

Publication list of Peter Sin

Mathematical papers

1. P. Sin, *A Green ring version of Brauer's Induction Theorem*, J. Algebra **111** (1987), 528-535.
2. P. Sin, *The Green ring and modular representations of finite groups of Lie type*, J. Algebra **123** (1989), 185-192.
3. P. Sin, W. Willems, *On induced projective modules*, Proc. Amer. Math. Soc. **105** (1989), 793-801.
4. P. Sin, *On the representation theory of modular Hecke algebras*, J. Algebra **146** (1992), 267-277.
5. P. Sin, W. Willems, *G-invariant quadratic forms*, J. Reine u. Angew. Math. **420** (1991), 45-59.
6. P. Sin, *Extensions of simple modules for $Sp_4(2^n)$ and $Suz(2^m)$* , Bull. Lond. Math. Soc. **24** (1992), 159-164.
7. P. Sin, *Extensions of simple modules for $SL_3(2^n)$ and $SU_3(2^n)$* , Proc. Lond. Math. Soc.(3) **65** (1992), 265-296.
8. P. Sin, *On the 1-cohomology of the groups $G_2(2^n)$* , Communications in Algebra **20** (9) (1992), 2653-2662.
9. G. Robinson, P. Sin, *A note on Brauer's Induction Theorem*, J. Algebra **162** (1993), 92-94.
10. P. Sin, *Extensions of simple modules for $G_2(3^n)$ and ${}^2G_2(3^m)$* , Proc. Lond. Math. Soc. **66** (1993), 327-357.
11. P. Sin, *The cohomology in degree one of the algebraic group of type F_4 in characteristic two*, J. Algebra **164** (1994), 694-717.
12. P. Sin, *Extensions of simple modules for special algebraic groups*, J. Algebra **170** (1994), 1011-1034.
13. M. Dowd, P. Sin, *Representations of algebraic groups in characteristic 2*, Comm. in Algebra. **24** (1996), 2597-2686.
14. P. Sin, *Modular representations of the Hall-Janko group*, Comm. Algebra **24**(14) (1996), 4513-4547.
15. N. S. N. Sastry, P. Sin, *The code of a regular generalized quadrangle of even order*, Proc. Symposia in Pure Mathematics **63** (1998), 485-496.
16. M. Bardoe, P. Sin, *The permutation module for $GL(n, q)$ acting on \mathbb{P}^n and \mathbb{F}^{n+1}* , J. London Math. Soc. **61** (2000), 58-80.
17. N. Sastry, P. Sin, *The binary code associated with nondegenerate quadrics of a symplectic space of even order*, J. Comb. Theory A **94** (2001), 1-14.
18. P. Sin, *The permutation representation of $Sp(2m, \mathbb{F}_p)$ acting on the vectors of its standard module.*, J. Algebra **241** (2001), 578-591.
19. P. Sin, *The elementary divisors of the incidence matrices of points and linear subspaces of projective space over a field of prime order*, J. Algebra **232** (2000), 76-85.
20. P. Sin, *The p-rank of the incidence matrix of intersecting linear subspaces*, Designs, Codes and Cryptography **31** (2004), 213-220.
21. J. M. Lataille, P. Sin, P. H. Tiep, *The modulo 2 structure of the rank 3 permutation modules for odd characteristic symplectic groups.*, J. Algebra **268** (2003), 463-483.
22. N. S. N. Sastry, P. Sin, *On the doubly transitive permutation representations of $Sp(2n, \mathbb{F}_2)$* , J. Algebra **257** (2002), 509-527.
23. P. Sin, P. H. Tiep, *On the rank 3 permutation modules of the finite classical groups*, J. Algebra **291** (2005), 551-606.
24. D. B. Chandler, P. Sin, Q. Xiang, *The Invariant Factors of the Incidence Matrices of points and subspaces in $PG(n, q)$ and $AG(n, q)$* , Trans. Amer. Math. Soc. **358** (2006), 4935-4957.

25. P. Sin, Q. Xiang, *On the dimensions of certain LDPC codes based on q -regular bipartite graphs*, IEEE Trans. Inform. Theory **52** (8) (2006), 3735-3737.
26. D. B. Chandler, P. Sin, Q. Xiang, *The permutation action of finite symplectic groups of odd characteristic on their Standard Modules*, J. Algebra **318** (2007), 871-892.
27. D. B. Chandler, P. Sin, Q. Xiang, *Incidence Modules for symplectic spaces in characteristic two*, J. Algebra **323** (2010), 3157-3181.
28. P. Sin, J. G. Thompson, *The divisor matrix, Dirichlet series and $SL(2, \mathbf{Z})$* , The legacy of Alladi Ramakrishnan in the mathematical sciences" (K. Alladi, J. Klauder, C. R. Rao, Eds.), Developments in Mathematics, Springer (2010), arXiv:math/0712.0837.
29. O. Arslan, P. Sin, *Some simple modules for classical groups and p -ranks of orthogonal and Hermitian geometries*, J. Algebra **327** (2011).
30. P. Sin, J. G. Thompson, *The divisor matrix, Dirichlet series and $SL(2, \mathbf{Z})$ II*, Preprint arXiv:math/0803.1121 (2009).
31. P. Sin, J. Wu, Q. Xiang, *Dimensions of some binary codes arising from a conic in $PG(2, q)$* , J. Combinatorial Theory, Ser. A. **118** (2011), 853-878.
32. P. Sin, *Oppositeness in buildings and simple modules for finite groups of Lie type*, "Buildings, Finite Geometries and Groups", N. S. N. Sastry (ed.) Proceedings in Mathematics (PROM), Springer, 2011.
33. Andries E. Brouwer, Joshua E. Ducey, Peter Sin, *The elementary divisors of the incidence matrix of skew lines in $PG(3, q)$* , Proc. Amer. Math. Soc. **140** (2012), 2561-2573.

Other Publications

- [1] C. Y. Ho, P. Sin, P. H. Tiep, A. Turull (Eds.), *Finite Groups 2003, Proceedings of the Gainesville conference*, De Gruyter, Amsterdam, 2004.
- [2] Y. Chen, J. Carrillo, P. Sin, A. Vakharia, *Fusion Product Planning: A Market Offering Perspective*, Decision Sciences Journal **41** (2010), 235-253.
- [3] Peter Sin, *Book Review of Finite Group Theory by I. M. Isaacs*, American Mathematical Monthly **117** (7) (2010).