgroups. *Experiment. Math.*, 9(2):261–274, 2000.
- [2269] M. C. Tamburini and E. P. Vdovin. Carter subgroups in finite groups. *J. Algebra*, 255(1):148–163, 2002.
- [2270] A. Terras. *Fourier analysis on finite groups and applications*, volume 43 of *London Mathematical Society Student Texts*. Cambridge University Press, Cambridge, 1999.
- [2271] H. Theißen. Methoden zur Bestimmung der rationalen Konjugiertheit in endlichen Gruppen. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1993.
- [2272] H. Theißen. *Eine Methode zur Normalisatorberechnung in Permutationsgruppen mit Anwendungen in der Konstruktion primitiver Gruppen*. PhD thesis, RWTH, Aachen, 1997.
- [2273] U. Thiel. A counter-example to Martino’s conjecture about generic Calogero-Moser families. *Algebr. Represent. Theory*, 17(5):1323–1348, 2014.
- [2274] U. Thiel. Champ: a Cherednik algebra Magma package. *LMS J. Comput. Math.*, 18(1):266–307, 2015.
- [2275] R. M. Thomas. Group presentations where the relators are proper powers. In *Groups ’93 Galway/St. Andrews, Vol. 2*, volume 212 of *London Math. Soc. Lecture Note Ser.*, pages 549–560. Cambridge Univ. Press, Cambridge, 1995.
- [2276] D. Tian and S. Zhou. Flag-transitive point-primitive symmetric (v, k, λ) designs with λ at most 100. *J. Combin. Des.*, 21(4):127–141, 2013.
- [2277] D. Tian and S. Zhou. Flag-transitive 2- (v, k, λ) symmetric designs with sporadic socle. *J. Combin. Des.*, 23(4):140–150, 2015.
- [2278] A. V. Timofeenko. On generating triples of involutions of large sporadic groups. *Diskret. Mat.*, 15(2):103–112, 2003.
- [2279] A. V. Timofeenko. Non-Platonic and non-Archimedean noncomposite polyhedra. *Fundam. Prikl. Mat.*, 14(2):179–205, 2008.
- [2280] B. Tolve and A. Erfanian. Relative non-commuting graph of a finite group. *J. Algebra Appl.*, 12(2):1250157, 11, 2013.

- [2281] H. P. Tong-Viet. Symmetric groups are determined by their character degrees. *J. Algebra*, 334:275–284, 2011.
- [2282] H. P. Tong-Viet. Alternating and sporadic simple groups are determined by their character degrees. *Algebr. Represent. Theory*, 15(2):379–389, 2012.
- [2283] H. P. Tong-Viet. Simple exceptional groups of Lie type are determined by their character degrees. *Monatsh. Math.*, 166(3-4):559–577, 2012.
- [2284] H. P. Tong-Viet. Groups with some arithmetic conditions on real class sizes. *Acta Math. Hungar.*, 140(1-2):105–116, 2013.
- [2285] H. P. Tong-Viet. Rank 3 permutation characters and maximal subgroups. *Forum Math.*, 25(1):49–106, 2013.
- [2286] H. P. Tong-Viet. Finite groups whose irreducible Brauer characters have prime power degrees. *Israel J. Math.*, 202(1):295–319, 2014.
- [2287] H. P. Tong-Viet. Finite nonsolvable groups with many distinct character degrees. *Pacific J. Math.*, 268(2):477–492, 2014.
- [2288] H. P. Tong-Viet and T. P. Wakefield. On Huppert’s conjecture for the Monster and Baby Monster. *Monatsh. Math.*, 167(3-4):589–600, 2012.
- [2289] S. Topalova and S. Zhelezova. On point-transitive and transitive deficiency one parallelisms of $PG(3, 4)$. *Des. Codes Cryptogr.*, 75(1):9–19, 2015.
- [2290] S. Topalova and S. Zhelezova. New regular parallelisms of $PG(3, 5)$. *J. Combin. Des.*, 24(10):473–482, 2016.
