

List of publications of Alexander Pott

- [1] Dieter Jungnickel and Alexander Pott. Two results on difference sets. In *Colloquia Mathematica Societatis János Bolyai 52. Combinatorics*, volume 52, pages 325–330, Eger (Hungary), 1987.
- [2] Alexander Pott. Applications of the DFT to abelian difference sets. *Arch. Math.*, 51:283–288, 1988.
- [3] Alexander Pott. A note on non-abelian difference sets. *Europ. J. Combinatorics*, 9:169–170, 1988.
- [4] K. T. Arasu and Alexander Pott. Relative difference sets with multiplier 2. *Ars Combinatoria*, 27:139–142, 1989.
- [5] Dieter Jungnickel and Alexander Pott. Computational non-existence results for abelian affine difference sets. *Congressus Numerantium*, 68:91–98, 1989.
- [6] Alexander Pott. On abelian difference sets with multiplier -1. *Arch. Math.*, 53:510–512, 1989.
- [7] Alexander Pott. A note on self-orthogonal codes. *Discrete Math.*, 76:283–284, 1989.
- [8] K. T. Arasu, James Davis, Dieter Jungnickel, and Alexander Pott. A note on intersection numbers of difference sets. *European J. Combin.*, 11:95–98, 1990.
- [9] K. T. Arasu, Dieter Jungnickel, and Alexander Pott. Divisible difference sets with multiplier -1. *Journal of Algebra*, 133(1):35–62, 1990.
- [10] Alexander Pott. An affine analogue of Wilbrink’s theorem. *J. Comb. Theory Ser.A*, 55:313–315, 1990.
- [11] Alexander Pott. On multiplier theorems. In Dijen K. Ray-Chaudhuri, editor, *Coding theory and design theory, Part II Design Theory*, volume 21 of *The IMA volumes in mathematics and its applications*, pages 286–272. Springer, 1990.
- [12] Alexander Pott. On symmetric designs whose incidence matrices satisfy a certain condition. *J. Combin. Math. Combin. Comput.*, 8:13–16, 1990.
- [13] K. T. Arasu, James Davis, Dieter Jungnickel, and Alexander Pott. Some non-existence results on divisible difference sets. *Combinatorica*, 11(1):1–8, 1991.
- [14] K. T. Arasu, Willem H. Haemers, Dieter Jungnickel, and Alexander Pott. Matrix constructions of divisible designs. *Linear Algebra Appl.*, 153:123–133, 1991.

- [15] K. T. Arasu, Dieter Jungnickel, and Alexander Pott. The Mann test for divisible difference sets. *Graphs and Combinatorics*, 7:209–217, 1991.
- [16] K. T. Arasu, Dieter Jungnickel, and Alexander Pott. Symmetric divisible designs with $k - \lambda_1 = 1$. *Discrete Math.*, 97:25–38, 1991.
- [17] K. T. Arasu and Alexander Pott. Group divisible designs with 2^a points. *Utilitas Mathematica*, 39:161–166, 1991.
- [18] K. T. Arasu and Alexander Pott. On quasiregular collineation groups of projective planes. *Des., Codes, Cryptogr.*, 1:83–92, 1991.
- [19] K. T. Arasu and Alexander Pott. Some constructions of group divisible designs with Singer groups. *Discrete Math.*, 97:39–45, 1991.
- [20] Alexander Pott and Mohan Shrikhande. t -designs with few intersection numbers. *Discrete Math.*, 90:215–217, 1991.
- [21] K. T. Arasu and Alexander Pott. Cyclic affine planes and Paley difference sets. *Discrete Math.*, 106/107:19–23, 1992.
- [22] Alexander Pott. A generalization of a construction of Lenz. *Sankhyā, Ser.A*, 54:315–318, 1992.
- [23] Alexander Pott. New necessary conditions on the existence of abelian difference sets. *Combinatorica*, 12(1):89–93, 1992.
- [24] Alexander Pott. On abelian difference set codes. *Des., Codes, Cryptogr.*, 2:263–271, 1992.
- [25] Alexander Pott. On the complexity of normal bases. *Bull. Inst. Combin. Appl.*, 4:51–52, 1992.
- [26] Alexander Pott. Maximal difference matrices of order q . *Journal of Combinatorial Designs*, 1(2):171–176, 1993.
- [27] K. T. Arasu, Dieter Jungnickel, Siu Lun Ma, and Alexander Pott. Strongly regular Cayley graphs with $\lambda - \mu = -1$. *J. Comb. Theory Ser.A*, 67:116–125, 1994.
- [28] K. T. Arasu and Alexander Pott. Variations on the McFarland and Spence constructions of difference sets. *Australas. J. Comb.*, 10:199–204, 1994.
- [29] Dieter Jungnickel and Alexander Pott. A new class of symmetric (v, k, λ) -designs. *Des., Codes, Cryptogr.*, 4:319–325, 1994.
- [30] Alexander Pott. On projective planes admitting elations and homologies. *Geom. Dedicata*, 52:181–193, 1994.
- [31] Alexander Pott. On the structure of abelian groups admitting divisible difference sets. *Journal of Combinatorial Theory, Series A*, 65(2):202–213, 1994.

