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).

[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).

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 λ-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 2*n*-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 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. Pálfy) 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] Digraphs admitting sharply edge-transitive automorphism groups, *Europ. J. Combinatorics* **8** (1987), 357–365.

[96] 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.

[97] (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.

[98] (with M. Kiyota) Sharp characters of finite groups, *J. Algebra* **115** (1988), 125–143.

[99] Some sequences of integers, *Discrete Math.* **75** (1989), 85–102.

[100] Groups of order-automorphisms of the rational numbers with prescribed scale type, *J. Math. Psychol.* **33** (1989), 163–171.

[101] A problem on integer matrices, *Linear Algebra Appl.* **114** (1989), 199–206.

[102] (with S. R. Thomas) Groups acting on unordered sets, *Proc. London Math. Soc.* (3) **59** (1989), 541–557.

[103] (with P. Frankl & W. M. Kantor) Intersecting families of finite sets and fixed-point-free 2-elements, *Europ. J. Combinatorics* **10** (1989), 149–160.

[104] (with R. Solomon & A. Turull) Chains of subgroups in symmetric groups, *J. Algebra* **127** (1989), 340–352.

[105] (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.

[106] (with D. R. Hughes & A. Pasini) Extended generalized quadrangles, *Geometriae Dedicata* **35** (1990), 193–228.

[107] (with P. H. Fisher) Small extended generalized quadrangles, *Europ. J. Combinatorics* **11** (1990), 403–413.

[108] Several 2-(46, 6, 3) designs, *Discrete Math.* **87** (1991), 89–90.

[109] The age of a relational structure, *Discrete Math.* **95** (1991), 49–67.

[110] Covers of graphs and EGQs, *Discrete Math.* **97** (1991), 83–92.

[111] (with J. J. Cannon) Fast recognition of doubly transitive groups, *J. Symbolic Comput.* **12** (1991), 459–474.

[112] Infinite permutation groups in enumeration and model theory, *Proc. International Congress of Mathematicians* (Kyoto 1990), 1431–1441, Springer–Verlag, Tokyo, 1991.

[113] (with F. C. Bussemaker, J. J. Seidel & S. V. Tsaranov) *Tables of Signed Graphs*, Technical Report **91–WSK–01**, Eindhoven University of Technology, 1991.

[114] (with J. I. Hall) Some groups generated by transvection subgroups, *J. Algebra*, **140** (1991), 184–209.

[115] Infinite geometric groups of rank 4, *Europ. J. Combinatorics*, **13** (1992), 87–88.

[116] Almost all quasigroups have rank 2, *Discrete Math.* **106/107** (1992), 111–115.

[117] (with A. M. Cohen) On the number of fixed point free elements in a permutation group, *Discrete Math.* **106/107** (1992), 135–138.

[118] 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.

[119] 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.

[120] (with J. A. Thas and A. Blokhuis) On a generalization of a theorem of B. Segre, *Geometriae Dedicata* **43** (1992), 299–305.

[121] (with C. E. Praeger) Partitioning into Steiner systems, pp. 61–71 in *Combinatorics '88* (ed. A. Barlotti *et al.*), Mediterranean Press, Roma, 1992.

[122] Quasi-symmetric designs possessing a spread, pp. 231–236 in *Combinatorics '88* (ed. A. Barlotti *et al.*), Mediterranean Press, Roma, 1992.

[123] (with T. Kataoka and M. Kiyota) Sharp characters of finite groups of type $\{-1, 1\}$, *J. Algebra* **152** (1992), 248–258.

[124] Extended generalised quadrangles — a survey, *Sankhyā: The Indian Journal of Statistics* **54** (1992), 89–95.

[125] (with G. Korchmàros) One-factorizations of complete graphs with a doubly transitive automorphism group, *Bull. London Math. Soc.* **25** (1993), 1–6.

[126] (with W. M. Kantor) Random permutations: Some group-theoretic aspects, *Combinatorics, Probability and Computing* **2** (1993), 257–262.

[127] 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.

[128] (with C. Martins) A theorem on reconstructing random graphs, *Combinatorics, Probability and Computing* **2** (1993), 1–9.

[129] (with C. E. Praeger) Block-transitive t-designs, I: point-imprimitive designs, *Discrete Math.* **118** (1993), 33–43.

[130] (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.