- [2291] B. Totaro. Splitting fields for E_8 -torsors. *Duke Math. J.*, 121(3):425–455, 2004.
- [2292] A. Tsapok. Computer investigations of modular group algebras. In *Actual problems of mathematics and computer science. 2nd regional scientific conference of young researchers. Zaporozhye, Ukraine, April 22–23, 2004*, pages 31–32, 2004.
- [2293] A. Tsapok. Symmetric subgroups of the unit group of the modular group algebra of a finite p -group. In *X International Scientific Kravchuk Conference, Kyiv, Ukraine, May 13–15, 2004*, page 545, 2004.
- [2294] B. A. Tuan and G. Ellis. The homology of $SL_2(\mathbb{Z}[1/m])$ for small m . *J. Algebra*, 408:102–108, 2014.
- [2295] A. Turull. Strengthening the McKay conjecture to include local fields and local Schur indices. *J. Algebra*, 319(12):4853–4868, 2008.
- [2296] V. A. Ufnarovskij. Combinatorial and asymptotic methods in algebra [MR1060321 (92h:16024)]. In *Algebra, VI*, volume 57 of *Encyclopaedia Math. Sci.*, pages 1–196. Springer, Berlin, 1995.
- [2297] S. Ugolini. Graphs associated with the map $X \mapsto X + X^{-1}$ in finite fields of characteristic three and five. *J. Number Theory*, 133(4):1207–1228, 2013.

- [2298] S. Ugolini. Sequences of irreducible polynomials over odd prime fields via elliptic curve endomorphisms. *J. Number Theory*, 152:21–37, 2015.
- [2299] A. M. Uludağ. Galois coverings of the plane by $K3$ surfaces. *Kyushu J. Math.*, 59(2):393–419, 2005.
- [2300] W. R. Unger. Computing the character table of a finite group. *J. Symbolic Comput.*, 41(8):847–862, 2006.
- [2301] K. Uno. Conjectures on character degrees for the simple Thompson group. *Osaka J. Math.*, 41(1):11–36, 2004.
- [2302] L. Valero-Elizondo. Some simple projective Brauer quotients of simple modules for the symmetric groups in characteristic two. *J. Algebra*, 236(2):796–818, 2001.
- [2303] A. Valibouze. Computation of the Galois groups of the resolvent factors for the direct and inverse Galois problems. In *Applied algebra, algebraic algorithms and error-correcting codes (Paris, 1995)*, volume 948 of *Lecture Notes in Comput. Sci.*, pages 456–468. Springer, Berlin, 1995.
- [2304] A. Valibouze. Sur les relations entre les racines d’un polynôme. *Acta Arith.*, 131(1):1–27, 2008.
- [2305] J. van Bon. Finite primitive distance-transitive graphs. *European J. Combin.*, 28(2):517–532, 2007.
- [2306] J. van Bon, A. A. Ivanov, and J. Saxl. Affine distance-transitive graphs with sporadic stabilizer. *European J. Combin.*, 20(2):163–177, 1999.
- [2307] E. R. van Dam and M. Muzychuk. Some implications on amorphic association schemes. *J. Combin. Theory Ser. A*, 117(2):111–127, 2010.
- [2308] E. R. van Dam and R. Sotirov. Semidefinite programming and eigenvalue bounds for the graph partition problem. *Math. Program.*, 151(2, Ser. B):379–404, 2015.
- [2309] I. Van Gelder and G. Olteanu. Finite group algebras of nilpotent groups: a complete set of orthogonal primitive idempotents. *Finite Fields Appl.*, 17(2):157–165, 2011.
- [2310] M. van Pruijssen and P. Román. Matrix valued classical pairs related to compact Gelfand pairs of rank one. *SIGMA Symmetry Integrability Geom. Methods Appl.*, 10:Paper 113, 28, 2014.
- [2311] S. van Willigenberg. *The descent algebras of Coxeter groups*. PhD thesis, University of St Andrews, 1997.
