

## P. J. Cameron: Publications

### Books

- [1] (with J. H. van Lint) *Graph Theory, Coding Theory and Block Designs*, London Math. Soc. Lecture Notes **19**, Cambridge Univ. Press, Cambridge, 1975.
- [2] *Parallelisms of Complete Designs*, London Math. Soc. Lecture Notes **23**, Cambridge Univ. Press, Cambridge, 1976. Reissued in paperback 2007.
- [3] (editor) *Combinatorial Surveys: Proceedings of the Sixth British Combinatorial Conference*, Academic Press, London, 1977.
- [4] (with J. H. van Lint) *Graphs, Codes and Designs*, London Math. Soc. Lecture Notes **43**, Cambridge Univ. Press, Cambridge, 1980.
- [5] (editor, with J. W. P. Hirschfeld & D. R. Hughes) *Finite Geometries and Designs*, London Math. Soc. Lecture Notes **49**, Cambridge Univ. Press, Cambridge, 1981.
- [6] *Oligomorphic Permutation Groups*, London Math. Soc. Lecture Notes **152**, Cambridge Univ. Press, 1990.
- [7] (with J. H. van Lint) *Graphs, Codes, Designs and their Links*, London Math. Soc. Student Texts **22**, Cambridge Univ. Press, 1991.
- [8] *Projective and Polar Spaces*, QMW Maths Notes **13**, QMW, London, 1991.
- [9] (editor, with H. C. A. van Tilborg) *A Collection of Contributions in Honour of Jack van Lint*, Topics in Discrete Math. **7**, North-Holland, Amsterdam, 1992.
- [10] *Permutation Groups*, Tempus Lecture Notes **6** (Discrete Mathematics and Applications), University of East Anglia, Norwich 1993.
- [11] *Combinatorics: Topics, Techniques, Algorithms*, Cambridge University Press, Cambridge, 1994; reprinted 1996.
- [12] *Introduction to Algebra*, Oxford University Press, Oxford, 1998. ISBN: 0-19-850195-1 (Hardback), 0-19-850194-3 (Paperback). Kazakh translation 2014.
- [13] *Sets, Logic and Categories*, Springer Undergraduate Mathematics Series, Springer-Verlag, London, 1999, viii+180pp. ISBN: 1-85233-056-2.
- [14] *Permutation Groups*, London Math. Soc. Student Texts 45, Cambridge University Press, Cambridge, 1999, 232pp. ISBN: 0 521 65302 9 (Hardback), 0 521 65378 9 (Paperback)
- [15] *Combinatorics and Groups: Peter Cameron's IPM Lecture Notes*, IPM Lecture Notes Series **4**, Institute for Studies in Theoretical Physics and Mathematics (IPM), Tehran, 2004, 86pp.
- [16] *Introduction to Algebra* (2nd edition), Oxford University Press, Oxford, December 2007; ISBN: 9780198569138 (hardback), 9780198527930 (paperback).
- [17] *Notes on Counting: An Introduction to Enumerative Combinatorics*, Australian Mathematical Society Lecture Series **26**, Cambridge University Press, Cambridge, June 2017; ISBN 9781108404952.

## Papers

- [1] Proofs of some theorems of W. A. Manning, *Bull. London Math. Soc.* **1** (1969), 349–352.
- [2] Bounding the rank of certain permutation groups, *Math. Z.* **124** (1972), 343–352.
- [3] Permutation groups with multiply transitive suborbits, *Proc. London Math. Soc.* (3), **25** (1972), 427–440.
- [4] On groups with several doubly transitive permutation representations, *Math. Z.* **128** (1972), 1–14.
- [5] On groups with two triply transitive permutation representations, *J. London Math. Soc.* (2) **6** (1972), 122–128.
- [6] Questions about symmetric designs, *Combinatorics* (ed. D. R. Woodall & D. J. A. Welsh), 38–46, IMA, Southend-on-Sea, 1973.
- [7] (with J. J. Seidel) Quadratic forms over GF(2), *Proc. Kon. Nederl. Akad. Wetensch.* (A) **76** (1973), 1–8.
- [8] Extending symmetric designs, *J. Combinatorial Theory* (A) **14** (1973), 215–220.
- [9] Primitive groups with most suborbits doubly transitive, *Geometriae Dedicata* **1** (1973), 434–446.
- [10] Biplanes, *Math. Z.* **131** (1973), 85–101.
- [11] Near-regularity conditions for designs, *Geometriae Dedicata* **2** (1973), 213–223.
- [12] Another characterisation of the small Janko group, *J. Math. Soc. Japan* **25** (1973), 591–595.
- [13] Characterisations of some Steiner systems, parallelisms and biplanes, *Math. Z.* **136** (1974), 31–39.
- [14] Locally symmetric designs, *Geometriae Dedicata* **3** (1974), 65–76.
- [15] Suborbits in transitive permutation groups, *Combinatorics* (ed. M. Hall Jr. & J. H. van Lint), Part 3, 98–129, *Math. Centre Tracts* **57**, Math. Centre, Amsterdam, 1974.
- [16] Permutation groups with multiply transitive suborbits, II, *Bull. London Math. Soc.* **6** (1974), 136–140.
- [17] On a theorem of Livingstone and Wagner, *Math. Z.* **137** (1974), 343–350.
- [18] Generalisation of Fisher’s inequality to fields with more than one element, *Combinatorics* (ed. T. P. McDonough & V. C. Mavron), 9–13, *London Math. Soc. Lecture Notes* **13**, Cambridge Univ. Press, Cambridge, 1974.
- [19] Partial quadrangles, *Quart. J. Math. Oxford* (2) **26** (1975), 61–73.
- [20] On groups of degree  $n$  and  $n - 1$ , and highly symmetric edge colourings, *J. London Math. Soc.* (2) **9** (1975), 385–391.
- [21] Minimal edge-colourings of complete graphs, *J. London Math. Soc.* (2) **11** (1975), 337–346.

- [22] (with J. I. Hall, J. H. van Lint, T. A. Springer & H. C. A. van Tilborg) Translates of subgroups of the multiplicative group of a finite field, *Proc. Kon. Nederl. Akad. Wetensch. (A)* **78** (1975), 285–289.
- [23] (with D. A. Preece) Some new fully-balanced Graeco-Latin Youden ‘squares’, *Utilitas Math.* **8** (1975), 193–204.
- [24] Two remarks on Steiner systems, *Geometriae Dedicata* **4** (1975), 403–418.
- [25] Transitivity of permutation groups on unordered sets, *Math. Z.* **48** (1976), 127–139.
- [26] On basis-transitive Steiner systems, *J. London Math. Soc. (2)* **13** (1976), 393–399.
- [27] Embedding edge-coloured complete graphs in binary affine spaces, *J. Combinatorial Theory (A)* **21** (1976), 203–215.
- [28] (with J.-M. Goethals, J. J. Seidel & E. E. Shult) Line graphs, root systems and elliptic geometry, *J. Algebra* **43** (1976), 305–327.
- [29] (with J. A. Thas & S. E. Payne) Polarities of generalized hexagons and perfect codes, *Geometriae Dedicata* **5** (1976), 525–528.
- [30] Permutation groups on unordered sets, *Higher Combinatorics* (ed. M. Aigner), 217–239, D. Reidel, Dordrecht, 1977.
- [31] Automorphisms and cohomology of switching classes, *J. Combinatorial Theory (B)* **22** (1977), 297–298.
- [32] A note on triple transitive graphs, *J. London Math. Soc. (2)* **15** (1977), 197–198.
- [33] Extensions of designs: variations on a theme, *Combinatorial Surveys: Proceedings of the Sixth British Combinatorial Conference* (ed. P. J. Cameron), 23–43, Academic Press, London, 1977.
- [34] Cohomological aspects of two-graphs, *Math. Z.* **157** (1977), 101–119.
- [35] (with W. M. Kantor) Rank 3 groups and biplanes, *J. Combinatorial Theory (A)* **24** (1978), 1–23.
- [36] (with R. H. F. Denniston) A partition system, *Ars Combinatoria* **4** (1977), 285–287.
- [37] (with J.-M. Goethals and J. J. Seidel) The Krein condition, spherical designs, Norton algebras and permutation groups, *Proc. Kon. Nederl. Akad. Wetensch. (A)* **81** (1978), 196–206.
- [38] Orbits of permutation groups on unordered sets, *J. London Math. Soc. (2)* **17** (1978), 410–414.
- [39] On doubly transitive permutation groups of degree prime squared plus one, *J. Austral. Math. Soc. (A)* **26** (1978), 317–318.
- [40] (with J.-M. Goethals and J. J. Seidel) Strongly regular graphs having strongly regular subconstituents, *J. Algebra* **55** (1978), 257–280.
- [41] Strongly regular graphs, *Selected Topics in Graph Theory* (ed. L. W. Beineke & R. J. Wilson), 337–360, Academic Press, London, 1979.