[131] (with C. E. Praeger and N. C. Wormald) Highly arc-transitive digraphs and universal covering digraphs, *Combinatorica* **13** (1993), 1–21.

[132] (with J. J. Seidel and S. V. Tsaranov) Signed graphs, root lattices and Coxeter groups, *J. Algebra* **164** (1994), 173–209.

[133] Ovoids in infinite incidence structures, *Arch. Math.* **62** (1994), 189–192.

[134] (with A. Beutelspacher) Transfinite methods in geometry, *Bull. Belg. Math. Soc.* **1** (1994), 337–347.

[135] How few entries determine any Latin square? *Bull. Inst. Combinatorics Appl.* **10** (1994), 63–65.

[136] An orbit theorem for Steiner triple systems, *Discrete Math.* **125** (1994), 97–100.

[137] Two-graphs and trees, *Discrete Math.* **127** (1994), 63–74.

[138] Infinite linear spaces, *Discrete Math.* **129** (1994), 29–41.

[139] Coloured spheres and quantum mechanics, *Bull. Inst. Combinatorics Appl.* **11** (1994), 126-128.

[140] 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.

[141] Counting two-graphs related to trees, *Electronic J. Combinatorics* **2** (1995), #R4 (8pp).

[142] (with F. Buekenhout) Projective and affine geometry over division rings, pp. 27–62 in *Handbook of Incidence Geometry* (ed. F. Buekenhout), Elsevier, Amsterdam, 1995.

[143] Note on large sets of infinite Steiner systems, *J. Combinatorial Design* **3** (1995), 307–311.

[144] (with D. Ghinelli) Tubes of even order and flat $\pi.C_2$ geometries, *Geometriae Dedicata* **55** (1995), 265–278.

[145] Sequence operators from groups, *Linear Algebra and Appl.* **226–228** (1995), 109–113.

[146] (Editor) Research problems (Problems from the Fourteenth British Combinatorial Conference), *Discrete Math.* **138** (1995), 405–411.

[147] (with D. G. Fon-Der-Flaass) Bases for permutation groups and matroids, *Europ. J. Combinatorics* **16** (1995), 537–544.

[148] (with D. G. Fon-Der-Flaass) Orbits of antichains revisited, *Europ. J. Combinatorics* **16** (1995), 545–554.

[149] Permutation groups, pp. 611–645 in *Handbook of Combinatorics* (ed. R. L. Graham, M. Grötschel and L. Lovász), Elsevier, Amsterdam, 1995.

[150] Finite geometries, pp. 647–691 in *Handbook of Combinatorics* (ed. R. L. Graham, M. Grötschel amd L. Lovász), Elsevier, Amsterdam, 1995.

[151] Cofinitary permutation groups, *Bull. London Math. Soc.* **28** (1996), 113–140.

[152] Metric and topological aspects of the symmetric group of countable degree, *Europ. J. Combinatorics* **17** (1996), 135–142.

[153] Stories about groups and sequences, *Designs, Codes, and Cryptography* **8** (1996), 109–134.

[154] Stories from the Age of Reconstruction, *Congressus Numerantium* **113** (1996), 31–41.

[155] Cycle-closed permutation groups, *J. Algebraic Combinatorics* **5** (1996), 315–322.

[156] The random graph, pp. 331–351 in *The Mathematics of Paul Erdős* (ed. R. L. Graham and J. Nešetřil), Springer, Berlin, 1997.

[157] 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.

[158] 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.

[159] On the probability of connectedness, *Discrete Mathematics* **167/168** (1997), 173–185.

[160] 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.

[161] 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.

[162] (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.

[163] Finite geometry after Aschbacher's Theorem: 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.

[164] 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.

[165] 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.

[166] On an algebra related to orbit-counting, *J. Group Theory* **1** (1998), 173–179.

[167] (with N. J. Calkin) Almost odd random sum-free sets, *Combinatorics, Probability and Computing* **7** (1998), 27–32.

[168] A census of infinite distance-transitive graphs, *Discrete Math.* **192** (1998), 11–26.

[169] (editor) Problems from the Sixteenth British Combinatorial Conference, *Discrete Math.* **197/198** (1999), 799–812.

[170] (with P. Erdős) Notes on sum-free and related sets, *Combinatorics, Probability and Computing* **8** (1999), 31–43.