- [2312] M. I. G. Vasco, A. L. P. del Pozo, and P. T. Duarte. A note on the security of MST_3 . *Des. Codes Cryptogr.*, 55(2-3):189–200, 2010.
- [2313] A. V. Vasil’ev. On the recognition of all finite nonabelian simple groups with orders having prime divisors at most 13. *Sibirsk. Mat. Zh.*, 46(2):315–324, 2005.

- [2314] A. V. Vasil'ev and E. P. Vdovin. An adjacency criterion in the prime graph of a finite simple group. *Algebra Logika*, 44(6):682–725, 764, 2005.
- [2315] A. V. Vasil'ev and E. P. Vdovin. Cocliques of maximal size in the prime graph of a finite simple group. *Algebra Logika*, 50(4):425–470, 554, 557, 2011.
- [2316] M. Vaughan-Lee. On 4-Engel groups. *LMS J. Comput. Math.*, 10:341–353 (electronic), 2007.
- [2317] N. Vavilov, A. Luzgarev, and A. Stepanov. Calculations in exceptional groups over rings. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 373(Teoriya Predstavlenii, Dinamicheskie Sistemy, Kombinatornye Metody. XVII):48–72, 346, 2009.
- [2318] N. A. Vavilov, V. I. Mysovskikh, and Y. G. Teterin. Computational group theory in St. Petersburg. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)*, 236(Vopr. Teor. Predst. Algebr i Grupp. 5):42–49, 215–216, 1997.
- [2319] E. P. Vdovin. Regular orbits of solvable linear p' -groups. *Sib. Èlektron. Mat. Izv.*, 4:345–360, 2007.
- [2320] E. P. Vdovin and V. I. Zenkov. On the intersections of solvable Hall subgroups in finite groups. *Proc. Steklov Inst. Math.*, 267(suppl. 1):S234–S243, 2009.
- [2321] L. Vendramin. On the classification of quandles of low order. *J. Knot Theory Ramifications*, 21(9):1250088, 10, 2012.
- [2322] A. Vera-López, J. M. Arregi, M. A. García-Sánchez, F. J. Vera-López, and R. Esteban-Romero. The exact bounds for the degree of commutativity of a p -group of maximal class. I. *J. Algebra*, 256(2):375–401, 2002.
- [2323] G. Verret. Shifts in Cayley graphs. *Discrete Math.*, 309(12):3748–3756, 2009.
- [2324] H. Verrill and D. Joyner. Computing with toric varieties. *J. Symbolic Comput.*, 42(5):511–532, 2007.
- [2325] R. Vessenes. Generalized Foulkes' conjecture and tableaux construction. *J. Algebra*, 277(2):579–614, 2004.
- [2326] M. P. Visscher. On the nilpotency class and solvability length of nonabelian tensor products of groups. *Arch. Math. (Basel)*, 73(3):161–171, 1999.
- [2327] P. Vojtěchovský. Generators of nonassociative simple Moufang loops over finite prime fields. *J. Algebra*, 241(1):186–192, 2001.
- [2328] P. Vojtěchovský. A class of Bol loops with a subgroup of index two. *Comment. Math. Univ. Carolin.*, 45(2):371–381, 2004.
- [2329] P. Vojtěchovský. Toward the classification of Moufang loops of order 64. *European J. Combin.*, 27(3):444–460, 2006.
- [2330] P. Vojtěchovský and I. M. Wanless. Closest multiplication tables of groups. *J. Algebra*, 353:261–285, 2012.

- [2331] M. Vsemirnov, V. Mysovskikh, and M. C. Tamburini. Triangle groups as subgroups of unitary groups. *J. Algebra*, 245(2):562–583, 2001.
- [2332] K. Waki. Decomposition numbers of non-principal blocks of J_4 for characteristic 3. *J. Algebra*, 321(8):2171–2186, 2009.