- [42] A combinatorial toolkit for permutation groups, *Relations between Combinatorics and Other Parts of Mathematics* (ed. D. K. Ray-Chaudhuri), 77–96, *Proc. Symp. Pure Math.* **34**, Amer. Math. Soc., Providence, R. I., 1979.
- [43] Multiple transitivity in graphs, *Graph Theory and Combinatorics* (ed. R. J. Wilson), 38–48, *Research Notes in Math.* **34**, Pitman, San Francisco, 1979.
- [44] (with P. M. Neumann and J. Saxl) An interchange property in finite permutation groups, *Bull. London Math. Soc.* **11** (1979), 161–169.
- [45] (with P. Delsarte and J.-M. Goethals) Hemisystems, orthogonal configurations, and dissipative conference matrices, *Philips J. Res.* **34** (1979), 147–162.
- [46] (with W. M. Kantor) 2-transitive and antiflag transitive collineation groups of finite projective spaces, *J. Algebra* **60** (1979), 384–422.
- [47] Cohomological aspects of two-graphs, II, *Homological Group Theory* (ed. C. T. C. Wall), 241–244, *London Math. Soc. Lecture Notes* **36**, Cambridge Univ. Press, Cambridge, 1979.
- [48] (with M. Deza) On permutation geometries, *J. London Math. Soc.* (2) **20** (1979), 373–386.
- [49] 6-transitive graphs, *J. Combinatorial Theory* (B) **28** (1980), 168–179.
- [50] Extremal results and configuration theorems for Steiner systems, *Ann. Discrete Math.* **7** (1980), 43–63.
- [51] A note on generalized line graphs, *J. Graph Theory* **4** (1980), 243–245.
- [52] On graphs with given automorphism group, *Europ. J. Combinatorics* **1** (1980), 91–96.
- [53] (with D. A. Drake) Partial  $\lambda$ -geometries of small nexus, *Ann. Discrete Math.* **6** (1980), 19–29.
- [54] Finite permutation groups and finite simple groups, *Bull. London Math. Soc.* **13** (1981), 1–22.
- [55] Orbits of permutation groups on unordered sets, II, *J. London Math. Soc.* (2) **23** (1981), 249–265.
- [56] Flat embeddings of near  $2n$ -gons, *Finite Geometries and Designs* (ed. P. J. Cameron, J. W. P. Hirschfeld & D. R. Hughes), 61–71, *London Math. Soc. Lecture Notes* **49**, Cambridge Univ. Press, Cambridge, 1981.
- [57] (with E. E. Bannai & J. Kahn) Nonexistence of certain distance-transitive digraphs, *J. Combinatorial Theory* (B) **31** (1981), 105–110.
- [58] (with L. Babai, M. Deza & N. M. Singhi) On sharply edge-transitive permutation groups, *J. Algebra* **73** (1981), 573–585.
- [59] Normal subgroups of infinite multiply transitive permutation groups, *Combinatorica* **1** (1981), 343–347.
- [60] (with C. E. Praeger) Graphs and permutation groups with projective subconstituents, *J. London Math. Soc.* (2) **25** (1982), 62–74.
- [61] Dual polar spaces, *Geometriae Dedicata* **12** (1982), 75–85.

- [62] (with J. H. van Lint) On the partial geometry  $\text{pg}(6, 6, 2)$ , *J. Combinatorial Theory* (A) **32** (1982), 252–255.
- [63] (with P. M. Neumann & D. N. Teague) On the degrees of primitive permutation groups, *Math. Z.* **180** (1982), 141–149.
- [64] There are only finitely many finite distance-transitive graphs of given valency greater than two, *Combinatorica* **2** (1982), 9–13.
- [65] (with R. A. Liebler), Tactical decompositions and orbits of projective groups, *Linear Algebra Appl.* **46** (1982), 91–102.
- [66] Colour schemes, *Ann. Discrete Math.* **15** (1982), 81–95.
- [67] Orbits, enumeration and colouring, *Combinatorial Mathematics IX* (ed. E. J. Billington, S. Oates-Williams & A. P. Street), 34–66, *Lecture Notes in Math.* **952**, Springer-Verlag, Berlin, 1982.
- [68] (with L. Babai & P. P. Pálffy) On the orders of primitive groups with bounded non-abelian composition factors, *J. Algebra* **79** (1982), 161–168.
- [69] Some aspects of “post-classification” geometry, *Finite Geometries* (ed. N. L. Johnson, M. J. Kallaher & C. T. Long), 113–127, Marcel Dekker, New York, 1982.
- [70] Orbits and enumeration, *Combinatorial Theory* (ed. D. Jungnickel & K. Vedder), 86–99, *Lecture Notes in Math.* **969**, Springer-Verlag, Berlin, 1982.
- [71] Orbits of permutation groups on unordered sets, III: imprimitive groups, *J. London Math. Soc.* (2) **27** (1983), 229–237.
- [72] Orbits of permutation groups on unordered sets, IV: homogeneity and transitivity, *J. London Math. Soc.* (2) **27** (1983), 238–247.
- [73] (with J. Saxl) Permuting unordered subsets, *Quart. J. Math. Oxford* (2) **34** (1983), 167–170.
- [74] (with C. E. Praeger, J. Saxl & G. M. Seitz) On the Sims conjecture and distance-transitive graphs, *Bull. London Math. Soc.* **15** (1983), 499–506.
- [75] Automorphism groups of graphs, *Selected Topics in Graph Theory II* (ed. L. W. Beineke & R. J. Wilson), 89–127, Academic Press, London, 1983.
- [76] (with C. E. Praeger) On 2-arc transitive graphs of girth 4, *J. Combinatorial Theory* (B) **35** (1983), 1–11.
- [77] (with R. A. Bailey, A. G. Chetwynd, D. E. Daykin, A. J. W. Hilton, F. C. Holroyd, J. H. Mason, R. Nelson, C. A. Rowley & D. R. Woodall) On the intricacy of combinatorial construction problems, *Discrete Math.* **50** (1984), 71–97.
- [78] (with P. M. Neumann & J. Saxl) On groups with no regular orbits on the set of subsets, *Arch. Math.* **43** (1984), 295–296.
- [79] Aspects of the random graph, *Graph Theory and Combinatorics* (ed. B. Bollobás), 65–79, Academic Press, London, 1984.
- [80] Infinite versions of some topics in finite geometry, *Geometric Combinatorics* (ed. F. C. Holroyd & R. J. Wilson), 13–20, Pitman, San Francisco, 1985.

- [81] Cyclic automorphisms of a countable graph and random sum-free sets, *Graphs and Combinatorics* **1** (1985), 129–135.
- [82] (with H. D. Macpherson) Rank three permutation groups with rank three sub-constituents, *J. Combinatorial Theory* (B) **39** (1985), 1–16.
- [83] (with L. G. Kovács, M. F. Newman & C. E. Praeger) Fixed-point-free permutations in transitive permutation groups of prime power order, *Quart. J. Math. Oxford* (2) **36** (1985), 273–278.
- [84] Four lectures on projective geometry, *Finite Geometries* (ed. C. A. Baker & L. M. Batten), 27–63, Marcel Dekker, New York, 1985.
- [85] (with D. E. Taylor) Stirling numbers and affine equivalence, *Ars Combinatoria* **20B** (1985), 3–14.
- [86] (with A. L. Wells, Jr.) Signatures and signed switching classes, *J. Combinatorial Theory* (B) **40** (1986), 344–361.
- [87] (with F. Mazzocca) Bijections which preserve blocking sets, *Geometriae Dedicata* **21** (1986), 219–229.
- [88] Regular orbits of permutation groups on the power set, *Discrete Math.* **62** (1986), 307–309.
- [89] (with A. M. Chetwynd and J. J. Watkins) Decomposition of snarks, *J. Graph Theory* **11** (1987), 13–19.
- [90] Portrait of a typical sum-free set, *Surveys in Combinatorics* (ed. C. Whitehead), 13–42, *LMS Lecture Notes* **123**, Cambridge Univ. Press, Cambridge, 1987.
- [91] Some treelike objects, *Quart. J. Math. Oxford* (2) **38** (1987), 155–183.
- [92] On the structure of a random sum-free set, *Probab. Theory Rel. Fields* **76** (1987), 523–531.
- [93] (with K. W. Johnson) An investigation of countable B-groups, *Math. Proc. Cambridge Philos. Soc.* **102** (1987), 223–232.
- [94] (with M. Deza & P. Frankl) Sharp sets of permutations, *J. Algebra* **111** (1987), 220–247.
- [95] Some permutation representations of a free group, *Europ. J. Combinatorics* **8** (1987), 257–260.
- [96] Digraphs admitting sharply edge-transitive automorphism groups, *Europ. J. Combinatorics* **8** (1987), 357–365.
- [97] Metric and geometric properties of sets of permutations, *Algebraic, Extremal and Metric Combinatorics* (ed. M.-M. Deza, P. Frankl & I. G. Rosenberg), 39–53, *LMS Lecture Notes* **131**, Cambridge Univ. Press, Cambridge, 1988.
- [98] (with M. Deza and N. M. Singhi) Infinite geometric groups and sets, pp. 54–61 in *Algebraic, Extremal and Metric Combinatorics* (ed. M.-M. Deza, P. Frankl & I. G. Rosenberg), *LMS Lecture Notes* **131**, Cambridge Univ. Press, Cambridge, 1988.