[171] (with E. A. Bender, A. M. Odlyzko and B. L. Richmond) Connectedness, classes and cycle index, *Combinatorics, Probability and Computing* **8** (1999), 95–107.

[172] An extremal problem related to biplanes, *Australasian J. Combinatorics* **20** (1999), 97–100.

[173] SGDs with doubly transitive automorphism group, *J. Graph Theory* **32** (1999), 229–233.

[174] (with A. Bonato and D. Delić) Tournaments and orders with the pigeonhole property, *Canadian Math. Bull.* **43** (2000), 397–405.

[175] Some counting problems related to permutation groups, *Discrete Math.* **225** (2000), 77–92.

[176] (with Csaba Szabó) Independence algebras, *J. London Math. Soc.* (2) **61** (2000), 321–334.

[177] Homogeneous Cayley objects, *European J. Combinatorics* **21** (2000), 745–760.

[178] (editor) Problems on discrete metric spaces, *European J. Combinatorics* **21** (2000), 831–838.

[179] (with L. Babai) Automorphisms and enumeration of switching classes of tournaments, *Electronic J. Combinatorics* **7(1)** (2000), article #R38.

[180] Sequences realized by oligomorphic permutation groups, *Journal of Integer Sequences* **3** (2000), article 00.1.5.

[181] (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.

[182] Permutation groups whose non-identity elements have k fixed points, *J. Group Theory* **4** (2001), 45–51.

[183] 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.

[184] (editor) Problems from the 17th British Combinatorial Conference, *Discrete Math.* **231** (2001), 469–478.

[185] 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.

[186] (with Wilfrid Hodges) Some combinatorics of imperfect information, *J. Symbolic Logic* **66** (2001), 673–684.

[187] (with Anthony Bonato, Dejan Delic and Stéphan Thomassé) Generalized pigeonhole properties of graphs and oriented graphs, *European J. Combinatorics* **23** (2002), 257–274.

[188] (with Bridget S. Webb) What is an infinite design?, *J. Combinatorial Design* **10** (2002), 79–91.

[189] Cycle index, weight enumerator and Tutte polynomial, *Electronic J. Combinatorics* **9(1)** (2002), #N2 (10pp).

[190] (with Philippe Cara) Independent generating sets and geometries for symmetric groups, *J. Algebra* **258** (2002), 641–650.

[191] Homogeneous permutations, *Electronic J. Combinatorics* **9(2)** (2002), #R2 (9pp).

[192] 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.

[193] (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.

[194] (with Dudley Stark) A prolific construction of graphs with the n-e.c. property, *Electronic J. Combinatorics* **9(1)** (2002), #R31 (12pp).

[195] Permutation groups, pp. 86–89 in *The Concise Handbook of Algebra* (ed. A. V. Mikhalev and G. F. Pilz), Kluwer, Dordrecht, 2002.

[196] 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.

[197] (with S. Majid) Braided line and counting fixed points of GL$(d, \mathbb{F}_q)$, *Communications in Algebra* **31** (2003), 2003–2013.

[198] (with P. P. Alejandro and R. A. Bailey), Association schemes and permutation groups, *Discrete Math.* **266** (2003), 47–67.

[199] Multi-letter Youden rectangles from quadratic forms, *Discrete Math.* **266** (2003), 143–151.

[200] (editor) Problems from the eighteenth British Combinatorial Conference, *Discrete Math.* **266** (2003), 441–451.

[201] Random strongly regular graphs?, *Discrete Math.* **273** (2003), 101–112.

[202] (with C. Y. Ku) Intersecting families of permutations, *Europ. J. Combinatorics* **24** (2003), 881–890.

[203] 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.

[204] (with S. Majid) Braided line and counting fixed points of GL$(d, \mathbb{F}_q)$, *Communications in Algebra* **31** (2003), 2003–2013.

[205] 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.

[206] 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.

[207] (with S. Tarzi) Switching with more than two colours, *Europ. J. Combinatorics* **25** (2004), 169–177.

[208] (with T. W. Müller) A cohomological property of *p*-groups, *Archiv der Mathematik* **82** (2004), 200–204.

[209] 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.

[210] The random graph has the strong small index property, *Discrete Math.* **291** (2005), 41–43.

[211] Partitions and permutations, *Discrete Math.* **291** (2005), 45–54.