- [2333] R. Waldmüller. A flat manifold with no symmetries. *Experiment. Math.*, 12(1):71–77, 2003.
- [2334] J. L. Walker. Constructing critical indecomposable codes. *IEEE Trans. Inform. Theory*, 47(5):1780–1795, 2001.
- [2335] C. Wang, S. Wang, Y. Zhang, and B. Zimmermann. Embedding surfaces into S^3 with maximum symmetry. *Groups Geom. Dyn.*, 9(4):1001–1045, 2015.
- [2336] H. Wang, Y. Tan, and T. Moss. On $B(n, k)$ 2-groups. *Comm. Algebra*, 43(11):4655–4659, 2015.
- [2337] J. Wang. Primitive permutation groups with a solvable 2-transitive subconstituent. *J. Algebra*, 386:190–208, 2013.
- [2338] J. Wang, J. Fan, and N. Du. Super- π -Brauer characters and super- π -regular classes. *Comm. Algebra*, 42(9):4102–4109, 2014.
- [2339] A. Weber. On coherence in computer algebra. *J. Symbolic Comput.*, 19(1-3):25–38, 1995. Design and implementation of symbolic computation systems (Gmunden, 1993).
- [2340] C. Weber. Low-degree cohomology of integral Specht modules. *Experiment. Math.*, 18(1):85–95, 2009.
- [2341] A. Wegner. Implementation eines Algorithmus zur Berechnung endlicher auflösbarer Faktorgruppen einer endlich präsentierten Gruppe. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, February 1989.
- [2342] A. Wegner. *The Construction of Finite Soluble Factor Groups of Finitely Presented Groups and its Application*. PhD thesis, University of St Andrews, 1992.
- [2343] M. Weidner. Independence and maximal subgroups. *Illinois J. Math.*, 40(1):47–76, 1996.
- [2344] S. Weiß. Die berechnung von ext-köchern mit relationen für blöcke von gruppenalgebren. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1995.
- [2345] M. Weller. Construction of classes of subgroups of small index in p -groups. *Arch. Math. (Basel)*, 68(2):89–99, 1997.
- [2346] M. Weller, G. O. Michler, and A. Previtali. Thompson’s sporadic group uniquely determined by the centralizer of a 2-central involution. *J. Algebra*, 298(2):371–459, 2006.
- [2347] F. Wettl. *Configuration problems in finite geometries*. PhD thesis, Hungarian Academy of Sciences, 1995. Candidates Degree.
- [2348] D. L. White. Decomposition numbers of unipotent blocks of $\mathrm{Sp}_6(2^a)$ in odd characteristics. *J. Algebra*, 227(1):172–194, 2000.

- [2349] D. L. White. Degree graphs of simple groups. *Rocky Mountain J. Math.*, 39(5):1713–1739, 2009.
- [2350] M. Wiegelmann. Fixpunktkondensation von tensorproduktmoduln. Diplomarbeit, Lehrstuhl D für Mathematik, RWTH-Aachen, Aachen, 1994.
- [2351] T. Wilde. The real part of the character table of a finite group. *Comm. Algebra*, 35(12):4042–4056, 2007.
- [2352] M. Wildon. Labelling the character tables of symmetric and alternating groups. *Q. J. Math.*, 59(1):123–135, 2008.
- [2353] G. Williams. Largeness and SQ-universality of cyclically presented groups. *Internat. J. Algebra Comput.*, 22(4):1250035, 19, 2012.
- [2354] R. A. Wilson. Standard generators for sporadic simple groups. *J. Algebra*, 184(2):505–515, 1996.
- [2355] R. A. Wilson. A representation for the Lyons group in $GL_{2480}(4)$, and a new uniqueness proof. *Arch. Math. (Basel)*, 70(1):11–15, 1998.
- [2356] R. A. Wilson. Construction of finite matrix groups. In *Computational methods for representations of groups and algebras (Essen, 1997)*, volume 173 of *Progr. Math.*, pages 61–83. Birkhäuser, Basel, 1999.