- [99] (with M. Kiyota) Sharp characters of finite groups, *J. Algebra* **115** (1988), 125–143.
- [100] (with M. Deza and P. Frankl) Intersection theorems in permutation groups, *Combinatorica* **8** (1988), 249–260.
- [101] Geometric sets of permutations, *Geom. Dedicata* **25** (1988), 339–351.
- [102] (with F. Mazzocca and R. Meshulam) Dual blocking sets in projective and affine spaces, *Geom. Dedicata* **27** (1988), 203–207.
- [103] Some sequences of integers, *Discrete Math.* **75** (1989), 85–102.
- [104] Groups of order-automorphisms of the rational numbers with prescribed scale type, *J. Math. Psychol.* **33** (1989), 163–171.
- [105] A problem on integer matrices, *Linear Algebra Appl.* **114** (1989), 199–206.
- [106] (with S. R. Thomas) Groups acting on unordered sets, *Proc. London Math. Soc.* (3) **59** (1989), 541–557.
- [107] (with P. Frankl & W. M. Kantor) Intersecting families of finite sets and fixed-point-free 2-elements, *Europ. J. Combinatorics* **10** (1989), 149–160.
- [108] (with R. Solomon & A. Turull) Chains of subgroups in symmetric groups, *J. Algebra* **127** (1989), 340–352.
- [109] (with P. Erdős) On the number of sets of integers with various properties, *Number Theory* (ed. R. A. Mollin), 61–79, de Gruyter, Berlin, 1990.
- [110] (with D. R. Hughes & A. Pasini) Extended generalized quadrangles, *Geometriae Dedicata* **35** (1990), 193–228.
- [111] (with P. H. Fisher) Small extended generalized quadrangles, *Europ. J. Combinatorics* **11** (1990), 403–413.
- [112] Several 2-(46, 6, 3) designs, *Discrete Math.* **87** (1991), 89–90.
- [113] The age of a relational structure, *Discrete Math.* **95** (1991), 49–67.
- [114] Covers of graphs and EGQs, *Discrete Math.* **97** (1991), 83–92.
- [115] (with J. J. Cannon) Fast recognition of doubly transitive groups, *J. Symbolic Comput.* **12** (1991), 459–474.
- [116] Infinite permutation groups in enumeration and model theory, *Proc. International Congress of Mathematicians* (Kyoto 1990), 1431–1441, Springer-Verlag, Tokyo, 1991.
- [117] (with F. C. Bussemaker, J. J. Seidel & S. V. Tsaranov) *Tables of Signed Graphs*, Technical Report **91-WSK-01**, Eindhoven University of Technology, 1991.
- [118] (with J. I. Hall) Some groups generated by transvection subgroups, *J. Algebra*, **140** (1991), 184–209.
- [119] Infinite geometric groups of rank 4, *Europ. J. Combinatorics*, **13** (1992), 87–88.
- [120] Almost all quasigroups have rank 2, *Discrete Math.* **106/107** (1992), 111–115.
- [121] (with A. M. Cohen) On the number of fixed point free elements in a permutation group, *Discrete Math.* **106/107** (1992), 135–138.

- [122] Finiteness questions for geometries, pp. 205–217 in *Groups, Combinatorics and Geometry* (ed. M. W. Liebeck and J. Saxl), *London Math. Soc. Lecture Notes* **165**, Cambridge Univ. Press, Cambridge, 1992.
- [123] Some open problems on permutation groups, pp. 340–350 in *Groups, Combinatorics and Geometry* (ed. M. W. Liebeck and J. Saxl), *London Math. Soc. Lecture Notes* **165**, Cambridge Univ. Press, Cambridge, 1992.
- [124] (with J. A. Thas and A. Blokhuis) On a generalization of a theorem of B. Segre, *Geometriae Dedicata* **43** (1992), 299–305.
- [125] (with C. E. Praeger) Partitioning into Steiner systems, pp. 61–71 in *Combinatorics '88* (ed. A. Barlotti *et al.*), Mediterranean Press, Roma, 1992.
- [126] Quasi-symmetric designs possessing a spread, pp. 231–236 in *Combinatorics '88* (ed. A. Barlotti *et al.*), Mediterranean Press, Roma, 1992.
- [127] (with T. Kataoka and M. Kiyota) Sharp characters of finite groups of type  $\{-1, 1\}$ , *J. Algebra* **152** (1992), 248–258.
- [128] Extended generalised quadrangles — a survey, *Sankhyā: The Indian Journal of Statistics* **54** (1992), 89–95.
- [129] (with G. Korchmáros) One-factorizations of complete graphs with a doubly transitive automorphism group, *Bull. London Math. Soc.* **25** (1993), 1–6.
- [130] (with W. M. Kantor) Random permutations: Some group-theoretic aspects, *Combinatorics, Probability and Computing* **2** (1993), 257–262.
- [131] Some multiply transitive permutation groups, *Coding Theory, Design Theory, Group Theory: Proceedings of the Marshall Hall Conference* (ed. D. Jungnickel and S. A. Vanstone), 1–11, Wiley, New York, 1993.
- [132] (with C. Martins) A theorem on reconstructing random graphs, *Combinatorics, Probability and Computing* **2** (1993), 1–9.
- [133] (with C. E. Praeger) Block-transitive  $t$ -designs, I: point-imprimitive designs, *Discrete Math.* **118** (1993), 33–43.
- [134] (with C. E. Praeger) Block-transitive  $t$ -designs, II: large  $t$ , *Finite Geometry and Combinatorics* (ed. A. Beutelspacher *et al.*), Cambridge University Press, 1993, pp. 103–119.
- [135] (with C. E. Praeger and N. C. Wormald) Highly arc-transitive digraphs and universal covering digraphs, *Combinatorica* **13** (1993), 1–21.
- [136] (with J. J. Seidel and S. V. Tsaranov) Signed graphs, root lattices and Coxeter groups, *J. Algebra* **164** (1994), 173–209.
- [137] Ovoids in infinite incidence structures, *Arch. Math.* **62** (1994), 189–192.
- [138] (with A. Beutelspacher) Transfinite methods in geometry, *Bull. Belg. Math. Soc.* **1** (1994), 337–347.
- [139] How few entries determine any Latin square? *Bull. Inst. Combinatorics Appl.* **10** (1994), 63–65.
- [140] An orbit theorem for Steiner triple systems, *Discrete Math.* **125** (1994), 97–100.



- [141] Two-graphs and trees, *Discrete Math.* **127** (1994), 63–74.
- [142] Infinite linear spaces, *Discrete Math.* **129** (1994), 29–41.
- [143] Coloured spheres and quantum mechanics, *Bull. Inst. Combinatorics Appl.* **11** (1994), 126–128.
- [144] Bases in permutation groups, pp. 181–198 in *Automorphisms of First-Order Structures* (ed. R. Kaye and H. D. Macpherson), Oxford University Press, Oxford, 1994.
- [145] Counting two-graphs related to trees, *Electronic J. Combinatorics* **2** (1995), #R4 (8pp).
- [146] (with F. Buekenhout) Projective and affine geometry over division rings, pp. 27–62 in *Handbook of Incidence Geometry* (ed. F. Buekenhout), Elsevier, Amsterdam, 1995.
- [147] Note on large sets of infinite Steiner systems, *J. Combinatorial Design* **3** (1995), 307–311.
- [148] (with D. Ghinelli) Tubes of even order and flat  $\pi.C_2$  geometries, *Geometriae Dedicata* **55** (1995), 265–278.
- [149] Sequence operators from groups, *Linear Algebra and Appl.* **226–228** (1995), 109–113.
- [150] (Editor) Research problems (Problems from the Fourteenth British Combinatorial Conference), *Discrete Math.* **138** (1995), 405–411.
- [151] (with D. G. Fon-Der-Flaass) Bases for permutation groups and matroids, *Europ. J. Combinatorics* **16** (1995), 537–544.
- [152] (with D. G. Fon-Der-Flaass) Orbits of antichains revisited, *Europ. J. Combinatorics* **16** (1995), 545–554.
- [153] Permutation groups, pp. 611–645 in *Handbook of Combinatorics* (ed. R. L. Graham, M. Grötschel and L. Lovász), Elsevier, Amsterdam, 1995.
- [154] Finite geometries, pp. 647–691 in *Handbook of Combinatorics* (ed. R. L. Graham, M. Grötschel and L. Lovász), Elsevier, Amsterdam, 1995.
- [155] Cofinitary permutation groups, *Bull. London Math. Soc.* **28** (1996), 113–140.
- [156] Metric and topological aspects of the symmetric group of countable degree, *Europ. J. Combinatorics* **17** (1996), 135–142.
- [157] Stories about groups and sequences, *Designs, Codes, and Cryptography* **8** (1996), 109–134.
- [158] Stories from the Age of Reconstruction, *Congressus Numerantium* **113** (1996), 31–41.
- [159] Cycle-closed permutation groups, *J. Algebraic Combinatorics* **5** (1996), 315–322.
- [160] The random graph, pp. 331–351 in *The Mathematics of Paul Erdős* (ed. R. L. Graham and J. Nešetřil), Springer, Berlin, 1997.

