

Curriculum Vitae

Name: **Abdollah Khodkar, Professor of Mathematics**

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Academic Achievement

- Ph.D. in Mathematics (Combinatorics), The University of Queensland, Australia, 1994.
Research Project: Balanced block designs and various properties.
- M.Sc. in Mathematics, Sharif University of Technology, Iran, 1988.
Research Project: Partial Differential Equations.
- B.Sc. in Applied Mathematics, Sharif University of Technology, Iran, 1986.
Final Project: Numerical solutions for some Differential Equations.

Employment History

- Professor: Department of Mathematics, University of West Georgia, August 2011 – present.
- Associate Professor: Department of Mathematics, University of West Georgia, August 2006 – August 2011.
- Assistant Professor: Department of Mathematics, University of West Georgia, August 2004 – August 2006.
- Research Fellow Level B: Department of Mathematics, The University of Queensland, January 2002 – August 2004.
- Lecturer Level B: Department of Mathematics, The University of Queensland, January 2002 – December 2002, July 2000 – July 2001.
- Visiting Professor: Department of Mathematics, Illinois State University, August 2001 – December 2001.
- Lecturer Level A: Department of Mathematics, The University of Queensland, January 2000 – July 2000.
- Research Officer Level A: Department of Mathematics, The University of Queensland, July 1995 – December 1999.
- Senior Research Assistant/Computer Programmer: Information Security Research Center within the Faculty of Information Technology at Queensland University of Technology, Australia, July 1994 – July 1995.

- Research Assistant: Department of Mathematics, The University of Queensland, December 1993 – July 1994.
- Academic Visitor: Department of Mathematics, The University of Queensland, January 1991 – January 1992.
- Part-Time Lecturer: Faculty of Environmental Sciences, Griffith University, January 2000 – July 2000, Department of Mathematics, The University of Queensland, July 1999 – December 2000, February 1997 – July 1997, Sharif University of Technology (Iran), January 1988 – January 1991.
- Tutorial Assistant: Department of Mathematics, Queensland University of Technology, February 1995 – July 1995, Department of Mathematics, The University of Queensland, January 1993 – December 1993.
- Tutor: Sharif University of Technology (Iran), January 1985 – January 1988.
- Teacher: Farzin High School (Iran), September 1980 – January 1985.

Courses Taught

- **Graduate Courses:** Linear Algebra II, Algebra II, Coding Theory and Cryptography III, Geometries and Designs and Discrete Mathematics.
- **Undergraduate Courses:** Quantitative Skills and Reasoning, College Algebra, Survey of Calculus, Calculus I, II, III, A Transition to Advance Mathematics, Mathematics for the Environment, Differential Equations, Set Theory, Number Theory, Linear Algebra I, Algebra I, and Graph Theory.
- **Online Course Development:** I developed “Survey of Calculus” (MATH 1413) online for undergraduate students in 2008 and I am now developing “Non-Euclidean Geometry” (MATH 6233) online for graduate students.

Graduate Student Research Direction

- Co-advisor: Dr. Nicholas J. Cavenagh (advisor: Dr D. Donovan), Department of Mathematics, the University of Queensland (2001-2004). This supervision proved extremely productive with four joint papers.
- Co-advisor: Dr. Mahmoud Sheikholeslami (advisor: Dr M.A. Shahabi), Department of Mathematics, University of Azarbaijan, Iran (2000-2003). This supervision led to three joint publications.
- Co-advisor: Mr. Carlo Hamalainen (advisor: Dr D. Donovan), Department of Mathematics, the University of Queensland (2003-2004).
- Co-advisor: Ms. Arezou Ghameshlou (Advisor: Dr S.M. Sheikholeslami), Department of Mathematics, Azarbaijan University of Tarbiat Moallem, Iran (2006-2010). This supervision led to three joint publications.
- Co-advisor: Ms. Maryam Atapour (Advisor: Dr S.M. Sheikholeslami), Department of Mathematics, Azarbaijan University of Tarbiat Moallem, Iran (2009-present).

- Co-advisor: Ms. Hamideh Aram (Advisor: Dr S.M. Sheikholeslami), Department of Mathematics, Azarbaijan University of Tarbiat Moallem, Iran (2009-present).
- Co-advisor: Mr. Hossein Karami (Advisor: Dr S.M. Sheikholeslami), Department of Mathematics, Azarbaijan University of Tarbiat Moallem, Iran (2009-present).

Undergraduate Student Research Direction

- Research Experiences for Undergraduates (REU) at UWG, 2007–2009.
- Joshua Ramsey: GEMS Summer 2008 Research Fellowship Program, UWG.
- Taeler Porter and Scott Gildemeyer: GEMS Summer 2007 Research Fellowship Program, UWG.
- Staci Sisk: GEMS Summer 2006 Research Fellowship Program, UWG.

