

# LIST OF PUBLICATIONS

Ruizhong Wei

## Refereed Journal Papers<sup>1</sup>

1. K. Chen and R. Wei, On super-simple 2-designs, *Ars Combinatoria*, accepted.
2. L. Wang and R. Wei, Reputation model based dynamic pairwise key establishment scheme for sensor networks, *Ad hoc and sensor wireless networks*, accepted.
3. Z. Tian and R. Wei, Decomposing triples into cyclic designs, *Discrete Math.*, accepted.
4. H. Cao, L. Wang and R. Wei, The existence of HGDDs with block size four and its application to double frames, *Discrete Math.*, 309(2009), 945-949.
5. H. Cao and R. Wei, Combinatorial constructions for optimal two-dimensional optical orthogonal codes, *IEEE Trans. Information Theory*, 55(2009), 1387-1394.
6. B.M. Paterson, D.R. Stinson and R. Wei, Combinatorial batch codes, *Advances in Mathematics of Communications*, 3(2009), 13-27.
7. H. Cao, J. Dinitz, D. Kreher, D.R. Stinson and R. Wei, On orthogonal generalized equitable rectangles, *Designs Codes and Cryptography*, 51(2009), 225-230.
8. R. Wei and K. Wu, Exception resolution services for Role Based Access Control systems, *Information Science*
9. D.R. Stinson, R. Wei and K. Chen, On generalized separating hash families, *J. Combinatorial Theory, A*, 115(2008), 105-120.

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<sup>1</sup>Most of the journals are in the master journal list of ISI including: *Annals of Discrete Math.*, *Europ.J.Combinatorics*, *J.Combinatorial Designs*, *J.Statist.Plann.Infer.*, *Discrete Math.*, *SIAM J.Discrete Math.*, *Appl. Discrete Math.*, *J.Combinatorial Theory*, *IEEE Tran.Information Theory*, *Designs Codes and Cryptography*, etc.

10. J.Wu and R. Wei, Comments on “Distributed symmetric key management for mobile ad hoc networks”, Information Processing Letters, (2009), doi: 10.1016/j.ipl.2009.04.005.
11. R. Wei, On cover-free families, Discrete Math, accepted.
12. H. Cao, K. Chen and R. Wei, Super-simple balanced incomplete block designs with block size 4 and index 5, Discrete Math. 309(2009) 2808-2814.
13. K. Chen and R. Wei, Super-simple  $(v, 5, 4)$  designs, Applied Discrete Math, 155(2007) 904-913.
14. K. Chen and R. Wei, Super-simple cyclic designs with small values, J. Statist. Plann. Inference, 137(2007),2034-2044.
15. Brian J. Cacic and R. Wei, Improving indirect key management schemes of access hierarchies, International J. Network Security, 4(2007), 128-137.
16. D.R. Stinson and R. Wei, Some results on query processes and reconstructions for unconditionally secure 2-server 1-round binary private information retrieval protocols, Journal of Mathematical Cryptology 1(2007), 33-46.
17. D. Deng, D.R. Stinson, P.C. Li, G.H.J. van Rees and R. Wei, Constructions and bounds for  $(m, t)$ -splitting systems, Discrete Math., to appear.
18. P.C. Li, D.R. Stinson, G.H.J. van Rees and R. Wei, On  $\{123, 124, 134\}$ -free hypergraphs, Congressus Numerantium, 183(2006), 161-174.
19. P.C. Li, G.H.J. van Rees and R. Wei, 2-cover free families and related separating hash families, JCD 14(2006), 423-440.
20. K. Chen and R. Wei, A few more cyclic 2-Steiner designs, E-J. Combinatorics 13(2006) #R10.
21. K. Chen and R. Wei, Super-simple  $(v, 5, 5)$  designs, Designs, Codes and Cryptography, 39(2006), 173-187.