- [2357] R. A. Wilson. The maximal subgroups of the Baby Monster. I. *J. Algebra*, 211(1):1–14, 1999.
- [2358] S. Wilson and A. Breda d’Azevedo. Surfaces having no regular hypermaps. *Discrete Math.*, 277(1-3):241–274, 2004.
- [2359] E. Wings. *Über die unipotenten Charaktere der Chevalley-Gruppen vom Typ F_4 in guter Charakteristik*. PhD thesis, RWTH, Aachen, 1995.
- [2360] H. Wondratschek and U. Müller. *Symmetry Relations between Space Groups*, volume A1. Kluwer Academic Publishers, Dordrecht/Boston/London, first edition, 2004.
- [2361] D. R. Wood. An algorithm for finding a maximum clique in a graph. *Oper. Res. Lett.*, 21(5):211–217, 1997.
- [2362] R. Woodrooffe. Shelling the coset poset. *J. Combin. Theory Ser. A*, 114(4):733–746, 2007.
- [2363] R. Woodrooffe. Cubical convex ear decompositions. *Electron. J. Combin.*, 16(2, Special volume in honor of Anders Bjorner):Research Paper 17, 33, 2009.
- [2364] S. Wreth. A certain non-singular system of length three equations over a group. *Proc. Edinburgh Math. Soc. (2)*, 40(3):515–539, 1997.
- [2365] D. Wright. Elicitation and validation of graphical dependability models. In *SAFECOMP*, 2003.

- [2366] W. Xie, Q. Jin, and W. Liu. Hom-structures on semi-simple Lie algebras. *Open Math.*, 13:617–630, 2015.
- [2367] M. Xu. Thompson’s conjecture for alternating group of degree 22. *Front. Math. China*, 8(5):1227–1236, 2013.
- [2368] Y. Xu and S. Yang. PBW-deformations of quantum groups. *J. Algebra*, 408:222–249, 2014.
- [2369] M. K. Yadav. On finite p -groups whose central automorphisms are all class preserving. *Comm. Algebra*, 41(12):4576–4592, 2013.
- [2370] c. Yalçınkaya. Black box groups. *Turkish J. Math.*, 31(suppl.):171–210, 2007.
- [2371] A. Yamasaki. Negative solutions to three-dimensional monomial Noether problem. *J. Algebra*, 370:46–78, 2012.
- [2372] N. Yankov, M. H. Lee, M. Gürel, and M. Ivanova. Self-dual codes with an automorphism of order 11. *IEEE Trans. Inform. Theory*, 61(3):1188–1193, 2015.
- [2373] M. Yoshikawa. The intersection of normal closed subsets of an association scheme is not always normal. *J. Fac. Sci. Shinshu Univ.*, 40:37–40 (2006), 2005.
- [2374] M. Zarrin. On element-centralizers in finite groups. *Arch. Math. (Basel)*, 93(6):497–503, 2009.
- [2375] M. Zarrin. Ensuring a group is weakly nilpotent. *Comm. Algebra*, 40(12):4739–4752, 2012.
- [2376] M. Zarrin. A generalization of Schmidt’s theorem on groups with all subgroups nilpotent. *Arch. Math. (Basel)*, 99(3):201–206, 2012.
- [2377] M. Zarrin. On groups with a finite number of normalisers. *Bull. Aust. Math. Soc.*, 86(3):416–423, 2012.
- [2378] M. Zarrin. Groups with few solvable subgroups. *J. Algebra Appl.*, 12(6):1350011, 4, 2013.
- [2379] M. Zarrin. On groups with finitely many derived subgroups. *J. Algebra Appl.*, 13(7):1450045, 5, 2014.
- [2380] A. V. Zavarnitsin. On the recognition of finite groups by the prime graph. *Algebra Logika*, 45(4):390–408, 502, 2006.