[212] (with Ian M. Wanless) Covering radius for sets of permutations, *Discrete Math.* **293** (2005), 91–109.

[213] (editor) Problems from the 19th British Combinatorial Conference, *Discrete Math.* **293** (2005), 313–320.

[214] (with R. A. Bailey) Crested products of association schemes, *J. London Math. Soc.* **72** (2005), 1–24.

[215] Embedding partial Steiner triple systems so that their automorphisms extend, *J. Combinatorial Designs* **13** (2005), 466–470.

[216] (with T. W. Müller) A descent principle in modular subgroup arithmetic, *J. Pure Appl. Algebra* **203** (2005), 189–203.

[217] (with Norbert Knarr) Tubes in PG(3,q), *Europ. J. Combinatorics* **27** (2006), 114–124.

[218] (with G. R. Omidi and B. Tayfeh-Rezaie) 3-designs from PGL(2,q), *Electronic J. Combinatorics* **13** (2006), #R50 (11pp.)

[219] (with J. Sheehan and P. Spiga) Semiregular automorphisms of vertex-transitive cubic graphs, *Europ. J. Combinatorics* **27** (2006), 924–930.

[220] (with J. Nešetřil) Homomorphism-homogeneous relational structures, *Combinatorics, Probability and Computing* **15** (2006), 91–103.

[221] (with T. Prellberg and D. Stark) Asymptotic enumeration of incidence matrices, *Journal of Physics: Conference Series* **42** (2006), 59–70.

[222] (with T. Prellberg and D. Stark) Asymptotics for incidence matrix classes, *Electronic J. Combinatorics* **13** (2006), #R85 (19pp.)

[223] (with A. W. Dent) Orbit-homogeneity in permutation groups, *Bull. London Math. Soc.* **38** (2006), 597–606.

[224] (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

[225] (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

[226] (with H. R. Maimani, G. R. Omidi and B. Tayfeh-Rezaie) 3-designs from PSL(2,q), *Discrete Math.* **306** (2006), 3063-3073; doi: 10.1016/j.disc.2005.06.041

[227] (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

[228] (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

[229] (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

[230] 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.

[231] Matrix groups, Chapter 67 in *Handbook of Linear Algebra* (ed. L. Hogben), Discrete Mathematics and its Applications **39**, CRC Press, 2006, ISBN: 1584885106.

[232] Finite geometry and permutation groups: some polynomial links, *Rendiconti di Matematica*, (VII) **26** (2006), 339–350.

[233] Orbit counting and the Tutte polynomial, *Combinatorics, Complexity and Chance* (ed. G. Grimmett and C. McDiarmid), Oxford University Press, Oxford, 2007, ISBN: 9780198571278.

[234] (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

[235] (with J. Cilleruelo and O. Serra) On monochromatic solutions of equations in groups, *Revista Matemática Iberoamericana* **23** (2007), 387–397.

[236] (with K. K. Kayibi) Orbital chromatic and flow roots, *Combinatorics, Probability and Computing* **16** (2007), 401-407; doi: 10.1017/S0963548306008200

[237] (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

[238] (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

[239] (with Leonard Soicher) Block intersection polynomials, *Bull. London Math. Soc.* **39** (2007), 559–564; doi: 10.1112/blms/bdm034

[240] (with Pablo Spiga) Min-wise independent families with respect to any linear order, *Communications in Algebra* **35** (2007), 3026–3033; doi: 10.1080/00927870701404812

[241] (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.

[242] (with D. Gewurz and F. Merola) Product action, *Discrete Math.* **308** (2008), 386–394; doi: 10.1016/j.disc.2006.11.054

[243] (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

[244] (editor, with Douglas B. West) Research problems from BCC20, *Discrete Mathematics* **308** (2008), 621–630; doi: 10.1016/j.disc.2007.07.021

[245] (with N. Iyudu) Graphs of relations and Hilbert series, *J. Symbolic Comput.* **42** (2007), 1066–1078; doi: 10.1016/j.jsc.2007.07.006

[246] 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)

[247] (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

[248] (with Sam Tarzi) Limits of cubes, *Topology and its Applications* **155** (2008), 1454–1461; doi: 10.1016/j.topol.2008.03.022

[249] (with Daniel Johannsen, Thomas Prellberg and Pascal Schweitzer) Counting defective parking functions, *Electronic J. Combinatorics* **15(1)** (2008), #R92 (15pp).