- [161] First-order logic, pp. 70–85 in *Graph Connections: Relationships between graph theory and other areas of mathematics* (ed. L. W. Beineke and R. J. Wilson), Oxford University Press, Oxford, 1997.
- [162] Groups, pp. 128–140 in *Graph Connections: Relationships between graph theory and other areas of mathematics* (ed. L. W. Beineke and R. J. Wilson), Oxford University Press, Oxford, 1997.
- [163] On the probability of connectedness, *Discrete Mathematics* **167/168** (1997), 173–185.
- [164] The algebra of an age, pp. 126–133 in *Model Theory of Groups and Automorphism Groups* (ed. David M. Evans), London Mathematical Society Lecture Notes **244**, Cambridge University Press, Cambridge, 1997.
- [165] Oligomorphic groups and homogeneous graphs, pp. 23–74 in *Graph Symmetry: Algebraic Methods and Applications* (ed. Geňa Hahn and Gert Sabidussi), NATO ASI Series C, Vol. 497, Kluwer, Dordrecht, 1997.
- [166] (with A. R. Calderbank, W. M. Kantor and J. J. Seidel)  $\mathbb{Z}_4$ -Kerdock codes, orthogonal spreads and extremal Euclidean line-sets, *Proc. London Math. Soc.* **75** (1997), 436–480.
- [167] Finite geometry after Aschbacher’s Theorem:  $\text{PGL}(n, q)$  from a Kleinian viewpoint, pp. 43–61 in *Geometry, Combinatorics and Related Topics* (ed. J. W. P. Hirschfeld et al.), London Math. Soc. Lecture Notes **245**, Cambridge University Press, Cambridge, 1997.
- [168] Cofinitary permutation groups, pp. 16–21 in *Proceedings of the First Jamaican Conference on Group Theory* (ed. T. Foguel and J. Minty), University of the West Indies, Kingston, 1997.
- [169] Aspects of cofinitary permutation groups, pp. 93–99 in *Advances in Algebra and Model Theory* (ed. M. Droste and R. Göbel), Gordon and Breach, 1997.
- [170] (Editor) Research problems (problems from the 15th British Combinatorial Conference), *Discrete Math.* **167/168** (1997), 605–615.
- [171] On an algebra related to orbit-counting, *J. Group Theory* **1** (1998), 173–179.
- [172] (with N. J. Calkin) Almost odd random sum-free sets, *Combinatorics, Probability and Computing* **7** (1998), 27–32.
- [173] A census of infinite distance-transitive graphs, *Discrete Math.* **192** (1998), 11–26.
- [174] (editor) Problems from the Sixteenth British Combinatorial Conference, *Discrete Math.* **197/198** (1999), 799–812.
- [175] (with P. Erdős) Notes on sum-free and related sets, *Combinatorics, Probability and Computing* **8** (1999), 31–43.
- [176] (with E. A. Bender, A. M. Odlyzko and B. L. Richmond) Connectedness, classes and cycle index, *Combinatorics, Probability and Computing* **8** (1999), 95–107.
- [177] An extremal problem related to biplanes, *Australasian J. Combinatorics* **20** (1999), 97–100.

- [178] SGD's with doubly transitive automorphism group, *J. Graph Theory* **32** (1999), 229–233.
- [179] (with A. Bonato and D. Delić) Tournaments and orders with the pigeonhole property, *Canadian Math. Bull.* **43** (2000), 397–405.
- [180] Some counting problems related to permutation groups, *Discrete Math.* **225** (2000), 77–92.
- [181] (with Csaba Szabó) Independence algebras, *J. London Math. Soc.* (2) **61** (2000), 321–334.
- [182] Homogeneous Cayley objects, *European J. Combinatorics* **21** (2000), 745–760.
- [183] (editor) Problems on discrete metric spaces, *European J. Combinatorics* **21** (2000), 831–838.
- [184] (with L. Babai) Automorphisms and enumeration of switching classes of tournaments, *Electronic J. Combinatorics* **7(1)** (2000), article #R38.
- [185] Sequences realized by oligomorphic permutation groups, *Journal of Integer Sequences* **3** (2000), article 00.1.5.
- [186] (with J. P. Bell, E. A. Bender and L. B. Richmond) Asymptotics for the probability of connectedness and the distribution of number of components, *Electronic J. Combinatorics* **7(1)** (2000), article #R33.
- [187] Permutation groups whose non-identity elements have  $k$  fixed points, *J. Group Theory* **4** (2001), 45–51.
- [188] Fixed points and cycles, pp. 49–60 in *Finite Geometries: Proceedings of the Fourth Isle of Thorns Conference* (ed. A. Blokhuis, J. W. P. Hirschfeld, D. Jungnickel and J. A. Thas), Kluwer, Boston, 2001.
- [189] (editor) Problems from the 17th British Combinatorial Conference, *Discrete Math.* **231** (2001), 469–478.
- [190] The random graph revisited, in *European Congress of Mathematics*, Barcelona, July 10–14, 2000, Volume II (ed. C. Casacuberta, R. M. Miró-Roig, J. Verdera and S. Xambó-Descamps), Birkhäuser, Basel, 2001, pp. 267–274.
- [191] (with Wilfrid Hodges) Some combinatorics of imperfect information, *J. Symbolic Logic* **66** (2001), 673–684.
- [192] (with Anthony Bonato, Dejan Delic and Stéphan Thomassé) Generalized pigeon-hole properties of graphs and oriented graphs, *European J. Combinatorics* **23** (2002), 257–274.
- [193] (with Bridget S. Webb) What is an infinite design?, *J. Combinatorial Design* **10** (2002), 79–91.
- [194] Cycle index, weight enumerator and Tutte polynomial, *Electronic J. Combinatorics* **9(1)** (2002), #N2 (10pp).
- [195] (with Philippe Cara) Independent generating sets and geometries for symmetric groups, *J. Algebra* **258** (2002), 641–650.
- [196] Homogeneous permutations, *Electronic J. Combinatorics* **9(2)** (2002), #R2 (9pp).