Other Professional Experience

- A reviewer for Mathematical Reviews.
- Nominated as an “Expert of International Standing” by Australian Research Council (ARC): Assessor for Discovery Projects Scheme Grant Applications.
- Organizing Conferences:
 - A member of organizing committee of the Integer Conference October 24-27, 2007 and the Integer Conference October 12-15, 2005, University of West Georgia Carrollton, Georgia.
 - Secretary of the Organizing Committee of the 13th Australasian Workshop on Combinatorial Algorithms (AWOCA2002). Member of the Program Committee and a co-editor of the Proceedings of AWOCA. Co-editor of the Proceedings of the 37th Annual Iranian Mathematics Conference (AIMC37).
- Invited Speaker:
 - Workshop on “Graph Decompositions and related trade structures”, The University of Queensland, Australia (July 2007).
 - Invited Speaker: The 37th Annual Iranian Mathematics Conference, Azarbaijan University of Tarbiat Moalem (September 2006).
 - Invited Lecturer: Ramkhamheang University (Thailand), March 1999 – April 1999.
- Referee for Journals: Journal of Combinatorial Theory Ser A; Discrete Mathematics; Journal of Combinatorial Designs; Graphs and Combinatorics; Discrete Applied Mathematics; The International Journal of Mathematics and Computer Science; Utilitas Mathematica; Ars Combinatoria; Australasian Journal of Combinatorics; Journal

of Statistical Planning and Inference; Integers: Electronic Journal of Combinatorial Number Theory; Global Journal of Pure and Applied Mathematics; Bulletin of the Institute of Combinatorics and its Applications; Discussiones Mathematicae Graph Theory; Iranian Journal of Science and Technology.

- Associate Editor for International Journal of Applied Mathematics and Statistics (IJAMAS) (2005-2006).

Service Committees

Departmental Service

- Center for Applied Mathematics and Science (2009-2011 member)
- Ad Hoc Committee for Standardized Finals (2009-2010 member)
- Department Advisory Committee (2008-2012 member)
- Scholarship Committee (2005-2006, 2008-2010 member), (2007-2008 Chair)
- Department Tenure and Promotion Committee (2006-2007, 2009-2011 member, 2008-2009 Chair)
- Assessment Committee (2006-2010 Chair, 2010-2011 member)
- Graduate Committee (2004-2011 member)
- Seminar/Colloquium Committee (2005-2008 member)
- Search Committee (2004-2006 member)

University Service

- College of Sciences and Mathematics Awards Committee (2011, member).
- UWG Post-Tenure Review Appeals Committee (2008-2009, member)
- COAS Tenure and Promotion Committee (2006-2008, 2009-2011, member)
- Faculty Advisory Committee (2006-2007-2008, member)
- Writing Across the Curriculum Committee (2005-2008, member)
- Student Advisor: College Student Inventory, CSI (2006-2007)
- Early Transfer Orientation for Spring Semester 2005, member
- New Freshmen Orientation, Fall 2005, 2006
- Liaison to Other Sciences (2005-2006)

Membership

- The Institute of Combinatorics and its Applications
- American Mathematical Society

- Australian Mathematical Society
- Iranian Mathematical Society

Computing Experience

Very good knowledge of: C Language, Fortran 90, Pascal, PL1, COBOL, Latex, Matlab, Mathematica, Maple, Magma, CPLEX, Otter.

Awards

- **Faculty Research Grant:** University of West Georgia, 2010-2011 (Fund \$1000.00).
- **Online Course Development Grant Summer 2010:** Math 6233, Non-Euclidean Geometry, University of West Georgia, Fund \$5000.00.
- **The COAS Excellence in Scholarship 2009-2010:** University of West Georgia, Fund \$500.00.
- **Raybould Visiting Fellowship 2010:** School of Mathematics and Physics, the University of Queensland, Australia (September 2010), Fund \$4000.00.
- **College of Arts and Sciences Faculty Research Grant 2009-2010:** University of West Georgia, Fund \$500.00.
- **NSF REU Grant**, “Problems in Combinatorics and Graph Theory”, 2007-2009, Fund \$216,422.
- **Faculty Research Grant:** University of West Georgia, 2005-2006 (Fund \$1500.00), 2007-2008 (Fund \$1500.00), 2010-2011 (Fund \$1000.00).
- Overseas Postgraduate Research Scholarship for PhD in Combinatorics from Australian government, January 1992-1994.
- Departmental Scholarship: Department of Mathematics, the University of Queensland, 1992-1994.
- University Scholarship: Sharif University of Technology, Iran, 1986-1988.