[250] (with Priscila A. Kazanidis) Cores of symmetric graphs, *J. Australian Math. Soc.* **85** (2008), 145–154; doi: 10.1017/S1446788708000815

[251] A generalisation of *t*-designs, *Discrete Math.* **309** (2009), 4835–4842; doi: 10.1016/j.disc.2008.07.005

[252] (with Ross Applegate) Orbits on *n*-tuples, *Communications in Algebra* **37** (2009), 269–275; doi: 10.1080/00927870802243739

[253] (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.

[254] Root systems and optimal block designs, *Michigan Math. J.* **58** (2009), 181–194; doi: 10.1307/mmj/1242071687

[255] Decompositions of complete multipartite graphs, *Discrete Math.* **309** (2009), 4185–4186; doi: 10.1016/j.disc.2008.10.021

[256] (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

[257] 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

[258] (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

[259] (with D. Lockett) Posets, homomorphisms and homogeneity, *Discrete Math.* **310** (2010), 604-613; doi: 10.1016/j.disc.2009.04.027

[260] (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

[261] (with M. Kung and D. Stark) Random preorders and alignments, *Discrete Math.* **310** (2010), 591–603; doi: 10.1016/j.disc.2009.04.021

[262] (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

[263] (with Christian Krattenthaler and Thomas W. Müller) Decomposable functors and the exponential principle, II, *Séminaire Lotharingien de Combinatoire* **61A** (2010), Article B61Am.

[264] The power graph of a finite group, II, *J. Group Theory* **13** (2010), 779–783; doi: 10.1515/JGT.2010.023

[265] (editor) Problems from CGCS Luminy, *Europ. J. Combinatorics* **31** (2010), 644–648; doi: 10.1016/j.ejc.2009.03.045

[266] Permutation codes, *Europ. J. Combinatorics* **31** (2010), 482–490; doi: 10.1016/j.ejc.2009.03.044

[267] (Editor) Research problems from the BCC21, *Discrete Math.* **310** (2010), 347–354; doi: 10.1016/j.disc.2009.04.016

[268] (with Christian Krattenthaler and Thomas W. Müller) A note on higher-dimensional magic matrices, *Australasian J. Combinatorics* **50** (2011), 207–217.

[269] (with Shamik Ghosh) The power graph of a finite group, *Discrete Math.* **311** (2011), 1220–1222; doi: 10.1016/j.disc.2010.02.011

[270] (editor) Problems from the 22nd British Combinatorial Conference, *Discrete Math.* **311** (2011), 1074–1083; doi: 10.1016/j.disc.2011.02.024

[271] (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

[272] (with Bridget Webb) Perfect countably infinite Steiner triple systems, *Australasian J. Combinatorics* **54** (2012), 273–278.

[273] (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

[274] (with Maxmilien Gadouleau) Remoteness of permutation codes, *European J. Combinatorics* **33** (2012), 1273–1285; doi: 10.1016/j.ejc.2012.03.027

[275] (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.

[276] (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

[277] (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

[278] (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.

[279] (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

Book reviews

[1] *Erdős on graphs: his legacy of unsolved problems* by F. Chung and R. Graham, *Nieuw Archief voor Wiskunde* (3) **17** (1999), 289–290.

[2] *Proofs and Confirmations: The Story of the Alternating Sign Matrix Conjecture* by D. M. Bressoud, *Proc. Edinburgh Math. Soc.* **43** (2000), 665–666.

[3] *Number Theoretic Density and Logical Limit Laws* by Stanley M. Burris, *Bull. London Math. Soc.* **34** (2002), 243–244.

[4] *Four Colours Suffice: How the Map Problem was Solved* by Robin Wilson, in *London Math. Soc. Newsletter* **315** (2003), 25–26.

[5] *Spectral Generalizations of Line Graphs: on graphs with least eigenvalue* -2 by D. Cvetkovič, P. Rowlinson and S. Simič, *Bull. London Math. Soc.* **37** (2005), 479–480.

[6] *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.

[7] *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.

[8] *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.

[9] *Circles Disturbed: the Interplay of Mathematics and Narrative* (ed. Apostolos Doxiadis and Barry Mazur), in *London Math. Soc. Newsletter* **417** (2012), 30.