- [197] Permutations, pp. 205–239 in *Paul Erdős and his Mathematics*, Vol. II (ed. G. Halász, L. Lovász, M. Simonovits and V. T. Sós), Bolyai Society Mathematical Studies **11**, Springer, Berlin, 2002.
- [198] (with Michael Giudici, Gareth A. Jones, William M. Kantor, Mikhail H. Klin, Dragan Marusic and Lewis A. Nowitz) Transitive permutation groups without semiregular subgroups, *J. London Math. Soc.* (2) **66** (2002), 325–333.
- [199] (with Dudley Stark) A prolific construction of graphs with the  $n$ -e.c. property, *Electronic J. Combinatorics* **9(1)** (2002), #R31 (12pp).
- [200] Permutation groups, pp. 86–89 in *The Concise Handbook of Algebra* (ed. A. V. Mikhalev and G. F. Pilz), Kluwer, Dordrecht, 2002.
- [201] Coherent configurations, association schemes, and permutation groups, pp. 55–71 in *Groups, Combinatorics and Geometry* (ed. A. A. Ivanov, M. W. Liebeck and J. Saxl), World Scientific, Singapore, 2003.
- [202] (with S. Majid) Braided line and counting fixed points of  $GL(d, \mathbb{F}_q)$ , *Communications in Algebra* **31** (2003), 2003–2013.
- [203] (with P. P. Alejandro and R. A. Bailey), Association schemes and permutation groups, *Discrete Math.* **266** (2003), 47–67.
- [204] Multi-letter Youden rectangles from quadratic forms, *Discrete Math.* **266** (2003), 143–151.
- [205] (editor) Problems from the eighteenth British Combinatorial Conference, *Discrete Math.* **266** (2003), 441–451.
- [206] Random strongly regular graphs?, *Discrete Math.* **273** (2003), 101–112.
- [207] (with C. Y. Ku) Intersecting families of permutations, *Europ. J. Combinatorics* **24** (2003), 881–890.
- [208] Coherent configurations, association schemes, and permutation groups, pp. 55–71 in *Groups, Combinatorics and Geometry* (ed. A. A. Ivanov, M. W. Liebeck and J. Saxl), World Scientific, Singapore, 2003.
- [209] (this item inadvertently left blank)
- [210] Combinatoria, in *Storia della scienza* (editor-in-chief Sandro Petruccioli), Istituto della Enciclopedia Italiana (10 vols), Roma, 2001–2004, Vol. IX (2003), pp. 335–344.
- [211] Topology in permutation groups, in *Groups: Topological, Combinatorial and Arithmetic Aspects* (ed. T. W. Müller), London Math. Soc. Lecture Notes 311, Cambridge University Press, Cambridge, 2004, pp. 93–105.
- [212] (with S. Tarzi) Switching with more than two colours, *Europ. J. Combinatorics* **25** (2004), 169–177.
- [213] (with T. W. Müller) A cohomological property of  $p$ -groups, *Archiv der Mathematik* **82** (2004), 200–204.
- [214] Three chapters in *Topics in Algebraic Graph Theory* (ed. L. W. Beineke and R. J. Wilson), Cambridge Univ. Press, Cambridge, 2004 (ISBN 0521801974):

- Introduction (with L. W. Beineke and R. J. Wilson), pp. 1–29; Automorphisms of graphs, pp. 137–155; Strongly regular graphs, pp. 203–221.
- [215] Tribute (to Roland Fraïssé), *Discrete Math.* **291** (2005), 3.
  - [216] The random graph has the strong small index property, *Discrete Math.* **291** (2005), 41–43.
  - [217] Partitions and permutations, *Discrete Math.* **291** (2005), 45–54.
  - [218] (with Ian M. Wanless) Covering radius for sets of permutations, *Discrete Math.* **293** (2005), 91–109.
  - [219] (editor) Problems from the 19th British Combinatorial Conference, *Discrete Math.* **293** (2005), 313–320.
  - [220] (with R. A. Bailey) Crested products of association schemes, *J. London Math. Soc.* **72** (2005), 1–24.
  - [221] Embedding partial Steiner triple systems so that their automorphisms extend, *J. Combinatorial Designs* **13** (2005), 466–470.
  - [222] (with T. W. Müller) A descent principle in modular subgroup arithmetic, *J. Pure Appl. Algebra* **203** (2005), 189–203.
  - [223] (with Norbert Knarr) Tubes in  $\text{PG}(3, q)$ , *Europ. J. Combinatorics* **27** (2006), 114–124.
  - [224] (with G. R. Omid and B. Tayfeh-Rezaie) 3-designs from  $\text{PGL}(2, q)$ , *Electronic J. Combinatorics* **13** (2006), #R50 (11pp.)
  - [225] (with J. Sheehan and P. Spiga) Semiregular automorphisms of vertex-transitive cubic graphs, *Europ. J. Combinatorics* **27** (2006), 924–930.
  - [226] (with J. Nešetřil) Homomorphism-homogeneous relational structures, *Combinatorics, Probability and Computing* **15** (2006), 91–103.
  - [227] (with T. Prellberg and D. Stark) Asymptotic enumeration of incidence matrices, *Journal of Physics: Conference Series* **42** (2006), 59–70.
  - [228] (with T. Prellberg and D. Stark) Asymptotics for incidence matrix classes, *Electronic J. Combinatorics* **13** (2006), #R85 (19pp.)
  - [229] (with A. W. Dent) Orbit-homogeneity in permutation groups, *Bull. London Math. Soc.* **38** (2006), 597–606.
  - [230] (with R. A. Bailey, P. Dobcsányi, J. P. Morgan, and L. H. Soicher) Designs on the Web, *Discrete Math.* **306** (2006), 3014–3027; doi: 10.1016/j.disc.2004.10.027
  - [231] (with Charles R. Johnson), The number of equivalence classes of symmetric sign patterns, *Discrete Math.* **306** (2006), 3074–3077; doi: 10.1016/j.disc.2004.10.029
  - [232] (with H. R. Maimani, G. R. Omid and B. Tayfeh-Rezaie) 3-designs from  $\text{PSL}(2, q)$ , *Discrete Math.* **306** (2006), 3063–3073; doi: 10.1016/j.disc.2005.06.041
  - [233] (with A. E. Brouwer, W. H. Haemers and D. A. Preece) Self-dual, not self-polar, *Discrete Math.* **306** (2006), 3051–3053; doi: 10.1016/j.disc.2004.11.027

- [234] (editor) Problems from the IPM Conference on Combinatorics, Linear Algebra and Graph Coloring (Tehran 2003), *Discrete Math.* **306** (2006), 3174–3179; doi: 10.1016/j.disc.2006.06.002
- [235] (with A. M. Vershik) Some isometry groups of the Urysohn space, *Ann. Pure Appl. Logic* **143** (2006), 70–78; doi: 10.1016/j.apal.2005.08.001
- [236] Two chapters (Chapter VI.30, Infinite designs (with Bridget S. Webb), pp. 504–505, and Chapter VII.10, Designs and Matroids (with Michel M. Deza), pp. 847–851) in *Handbook of Combinatorial Design* (ed. C. J. Colbourn and J. Dinitz), Discrete Mathematics and its Applications **42**, CRC Press, 2006, ISBN: 1584885068.
- [237] Matrix groups, Chapter 67 in *Handbook of Linear Algebra* (ed. L. Hogben), Discrete Mathematics and its Applications **39**, CRC Press, 2006, ISBN: 1584885106.
- [238] Finite geometry and permutation groups: some polynomial links, *Rendiconti di Matematica*, (VII) **26** (2006), 339–350.
- [239] Orbit counting and the Tutte polynomial, *Combinatorics, Complexity and Chance* (ed. G. Grimmett and C. McDiarmid), Oxford University Press, Oxford, 2007, ISBN: 9780198571278.
- [240] (with R. A. Bailey) A family of balanced incomplete-block designs with repeated blocks on which general linear groups act, *J. Combinatorial Designs* **15** (2007), 143–150; doi: 10.1002/jcd.20120
- [241] (with J. Cilleruelo and O. Serra) On monochromatic solutions of equations in groups, *Revista Matemática Iberoamericana* **23** (2007), 387–397; doi: 10.4171/RMI/499
- [242] (with K. K. Kayibi) Orbital chromatic and flow roots, *Combinatorics, Probability and Computing* **16** (2007), 401–407; doi: 10.1017/S0963548306008200
- [243] (with A. Rudvalis) A design and a geometry for the group  $F_{22}$ , *Designs, Codes, Cryptography* **44** (2007), 11–14; doi: 10.1007/s10623-007-9041-1
- [244] (with R. A. Bailey) What is a design? How should we classify them? *Designs, Codes, Cryptography* **14** (2007), 223–238; doi: 10.1007/s10623-007-9092-3
- [245] (with Leonard Soicher) Block intersection polynomials, *Bull. London Math. Soc.* **39** (2007), 559–564; doi: 10.1112/blms/bdm034
- [246] (with Pablo Spiga) Min-wise independent families with respect to any linear order, *Communications in Algebra* **35** (2007), 3026–3033; doi: 10.1080/00927870701404812
- [247] (with Ashley Montanaro, Michael W. Newman, Simone Severini and Andreas Winter) On the quantum chromatic number of a graph, *Electronic J. Combinatorics* **14(1)** (2007), #R82 (15pp.)
- [248] Aspects of infinite permutation groups, in *Groups St Andrews 2005* (ed. C. M. Campbell, M. R. Quick, E. F. Robertson and G. C. Smith), London Math. Soc. Lecture Notes **339**, Cambridge Univ. Press, Cambridge, 2007, pp. 1–35; ISBN 0-521-69469-8
- [249] (with R. A. Bailey and R. Connelly) Sudoku, gerechte designs, resolutions, affine space, spreads, reguli, and Hamming codes, *American Math. Monthly* **115** (2008), 383–404.