22. K. Chen, Z. Cao and R. Wei, Existence of  $V(9, t)$  vectors, *J. Combin. Math. Combin. Computing*, 55(2005), 209-221
23. K. Chen, Z. Cao and R. Wei, Elementary abelian difference families with blk size  $\leq 6$ , *Bulletin of the ICA*, 43 (2005), 80-84.
24. K. Chen, Z. Cao and R. Wei, Super-simple balanced incomplete block designs with block size 4 and index 6, *J. Statist. Plann. Inference*, 133(2005), 537-554.
25. G. Ge and R. Wei, HGDD with block size four, *Discrete Math.*, 279(2004).
26. D.R. Stinson and R. Wei, Generalized cover-free families, *Discrete Math.*, 279(2004), 463-477.
27. X. Ma and R. Wei, On a bound of cover-free families, *Designs, Codes and Cryptography*, 32(2004),303-321.
28. D. Deng, D.R. Stinson and R. Wei, The Lovász local lemma and its applications to some combinatorial arrays, *Designs, Codes and Cryptography*, 32(2004), 121-134.
29. G. Ge, J. Wang and R. Wei, MGDD with block size 4 and its applications to sampling designs, *Discrete Math*, 272(2003) 277-283.
30. K. Chen, R. Wei and L. Zhu, Existence of  $(q, 7, 1)$  deference family with  $q$  prime powers, *J. Comb. Designs*, 10(2002), 126-138.
31. C. Blundo, B. Masucci, D.R. Stinson and R. Wei, Constructions and bounds for unconditionally secure non-interactive commitment schemes, *Designs Codes and Cryptography*, 26(2002), 97-110.
32. R. Wei, Cyclic BSEC with block size 3, *Discrete Math.*, 250(2002), 291-298.
33. Y. Chang, D. Bryant, C.A. Rodger and R. Wei, Two dimensional balanced sampling plan excluding contiguous units, *Communications in Statistics – Theory and Methods*, 31(2002), 1441-1455.
34. J.N. Staddon, D.R. Stinson and R. Wei, Combinatorial properties of frameproof and traceability codes, *IEEE Tran. Information Theory*, 47(2001),1042-1049.

35. D.R. Stinson, Tran van Trung and R. Wei, *Secure frameproof codes, key distribution patterns, group testing algorithms and related structures*, Journal of Statistical Planning and Inference, 86(2000), 595-617.
36. M. Atici, D.R. Stinson and R. Wei, *A new practical algorithm for the construction of a perfect hash function*, J. Combin. Math. Combin. Computing, 35(2000), 127-145.
37. D. R. Stinson, R. Wei and L. Zhu, *New Constructions for perfect hash families and related structures using related combinatorial designs*, J. Combinatorial Designs, 8(2000), 189-200
38. D. R. Stinson, R. Wei and L. Zhu, *Some New Bounds of Cover-Free Families*, J. Combinatorial Theory, A., 90(2000), 224-234.
39. R. Wei *An  $S(2, 3, 21)$  with three complete arcs*, Bulletin of the ICA, 29(2000), 97-98.
40. A.M. Assaf and R. Wei, *Modified group divisible designs with block size four and  $\lambda = 1$* , Discrete Math., 195 (1999), 15-25.
41. F.E. Bennett, R. Wei and H. Zhang, *Holey Schröder designs of type  $2^nu^1$* , J. Combinatorial Designs, 6(1998), 131-150.
42. F.E. Bennett, R. Wei and H. Zhang, *HPMDs of type  $2^n3^1$  with block size four and related HCOLSs*, J. Combin. Math. Combin. Computing, 23(1997), 33-45.
43. D.R. Stinson and R. Wei, *Combinatorial properties and constructions of frameproof codes and traceability schemes*, SIAM J. Discrete Math., 11(1998), 41-53
44. D.R. Stinson and R. Wei, *An application of ramp schemes to broadcast encryption*, Information Processing Letters, 69 (1999), 131-135.
45. R. Rees, D.R. Stinson, R. Wei and G.H.J. van Rees, *An application of coverings: determine the maximum consistent set of shares in a threshold scheme*, Ars Comb., 53(1999), 225-237.
46. F.E.Bennett and R. Wei, *The existence of Schröder designs with equal-sized holes*, Discrete Math., 170(1997), 15-28.