- [32] K. T. Arasu, J. F. Dillon, D. Jungnickel, and A. Pott. The solution of the Waterloo problem. *J. Comb. Theory Ser.A*, 71(2):316–331, 1995.
- [33] K. T. Arasu, Dieter Jungnickel, Siu Lun Ma, and Alexander Pott. Relative difference sets with $n = 2$. *Discrete Math.*, 147:1–17, 1995.
- [34] S. L. Ma and A. Pott. Relative difference sets, planar functions, and generalized Hadamard matrices. *Journal of Algebra*, 175:505–525, 1995.
- [35] Alexander Pott and Steven P. Bradley. Existence and nonexistence of almost-perfect autocorrelation sequences. *IEEE Trans. Inf. Th.*, 41(1):301–304, January 1995.
- [36] Alexander Pott. A survey on relative difference sets. In K. T. Arasu, J.F. Dillon, K. Harada, S. Sehgal, and R. Solomon, editors, *Groups, Difference Sets, and the Monster. Proceedings of a Special Research Quarter at the Ohio State University, Spring 1993*, pages 195–232, Berlin, 1996. Walter de Gruyter.
- [37] Alexander Pott, Dirk Reuschling, and Bernhard Schmidt. A multiplier theorem for projections of affine difference sets. *J. Stat. Plann. Inference*, 62(200):63–67, 1997.
- [38] Dieter Jungnickel and Alexander Pott. Difference sets: An introduction. In Alexander Pott, P. Vijay Kumar, Tor Helleseth, and Dieter Jungnickel, editors, *Difference sets, sequences and their correlation properties*, volume 542 of *NATO Science Series*. Kluwer Academic Publishers, Dordrecht, 1999.
- [39] Dieter Jungnickel and Alexander Pott. Perfect and almost perfect sequences. *Discrete Applied Mathematics*, 95:331–359, 1999.
- [40] Holger Glaab and Alexander Pott. The Hamiltonian p -median problem. *Electron. J. Combin.*, 7(1), 2000. R42.
- [41] K. T. Arasu, Yuqing Chen, and Alexander Pott. Hadamard and conference matrices. *J. Algebraic Combin.*, 14(2):103–117, September 2001.
- [42] K.T. Arasu and Alexander Pott. A nonexistence result on negacirculant conference matrices. *Congressus Numerantium*, 150:199–210, 2001.
- [43] Holger Glaab and Alexander Pott. Optimization problems in a semi-automatic device for cutting leather. In Willi Jäger and Hans-Joachim Krebs, editors, *Mathematics–Key Technology for the Future*, pages 609–622. Springer, Berlin, Heidelberg, New York, 2003.
- [44] Hans Dobbertin, Donald Mills, Eva Nuria Müller, Alexander Pott, and Wolfgang Willems. APN functions in odd characteristic. *Discrete Appl. Math.*, 267(1–3):95–112, 2003.

- [45] Alexander Pott and Gohar Kyureghyan. On the linear complexity of the Sidelnikov-Lempel-Cohn-Eastman sequences. *Des., Codes, Cryptogr.*, 29:149–164, 2003.
- [46] Alexander Pott. Nonlinear functions in abelian groups and relative difference sets. *Discrete Appl. Math.*, 138:177–193, 2004.
- [47] Alexander Pott. Group algebras and correlation immune functions. In Tor Helleseth and Dilip Sarwate, editors, *Sequences and Their Applications – Proceedings of SETA '04*, volume 3486 of *Lecture Notes in Computer Science*, pages 437–450. Springer-Verlag, 2005.
- [48] Lilya Budaghyan, Claude Carlet, and Alexander Pott. New constructions of almost bent and almost perfect nonlinear polynomials. In Pascale Charpin and Øyvind Ytrehus, editors, *Abstract Book of the International Workshop on Coding and Cryptography, Bergen (Norway)*, pages 306–315, 2005.
- [49] Yves Edel, Gohar Kyureghyan, and Alexander Pott. A new APN function which is not equivalent to a power mapping. *IEEE Trans. Inform. Theory*, 52(2):744–747, 2006.
- [50] Lilya Budaghyan, Claude Carlet, and Alexander Pott. New classes of almost bent and almost perfect nonlinear polynomials. to appear in *IEEE Transaction on Information Theory*, 2006.
- [51] K.T. Arasu, Yu Qing Chen, and Alexander Pott. On abelian $2^{2m+1}(2^{m-1} + 1)$, $2^m(2^m + 1)$, 2^m -difference sets. to appear.
- [52] Alexander Pott. Two applications of relative difference sets: Difference triangle sets and negaperiodic autocorrelation functions. to appear.
- [53] Doreen Hertel and Alexander Pott. A characterization of a class of maximum nonlinear functions. manuscript, 2006.