- [250] (with D. Gewurz and F. Merola) Product action, *Discrete Math.* **308** (2008), 386–394; doi: 10.1016/j.disc.2006.11.054
- [251] (with B. Jackson and J. Rudd) Orbit-counting polynomials for graphs and codes, *Discrete Math.*, **308** (2008), 920–930; doi: 10.1016/j.disc.2007.07.108
- [252] (editor, with Douglas B. West) Research problems from BCC20, *Discrete Mathematics* **308** (2008), 621–630; doi: 10.1016/j.disc.2007.07.021
- [253] (with N. Iyudu) Graphs of relations and Hilbert series, *J. Symbolic Comput.* **42** (2007), 1066–1078; doi: 10.1016/j.jsc.2007.07.006
- [254] Two articles in *Princeton Companion to Mathematics* (ed. W. T. Gowers), Princeton University Press, 2009: Designs (III.14, pp. 172–173) and Gödel’s Theorem (V.15, pp. 700–702); ISBN 978-0-691-11880-2
- [255] (with Robert F. Bailey) On the single-orbit conjecture for uncoverings-by-bases, *J. Group Theory* **11** (2008), 845–850; doi: 10.1515/JGT.2008.053
- [256] (with Sam Tarzi) Limits of cubes, *Topology and its Applications* **155** (2008), 1454–1461; doi: 10.1016/j.topol.2008.03.022
- [257] (with Daniel Johannsen, Thomas Prellberg and Pascal Schweitzer) Counting defective parking functions, *Electronic J. Combinatorics* **15(1)** (2008), #R92 (15pp).
- [258] (with Priscila A. Kazanidis) Cores of symmetric graphs, *J. Australian Math. Soc.* **85** (2008), 145–154; doi: 10.1017/S1446788708000815
- [259] A generalisation of  $t$ -designs, *Discrete Math.* **309** (2009), 4835–4842; doi: 10.1016/j.disc.2008.07.005
- [260] (with Ross Applegate) Orbits on  $n$ -tuples, *Communications in Algebra* **37** (2009), 269–275; doi: 10.1080/00927870802243739
- [261] (with R. A. Bailey) Combinatorics of optimal designs, in *Surveys in Combinatorics 2009* (ed. S. Huczynska, J. D. Mitchell and C. M. Roney-Dougal), London Math. Soc. Lecture Notes **365**, Cambridge University Press 2009, pp. 19–73; ISBN 978-0-521-74173-6
- [262] Root systems and optimal block designs, *Michigan Math. J.* **58** (2009), 181–194; doi: 10.1307/mmj/1242071687
- [263] Decompositions of complete multipartite graphs, *Discrete Math.* **309** (2009), 4185–4186; doi: 10.1016/j.disc.2008.10.021
- [264] (with S. Riis and T. Wu) On the guessing number of shift graphs, *J. Discrete Algorithms* **7** (2009), 220–226; doi: 10.1016/j.jda.2008.09.009
- [265] Oligomorphic permutation groups, in *Perspectives in Mathematical Sciences II: Pure Mathematics* (ed. N. S. Narasimha Sastry, T. S. S. R. K. Rao, Mohan Delampady and B. Rajeev), World Scientific, Singapore, 2009, pp. 37–61; ISBN 978-981-4273-64-0
- [266] (with C. Buchheim and T. Wu) On the subgroup distance problem, *Discrete Math.* **309** (2009), 962–968; doi: 10.1016/j.disc.2008.01.036

- [267] (with D. Lockett) Posets, homomorphisms and homogeneity, *Discrete Math.* **310** (2010), 604–613; doi: 10.1016/j.disc.2009.04.027
- [268] (with T. Wu) The complexity of the weight problem for permutation and matrix groups, *Discrete Math.* **310** (2010), 408–416; doi: 10.1016/j.disc.2009.03.005
- [269] (with M. Kung and D. Stark) Random preorders and alignments, *Discrete Math.* **310** (2010), 591–603; doi: 10.1016/j.disc.2009.04.021
- [270] (with T. Prellberg and D. Stark) Asymptotic enumeration of 2-covers and line graphs, *Discrete Math.* **310** (2010), 230–240; doi: 10.1016/j.disc.2008.09.008
- [271] (with Christian Krattenthaler and Thomas W. Müller) Decomposable functors and the exponential principle, II, *Séminaire Lotharingien de Combinatoire* **61A** (2010), Article B61Am.
- [272] The power graph of a finite group, II, *J. Group Theory* **13** (2010), 779–783; doi: 10.1515/JGT.2010.023
- [273] (editor) Problems from CGCS Luminy, *Europ. J. Combinatorics* **31** (2010), 644–648; doi: 10.1016/j.ejc.2009.03.045
- [274] Permutation codes, *Europ. J. Combinatorics* **31** (2010), 482–490; doi: 10.1016/j.ejc.2009.03.044
- [275] (Editor) Research problems from the BCC21, *Discrete Math.* **310** (2010), 347–354; doi: 10.1016/j.disc.2009.04.016
- [276] (with Christian Krattenthaler and Thomas W. Müller) A note on higher-dimensional magic matrices, *Australasian J. Combinatorics* **50** (2011), 207–217.
- [277] (with Shamik Ghosh) The power graph of a finite group, *Discrete Math.* **311** (2011), 1220–1222; doi: 10.1016/j.disc.2010.02.011
- [278] (editor) Problems from the 22nd British Combinatorial Conference, *Discrete Math.* **311** (2011), 1074–1083; doi: 10.1016/j.disc.2011.02.024
- [279] (with Robert F. Bailey) Base size, metric dimension, and other invariants of groups and graphs, *Bull. London Math. Soc.* **43** (2011), 209–242; doi: 10.1112/blms/bdq096
- [280] (with Bridget Webb) Perfect countably infinite Steiner triple systems, *Australasian J. Combinatorics* **54** (2012), 273–278.
- [281] (with Adam Bohn and Peter Müller) Galois groups of multivariate Tutte polynomials, *J. Algebraic Combinatorics* **36** (2012), 223–230; doi: 10.1007/s10801-011-0332-2
- [282] (with Maxmilien Gadouleau) Remoteness of permutation codes, *European J. Combinatorics* **33** (2012), 1273–1285; doi: 10.1016/j.ejc.2012.03.027
- [283] (with A. J. W. Hilton and E. R. Vaughan) An analogue of Ryser’s Theorem for partial Sudoku squares, *J. Combinatorial Math. Combinatorial Computing* **80** (2012), 47–69.
- [284] (with Tatiana Gateva-Ivanova) Multipermutation solutions of the Yang–Baxter equation, *Comm. Math. Phys.* **309** (2012), 589–631; doi: 10.1007/s00220-011-1394-7



- [285] (with M. R. Gadouleau and S. Riis) Combinatorial representations, *J. Combinatorial Theory (A)* **120** (2013), 671–682; doi: 10.1016/j.jcta.2012.12.002
- [286] (with R. A. Bailey) Using graphs to find the best block designs, in *Topics in Structural Graph Theory* (ed. L. W. Beineke and R. J. Wilson), Encyclopedia of Mathematics and its Applications **147**, Cambridge University Press, 2013, pp. 282–317; ISBN 978-0-521-80231-4
- [287] (with J. Araújo, J. D. Mitchell and M. Neunhöffer) The classification of normalizing groups, *J. Algebra* **373** (2013), 481–490; doi: 10.1016/j.jalgebra.2012.08.033
- [288] Dixon’s Theorem and random synchronization, *Discrete Math.* **313** (2013), 1233–1236; doi: 10.1016/j.disc.2012.06.002
- [289] (with Claude Laflamme, Maurice Pouzet, Sam Tarzi and Robert Woodrow) Overgroups of the automorphism group of the Rado graph, pp. 45–54 in *Asymptotic Geometric Analysis* (ed. Monika Ludwig, Vitali D. Milman, Vladimir Pestov, and Nicole Tomczak-Jaegermann), *Fields Institute Communications* **68**, Springer, 2013; ISBN 978-1-4614-6405-1
- [290] Groups with right-invariant multiorders, *Australasian J. Combinatorics* **56** (2013), 187–193.
- [291] Aftermath: a personal view of combinatorics, pp. 355–366 in *Combinatorics, Ancient and Modern* (ed. J. J. Watkins and R. J. Wilson), Oxford University Press, 2013; ISBN 978-0-19-965659-2
- [292] (with João Araújo and Wolfram Bentz) Groups synchronizing a transformation of non-uniform kernel, *Theoretical Computer Science* **498** (2013), 1–9; doi: 10.1016/j.tcs.2013.06.016
- [293] The random graph, pp. 353–378 in *The Mathematics of Paul Erdős, II* (2nd ed.), ed. Ronald L. Graham, Jaroslav Nešetřil and Steve Butler, Springer, 2013, ISBN 978-1-4614-7253-7; doi: 10.1007/978-1-4614-7254-4.22
- [294] (with Joshua M. Browning and Ian M. Wanless), Bounds on the number of small Latin subsquares, *J. Combinatorial Theory (A)* **124** (2014), 41–56; doi: 10.1016/j.jcta.2014.01.002
- [295] (with João Araújo) Primitive groups synchronize non-uniform maps of extreme ranks, *J. Combinatorial Theory (B)* **106** (2014), 98–114; doi: 10.1016/j.jctb.2014.01.006
- [296] (with Ben Fairbairn and Maximilien Gadouleau) Computing in permutation groups without memory, *Chicago J. Theor. Computer Sci.*, Vol 2014, paper 7; doi: 10.4086/cjtcs.2014.007
- [297] (with Ben Fairbairn and Maximilien Gadouleau) Computing in matrix groups without memory, *Chicago J. Theor. Computer Sci.*, Vol 2014, paper 8; doi: 10.4086/cjtcs.2014.008
- [298] (with László Babai) Most primitive groups are full automorphism groups of edge-transitive hypergraphs, *J. Algebra* **421** (2015), 512–523; doi: 10.1016/j.jalgebra.2014.09.002