47. F.E.Bennett, R. Wei and L. Zhu, *Resolvable Mendelsohn Triple Systems with Equal Sized Holes*, J. Combinatorial Designs, 5(1997), 329-340.
48. R. Wei and L. Zhu, *The Generalized H Code and Binary Doubly Even Self-dual Code*, J. Statist. Plan. Infer., 51(1996), 387-393.
49. F.E. Bennett, R. Wei and L. Zhu, *Incomplete Idempotent Schröder Quasigroups and Related Packing Designs*, Aequationes Math. 51(1996), 100-114.
50. R.Wei, *On Modified Group Divisible Designs with Block Size Four*, J. Suzhou Univ., 10(1994), 100-103.
51. R. Wei, *The Existence of Group Divisible Designs with Equal Sized Holes*, Ars Combinatoria, 35(1993) 315-323.
52. Wu Dianhua and Wei Ruizhong, *A Note on IGDDs*, J. Suzhou Univ. 8(1992), 142-145.
53. G. Kong and R. Wei, *Existence of IPBDs of Block Size Four*, JCMCC 14(1993) 193-210.
54. F.E. Bennett and R. Wei, *Embeddings of Resolvable Mendelsohn Triple Systems*, J. Combin. Designs, 4(1993) 281-299.
55. F.E. Bennett, R. Wei, J. Yin and A. Mahmood, *Existence of DBIBD with Block Size Six*, Utilitas Math, 43(1993), 205-217.
56. R. Wei, *The Embeddings of  $S_3(2, 4, v)$* , J. Comb. Math. Comb. Computing, 9(1991), 11-32.
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58. R. Wei and L. Zhu, *Embeddings of Steiner Systems  $S(2,4,v)$* , Annals of Discrete Math., 34(1987), 465-470.

### Refereed Conference Papers

59. B. Wang and R. Wei, Zero-knowledge trust negotiation, Proceedings of CSCWD 09, 390-395.
60. R. Wei, Z. Mao and K. Yuan, Aperiodic Correlation for Complex Sequences from Difference Sets, Proceedings of International conference on communication (ICC 2008), 1190-1194.
61. Z. Liang and R. Wei, An efficient algorithm for data  $k$ -anonymization, Proceedings of CSCWD 08, 737-742.(12th International conference on computer supported cooperative work in design, April 16-18, 2008, Xi'an, China).
62. F. Tang and R. Wei, Implement Privacy for an OMS, Proceedings of CSCWD 08, 749-753. (12th International conference on computer supported cooperative work in design, April 16-18, 2008, Xi'an, China).
63. R. Wei and K. Wu, Exception resolution service for RBAC systems, Proceedings of CSCWD 07, pp 840-845. (11th International conference on computer supported cooperative work in design, April 26-28, 2007, Melbourne Australia).
64. A. Mohamed and R. Wei, Context dependent controller on performance metrics revision, Proceedings of ICCI 2006, pp. 507-516. (Fifth IEEE International Conference on Cognitive Information, July 17-19, 2006, Beijing China).
65. Siami N. Akbar, R. Wei, Weiming Shen and Hamada Ghenniwa, An efficient trust model for multi-agent systems, Proceedings of CSCWD2006, pp.659-664. (10th International conference on computer supported cooperative work in design, May 3-5, 2006, Nanjing, China.)
66. Siami N. Akbar, R. Wei, Weiming Shen and Hamada Ghenniwa, Applying Secret Sharing Schemes to Service Reputation, ICEIS-2005, Miami, May 25-28, 2005. (7th International Conference on Enterprise Information Systems)
67. X. Chen and R. Wei, A scheme for inference problems using rough sets and entropy, RSFDGrC 2005, LNCS 3642, 558-567.