- [2381] A. V. Zavarnitsine. Finite simple groups with narrow prime spectrum. *Sib. Èlektron. Mat. Izv.*, 6:1–12, 2009.
- [2382] A. V. Zavarnitsyn. A solvable group isospectral to the group $S_4(3)$. *Sibirsk. Mat. Zh.*, 51(1):26–31, 2010.
- [2383] P. Zeiner and T. Janssen. Notes on the normalizer of a finite subgroup of $GL(n, d, \mathbb{Z})$ in $GL(n, d, \mathbb{Z})$. *Acta Cryst. Sect. A*, 57(3):256–263, 2001.
- [2384] S. Zelikson. On crystal operators in Lusztig’s parametrizations and string cone defining inequalities. *Glasg. Math. J.*, 55(1):177–200, 2013.

- [2385] G. Zhang. On the weight distributions of some cyclic codes. *Discrete Math.*, 339(8):2070–2078, 2016.
- [2386] P. Zhao and V. H. Fernandes. The ranks of ideals in various transformation monoids. *Comm. Algebra*, 43(2):674–692, 2015.
- [2387] S. Zhou and H. Dong. Exceptional groups of Lie type and flag-transitive triplanes. *Sci. China Math.*, 53(2):447–456, 2010.
- [2388] S. Zhou, H. Dong, and W. Fang. Finite classical groups and flag-transitive triplanes. *Discrete Math.*, 309(16):5183–5195, 2009.
- [2389] S. Zhou and Y. Wang. Flag-transitive non-symmetric 2-designs with $(r, \lambda) = 1$ and alternating socle. *Electron. J. Combin.*, 22(2):Paper 2.6, 15, 2015.
- [2390] Y. Zhu, H. Guan, and S. Zhou. Flag-transitive $2-(v, k, \lambda)$ symmetric designs with $(k, \lambda) = 1$ and alternating socle. *Front. Math. China*, 10(6):1483–1496, 2015.
- [2391] A. K. Zhurtov. Frobenius groups generated by two elements of order 3. *Sibirsk. Mat. Zh.*, 42(3):533–537, i, 2001.
- [2392] A. K. Zhurtov. On a group acting locally freely on an abelian group. *Sibirsk. Mat. Zh.*, 44(2):343–346, 2003.
- [2393] G. Ziegler. Die kommutatorstruktur der pro- p -sylogruppen einiger p -adisch algebraischer gruppen. Diplomarbeit, Lehrstuhl B für Mathematik, RWTH, RWTH, 1993.
- [2394] K. Zimba and M. Raboshakga. The conjugacy classes of a subgroup $S_n^m : C_m$ of S_{mn} , prime m . *Internat. J. Algebra Comput.*, 18(4):705–717, 2008.
- [2395] J. Zimmer. Stored energy functions for phase transitions in crystals. *Arch. Ration. Mech. Anal.*, 172(2):191–212, 2004.
- [2396] J. Zimmerman. The symmetric genus of 2-groups. *Glasg. Math. J.*, 41(1):115–124, 1999.
- [2397] A. Zinchenko. Extensions of a residue class ring with the help of the primitive root of unity. In *Actual problems of mathematics and computer science. 2nd regional scientific conference of young researchers. Zaporozhye, Ukraine, April 22–23, 2004*, pages 27–28, 2004.
- [2398] P. Zusmanovich. ω -Lie algebras. *J. Geom. Phys.*, 60(6-8):1028–1044, 2010.
- [2399] P. Zusmanovich. On δ -derivations of Lie algebras and superalgebras. *J. Algebra*, 324(12):3470–3486, 2010.
- [2400] P. Zusmanovich. Erratum to “On δ -derivations of Lie algebras and superalgebras” [J. Algebra 324 (12) (2010) 3470–3486] [see 2735394]. *J. Algebra*, 410:545–546, 2014.
- [2401] M. A. Zvezdina. On nonabelian simple groups with the same prime graph as an alternating group. *Sibirsk. Mat. Zh.*, 54(1):65–76, 2013.