- [299] (with Pablo Spiga) Most switching classes with primitive automorphism groups contain graphs with trivial groups, *Australasian J. Combinatorics* **62** (2015), 76–90.
- [300] (with João Araújo) Permutation groups and transformation semigroups: results and problems, pp.128-141 in *Groups St Andrews 2013* (ed. C. M. Campbell, M. R. Quick, E. F. Robertson, C. M. Roney-Dougal), London Math. Soc. Lecture Notes **422**, Cambridge University Press, Cambridge, 2015, ISBN 978-1-107-51454-6
- [301] (with Sebastian Cioabă) A graph partition problem, *Amer. Math. Monthly* **122** (2015), 972–982.
- [302] (with João Araújo) Two generalizations of homogeneity in groups with applications to regular semigroups, *Trans. Amer. Math. Soc.* **368** (2016), 1159–1188; doi: 10.1090/tran/6368
- [303] (with Maria Elisa Fernandes, Dimitri Leemans and Mark Mixer) String C-groups as transitive subgroups of  $\text{Sym}(n)$ , *J. Algebra* **447** (2016), 468–478; doi: 10.1016/j.jalgebra.2015.09.040
- [304] (with Cheryl E. Praeger) Constructing flag-transitive, point-imprimitive designs, *J. Algebraic Combinatorics* **43** (2016), 755–769; doi: 10.1007/s10801-015-0591-4
- [305] (with Jorge André and João Araújo) The classification of partition homogeneous groups with applications to semigroup theory, *J. Algebra* **452** (2016), 288–310; doi: 10.1016/j.jalgebra.2015.12.025
- [306] (with R. A. Bailey, K. Filipiak, J. Kunert and A. Markiewicz) On optimality and construction of circular repeated-measurements designs, *Statistica Sinica* **27** (2017), 1–22; doi: 10.5705/ss.202015.0045
- [307] Enumerative combinatorics, pp.1–39 in *Algebra, Logic and Combinatorics* (ed. Shaun Bullett, Frank Smith and Tom Fearn), LTCC Advanced Mathematics Series **3**, World Scientific, Singapore, 2016. ISBN: 978-1-78634-029-0.
- [308] (with Anh Dang and Søren Riis) Guessing games on triangle-free graphs, *Electronic J. Combinatorics* **23(1)** (2016), Paper #1.48.
- [309] (with Josephine Kusuma and Patrick Solé)  $\mathbb{Z}_4$ -codes and their Gray map images as orthogonal arrays, *Designs, Codes, Cryptography* **84** (2017), 109–114; doi: 10.1007/s10623-016-0225-4.
- [310] (with J. Araújo, W. Bentz, G. F. Royle and A. Schaefer) Primitive groups, graph endomorphisms and synchronization, *Proc. London Math. Soc.* (3) **113** (2016), 829–867; doi: 10.1112/plms/pdw040
- [311] (with Maximilien Gadouleau, James D. Mitchell and Yann Peresse) Chains of subsemigroups, *Israel J. Math.* **220** (2017), 479–508; doi: 10.1007/s11856-017-1523-x
- [312] (with Alonso Castillo-Ramirez, Maximilien Gadouleau and James D. Mitchell) Lengths of words in transformation semigroups generated by digraphs, *J. Algebraic Combinatorics* **45** (2017), 149–170; doi: 10.1007/s10801-016-0703-9

- [313] (with Thomas Britz) Codes, chapter 16 in *Handbook of the Tutte polynomial* (ed. J. Ellis-Monaghan), CRC Press, Boca Raton, 2022, pp.328–344.
- [314] (with Kerri Morgan) Algebraic properties of chromatic roots, *Electronic J. Combinatorics* **24(1)** (2017), #P1.21
- [315] (with Maria Elisa Fernandes, Dimitri Leemans and Mark Mixer) Highest rank of a polytope for  $A_n$ , *Proc. London Math. Soc.* (3) **115** (2017), 135–176; doi: 10.1112/plms.12039
- [316] (with J. Araújo, J. P. Araújo, T. Dobson, A. Hulpke and P. Lopes) Imprimitive permutations in primitive groups, *J. Algebra* **486** (2017), 396–416; doi: 10.1016/j.jalgebra.2017.03.043
- [317] (with A. Lucchini and C. M. Roney-Dougal) Generating sets of finite groups, *Trans. Amer. Math. Soc.* **370** (2018), 6751–6770; doi: 10.1090/tran/7248
- [318] (with J. Araújo and W. Bentz) Orbits of primitive  $k$ -homogeneous groups on  $(n - k)$ -partitions with applications to semigroups, *Trans. Amer. Math. Soc.* **371** (2019), 105–136; doi: 10.1090/tran/7274
- [319] (with J. Araújo and B. Steinberg) Between primitive and 2-transitive: Synchronization and its friends, *Europ. Math. Soc. Surveys* **4** (2017), 101–184; doi: 10.4171/EMSS/4-2-1
- [320] (with G. Aalipour, S. Akbari, R. Nikandish and F. Shaveisi) On the structure of the power graph and the enhanced power graph of a group, *Electronic J. Combinatorics* **24(3)** (2017), paper P3.16
- [321] (with T. Nilson) Triple arrays from difference sets, *J. Combinatorial Designs* **25** (2017), 494–506; doi: 10.1002/jcd.21569
- [322] (with Mohammed Aljohani and John Bamberg) Synchronization and separation in the Johnson scheme, *Portugaliae Mathematica* **74** (2018), 213–232; doi: 10.4171/PM/2003
- [323] (with Jason Semeraro) The cycle polynomial of a permutation group, *Electronic J. Combinatorics* **25(1)** (2018), #P1.14.
- [324] (with R. A. Bailey and T. Nilson) Sesqui-arrays, including triple arrays, *Australas. J. Combinatorics* **71(3)** (2018), 427–451.
- [325] (with Bertalan Bodor and Csaba Szabó) Infinitely many reducts of homogeneous structures, *Algebra Universalis* **79** (2018), article #43; doi: 10.1007/s00012-018-0526-8
- [326] (with João Araújo) Special issue on computational algebra (introduction), *Portugaliae Mathematica* **74** (2018), 171–172; doi: 10.4171/PM/2000
- [327] (with H. Guerra and Š. Jurina) The power graph of a torsion-free group, *J. Algebraic Combinatorics* **49** (2019), 83–98; doi: 10.1007/s10801-018-0819-1
- [328] (with R. A. Bailey, A. Gavrilyuk and S. Goryainov) Equitable partitions of Latin square graphs, *J. Combinatorial Designs* **27** (2019), 142–160; doi: 10.1002/jcd.21634
- [329] (with J. Araújo, C. Casolo and F. Matucci) Integrals of groups, *Israel J. Math.* **234** (2019), 149–178; doi: 0.1007/s11856-019-1926-y