68. J. Wu and R. Wei, An access control scheme for partially ordered set hierarchy with provable security, Proceedings of SAC'05, 223-245. LNCS 3897, 221-232.
69. X. Chen and R. Wei, A dynamic method for handling the inference problem in multilevel secure databases, Proceedings of ITCC-2005, 751-756, Las Vegas, April 2005. (International Conference on Information Technology: Coding and Computing).
70. R. Wei and J. Wu, Product construction of key distribution schemes for sensor networks, SAC'04, Waterloo, 2004, LNCS 3357, 280-293.
71. A.S. Namin, R. Wei, W. Shen and H. Ghenniwa, An agent-based threshold payment model for metering web services, WSABE, New York City, 2004.
72. C. Miao and R. Wei, Secret sharing for mobile agent cryptography, Proceedings of the 2003 Communication Networks & Services Research Conference (CNSR 2003), 93-100.
73. D.R. Stinson and R. Wei, *Key preassigned traceability schemes for broadcast encryption*, SAC'98, LNCS 1556, 144 - 156.
74. D.R. Stinson and R. Wei, *Unconditional secure proactive secret sharing scheme with combinatorial structures*, SAC'99, LNCS 1758, 200-214.
75. R. Wei, *Nonexistence of Some Abelian Difference Sets*, in: Combinatorial Designs and Applications (Eds. W.D. Wallis, et al), Marcel Dekker Inc., 159-164, 1990.

## OTHER PUBLICATIONS

### Chapters in book

76. D.R. Stinson, R. Wei and J. Yin, Packings, CRC Handbook of Combinatorial Designs, 2nd Edition (J.H. Dinitz, C.J. Colbourn, eds.), Chapman & Hall/CRC, 2007, 550-556.

## Papers in preparation

77. L. Ji and R. Wei, The spectrum of 2-idempotent 3-quasigroups with conjugate invariant subgroups, Submitted to J. Combin Designs.
78. R. Wei, Z. Zeng and Z. Liang, Encryption based on splay trees, In preparation.
79. H. Cao, F. Yan and R. Wei, Super-simple Group Divisible Designs with Block Size 4 and Index 2, preprint.
80. L. Wang, R. Wei and D. Wang, Anisotropic voronoi tessellations based anti-monitoring algorithm in anisotropic sensory fields, submitted to Ad Hoc Networks.
81. L.Wang, R. Wei and Z. Tian, A new scheduling method for wireless sensor networks, in preparation.
82. Z. Tian and R. Wei, Decomposing triples of  $\mathbb{Z}_p^n$  and  $\mathbb{Z}_{3p^n}$  into cyclic designs, submitted to Designs, Codes and Cryptography.
83. S. Hsu and R. Wei, Complexity of optimal  $\ell$ -diversity, submitted.
84. S. Huang and R. Wei, Visual cryptography with cheating shares, in preparation.

## Technical Reports

85. J.Wu and R. Wei, Comments on a INFORCOM paper, ePrint, 008(2005).
86. J.Wu and R. Wei, An access control scheme for partially ordered set hierarchies with provable security, ePrint, 293(2004).
87. D.R. Stinson, T. van Trung and R. Wei, Secure Frameproof Codes, Key Distribution Patterns, Group Testing Algorithms and Related Structures, CORR 98-01.
88. D.R. Stinson and R. Wei, An Application of Ramp Schemes to Broadcast Encryption, CORR 98-02.



89. D. R. Stinson and R. Wei, Key Preassigned Traceability Schemes for Broadcast Encryption, CORR 98-26.
90. D. Stinson and R. Wei, Bibliography on Authentication Codes, CORR 98-49.
91. D. Stinson and R. Wei, Bibliography on Secret Sharing Schemes, CORR 98-50.
92. D. Stinson and R. Wei, Determining the Maximum Consistent Set of Shares in a Threshold Scheme, CORR 99-10.
93. D. Stinson and R. Wei, Unconditionally Secure Proactive Secret Sharing Scheme with Combinatorial Structures, CORR 99-14.
94. J.N. Staddon, D.R. Stinson and R. Wei, Combinatorial properties of frameproof and traceability codes, CORR 2000-16

### **Conference Papers**

95. R. Wei, Constructions of balanced sampling plan excluding contiguous units, CMS summer meeting, St. John's, Canada, 1999.