- [330] (with R. A. Bailey) Multi-part balanced incomplete-block designs, *Statistical Papers* **60** (2019), 405–426; doi: 10.1007/s00362-018-01071-x. Addendum: *ibid.*, in press; doi: 10.1007/s00362-019-01137-4
- [331] (with J. N. Bray, Q. Cai, P. Spiga and H. Zhang) The Hall–Paige conjecture, and synchronization for affine and diagonal groups, *J. Algebra* **545** (2020), 27–42; doi: 10.1016/j.jalgebra.2019.02.025
- [332] (with R. A. Bailey) Substitutes for the non-existent square lattice designs for 36 varieties (extended abstract), *Biuletyn Oceny Odmian* **35** (2018), 11–13.
- [333] (with David Ellis and William Raynaud) Smallest cyclic covering subspaces of  $\mathbb{F}_q^n$ , and lower bounds in Isbell’s conjecture, *Europ. J. Combinatorics* **81** (2019), 242–255; doi: 10.1016/j.ejc.2019.06.004
- [334] (with Sean Eberhard) Association schemes for diagonal groups, *Australasian J. Combinatorics* **75** (2019), 357–364; correction *ibid.* **78** (2020), 450.
- [335] (with R. A. Bailey, L. H. Soicher and E. R. Williams) Substitutes for the non-existent square lattice designs for 36 vertices, *J. Agricultural, Biological and Environmental Statistics* **25** (2020), 487–499; doi: 10.1007/s13253-020-00388-1
- [336] (with S. H. Jafari) On the connectivity and independence number of power graphs of groups, *Graphs Combin.* **36** (2020), 895–904; doi: 10.1007/s00373-020-02162-z
- [337] (with J. Araújo and W. Bentz) Primitive permutation groups and strongly factorizable transformation semigroups, *J. Algebra* **565** (2021), 513–530; doi: 10.1016/j.jalgebra.2020.05.023
- [338] (with J. Araújo and W. Bentz) The existential transversal property: a generalization of homogeneity and its impact on semigroups, *Trans. Amer. Math. Soc.* **374** (2021), 1155–1195; doi: 10.1090/tran/8285
- [339] (with B. Adam-Day) Undirecting membership in models of ZFA, *Aequationes Math.* **95** (2021), 393–400; doi: 10.1007/s00010-020-00763-w
- [340] (with R. A. Bailey, Michael Giudici and Gordon F. Royle) Groups generated by derangements, *J. Algebra* **572** (2021), 245–262; doi: 10.1016/j.jalgebra.2020.12.020
- [341] (with Colva Roney-Douglass and Saul Freedman) The non-commuting, non-generating graph of a nilpotent group, *Electronic J. Combinatorics* **28(1)** (2021), Paper P1.16 (15pp); doi: 10.37236/9802
- [342] (with J. Araújo, J. P. Araújo, W. Bentz and P. Spiga) A transversal property for permutation groups motivated by partial transformations, *J. Algebra* **573** (2021), 741–759; doi: 10.1016/j.jalgebra.2020.12.024
- [343] Graphs defined on groups, *Internat. J. Group Theory* **11** (2022), 43–124; doi: 10.22108/ijgt.2021.127679.1681
- [344] (with R. A. Bailey, M. Kinyon and C. E. Praeger) Diagonal groups and arcs over groups, *Designs, Codes, Cryptography*, **90** (2022), 2069–2080; doi: 10.1007/s10623-021-00907-2

- [345] (with J. Araújo, C. Casolo, F. Matucci and C. Quadrelli) Integrals of groups, II, *Israel J. Math.*, in press
- [346] (with P. Manna and R. Mehatari) Forbidden subgraphs of power graphs, *Electronic J. Combinatorics* **28(3)** (2021), Paper #P3.4 (14pp); doi: 10.37236/9961
- [347] (with R. A. Bailey) The diagonal graph, *J. Ramanujan Math. Soc.* **36** (2021), 353–361.
- [348] (with R. A. Bailey, Cheryl E. Praeger and Csaba Schneider) The geometry of diagonal groups, *Trans. Amer. Math. Soc.* **375** (2022), 5259–5311; doi: 10.1090/tran/8507
- [349] (with Ajay Kumar, Lavanya Selvaganesh and T. Tamizh Chelvam) Recent developments on the power graph of finite groups – a survey, *AKCE Internat. J. Graphs Combinatorics* **18** (2021), 65–94; doi: 10.1080/09728600.2021.1953359
- [350] (with Collin Bleak, Yonah Maissel, Andrés Navas, and Feyisayo Olukoya) The further chameleon groups of Richard Thompson and Graham Higman: Automorphisms via dynamics for the Higman groups  $G_{n,r}$ , *Memoirs Amer. Math. Soc.*, in press
- [351] (with Collin Bleak and Feyisayo Olukoya) Automorphisms of shift spaces and the Higman–Thompson groups: the one-sided case, *Discrete Analysis* **2021:15** (2021), 35pp; doi: 10.19086/da.28243
- [352] (with Pallabi Manna and Ranjit Mehatari) On finite groups whose power graph is a cograph, *J. Algebra* **591** (2022), 59–74; doi: 10.1016/j.jalgebra.2021.09.034
- [353] (with João Araújo, Wolfram Bentz, Michael Kinyon and Janusz Konieczny) Matrix theory for independence algebras, *Linear Algebra Appl.* **642** (2022), 221–250; doi: 10.1016/j.laa.2022.02.021
- [354] (with Natalia Maslova) Criterion of unrecognizability of a finite group by its Gruenberg–Kegel graph, *J. Algebra* **607** (2022), 186–213; doi: 10.1016/j.jalgebra.2021.12.005
- [355] (with Allen Herman and Dimitri Leemans) String  $C$ -groups with Schur index 2, *J. Pure Appl. Algebra* **226** (2022), 107025; doi: 10.1016/j.jpaa.2022.107025
- [356] (with V. V. Swathi and M. S. Sunitha) Matching in power graphs of finite groups, *Annals of Combinatorics* **26** (2022), 379–391; doi: 10.1007/s00026-022-00576-5
- [357] Balanced incomplete block designs, chapter in *The Sage Encyclopedia of Research Design*, Sage Publications Inc., Thousand Oaks, 2022, 6pp.; doi: 10.4135/9781071812082.n35
- [358] (with Bojan Kuzma) Between the enhanced power graph and the commuting graph, *J. Graph Theory*, in press; doi: 10.1002/jgt.22871
- [359] (with G. Arun Kumar, Rajat Kanti Nath and Lavanya Selvaganesh) Super graphs on groups, *Graphs and Combinatorics* **38** (2022), article 100; doi: 10.1007/s00373-022-02496-w

- [360] (with J. Araújo, C. Casolo, F. Mattucci, and C. Quadrelli) Integrals of groups, II, *Israel J. Math.*, in press.
- [361] (with R. Raveendra Prathap and T. Tamizh Chelvam) Subgroup sum graphs of finite abelian groups, *Graphs and Combinatorics* **38** (2022), article 114; doi: 10.1007/s00373-022-02515-w
- [362] (with Angsuman Das and Hiranya Kishore Dey) On some properties of vector space graphs, *Linear and Multilinear Algebra*, in press; doi: 10.1080/03081087.2022.2121370

### Book reviews, obituaries

- [1] *Ordered Permutation Groups* by A. M. W. Glass, *Bull. London Math. Soc.* **14** (1982), 463–464.
- [2] *Erdős on graphs: his legacy of unsolved problems* by F. Chung and R. Graham, *Nieuw Archief voor Wiskunde* (3) **17** (1999), 289–290.
- [3] *Proofs and Confirmations: The Story of the Alternating Sign Matrix Conjecture* by D. M. Bressoud, *Proc. Edinburgh Math. Soc.* **43** (2000), 665–666.
- [4] *Number Theoretic Density and Logical Limit Laws* by Stanley M. Burris, *Bull. London Math. Soc.* **34** (2002), 243–244.
- [5] *Four Colours Suffice: How the Map Problem was Solved* by Robin Wilson, in *London Math. Soc. Newsletter* **315** (2003), 25–26.
- [6] *Spectral Generalizations of Line Graphs: on graphs with least eigenvalue  $-2$*  by D. Cvetković, P. Rowlinson and S. Simić, *Bull. London Math. Soc.* **37** (2005), 479–480.
- [7] *The Mathematician’s Brain: A Personal Tour through the Essentials of Mathematics and Some of the Great Brains behind them* by David Ruelle, and *How Mathematicians Think: Using Ambiguity, Contradiction and Paradox to Create Mathematics* by William Byers, both Princeton University Press 2007, *Times Higher*, 14 September 2007, 24–25.
- [8] *The Unfinished Game: Pascal, Fermat and the Seventeenth-Century Letter that Made the World Modern* by Keith Devlin, *Times Higher*, 7 May 2009, 50–51.
- [9] *Before Sudoku: The World of Magic Squares* by Seymour S. Block and Santiago A. Tavares, Oxford University Press, 2009, in *London Math. Soc. Newsletter* **395** (2010), 35.
- [10] *Circles Disturbed: the Interplay of Mathematics and Narrative* (ed. Apostolos Doxiadis and Barry Mazur), in *London Math. Soc. Newsletter* **417** (2012), 30.
- [11] *Erdős–Ko–Rado theorems: Algebraic Approaches* by Chris Godsil and Karen Meagher, *The Mathematical Gazette* **102** (2018), 189–190.
- [12] Obituary: Robin Chapman, *London Math. Soc. Newsletter* **493** (February 2021), 64–65.