Presentations

I have presented papers at the international conferences and research centers including: Mathematical Abundance: Designs, Graphs and Number Theory, Illinois State University April 2008; 21st British Combinatorial Conference, University of Reading July 2007; Workshop on Combinatorial Trades, The University of Queensland, Australia July 2007, September 2010; The 38th South East Conference on Combinatorics, Graph Theory and Computing, Florida (2007); The 37th Annual Iranian Mathematics Conference, Tabriz (2006); Mid-West Graph Theory Conference (1997, 2001, 2005); American Mathematical Society (2005); Australasian Workshop on Combinatorial Algorithms (2002); Australasian Conference on Combinatorial Mathematics and Combinatorial Computing (1993, 1996, 1998, 1999, 2000); Integers Conference, University of West Georgia October 2009; Math Day, University of West Georgia April 2010.

I have also presented papers at different universities including:

USA: Illinois State University (1997, 2001, 2003, 2006, 2008, 2009), University of Illinois (1997, 2003), Auburn University (1997, 2006, 2008, 2009), University of West Georgia (2004, 2005)

Australia: The University of Queensland (1995, 1999, 2001, 2007, 2010)

Iran: Sharif University of Technology (1997, 2001, 2003, 2005-2008, 2010), University of Mazandaran (2005), Azarbaijan University of Tarbiat Moallem (2005-2008, 2010), Tabriz University (2005)

Canada: Defence Center at the University of Manitoba (1997), the University of Manitoba (1997)

Thailand: Ramkhamheang University (1999)

Referees

- Professor Anne Penfold Street: Department of Mathematics, the University of Queensland, Brisbane, QLD. 4072, Australia.
Email Address: `aps@maths.uq.edu.au`
Phone: 617-33653279, Fax: 617-33651477.
- Professor Chris Rodger: Department of Discrete, and Statistical Sciences, Auburn University, Auburn, Alabama 36849-5307, USA.
Email Address: `rodgecl@mail.auburn.edu`
Phone: 1-334-844-3746, Fax: 1-334-844-3611.
- Professor Saad I. El-Zanati: Department of Mathematics, Illinois State University, Normal, Illinois 61790-4520, USA.
Email Address: `saad@ilstu.edu`
Phone: by phone: 1-309-438-5765, Fax: 1-309-438-5866.
- Dr Elizabeth J. Billington: Department of Mathematics, The University of Queensland, Brisbane, QLD. 4072, Australia.
Email Address: `ejb@maths.uq.edu.au`
Phone: 617-33652313, Fax: 617-33651477.
- Dr Diane M. Donovan: Department of Mathematics, The University of Queensland, Brisbane, QLD. 4072, Australia.
Email Address: `dmd@maths.uq.edu.au`, Phone: 617-33651354, Fax: 617-33651477.

PUBLICATIONS

Research papers:

1. A. Khodkar, *Construction of some balanced ternary designs from one factorizations*, *Utilitas Mathematica* **42** (1992), 213–217.
2. A. Khodkar, *Balanced ternary designs with holes and numbers of common triples*, *Australasian Journal of Combinatorics* **7** (1993), 111–122.
3. A. Khodkar, *The fine structure of balanced ternary designs with block size three*, *Utilitas Mathematica* **44** (1993), 197–230.
4. E.J. Billington, A. Khodkar and E.S. Mahmoodian, *Balanced ternary designs with block size four*, *Journal of Statistical Planning and Inference* **37** (1993), 95–126.
5. A. Khodkar, *Various super-simple designs with block size four*, *Australasian Journal of Combinatorics* **9** (1994), 201–210.
6. A. Khodkar, *Balanced block designs and various properties*, *Bulletin of the Australian Mathematical Society* **50** (1994), No. 2, 349–350.
7. A. Khodkar, *Number of common triples in simple balanced ternary designs*, *Ars Combinatoria* **40** (1995), 235–246.
8. A. Khodkar, *Smallest defining sets for the 36 non-isomorphic twofold triple systems of order nine*, *Journal of Combinatorial Mathematics and Combinatorial Computing* **17** (1995), 209–215.
9. A. Khodkar, *Twofold triple systems having a prescribed number of triples in common*, *Utilitas Mathematica* **48** (1995), 203–214.
10. E. Dawson and A. Khodkar, *On burst-error correcting algorithm for Reed-Solomon codes*, *Electronics Letters* **31** No. 11 (1995), 848–849.
11. J. Golić, M. Salmasizadeh, M. Clark, A. Khodkar and E. Dawson, *Discrete Optimisation and Fast Correlation Attacks*, *Preproceedings of CPAC 1995*, Queensland University of Technology, 3–5 July 1995, 527–538.
12. A. Khodkar, *The fine structure of $(v, 3)$ directed triple systems: $v \equiv 0$ or $1 \pmod{3}$* , *Ars Combinatoria* **43** (1996), 213–224.
13. J. Golić, M. Salmasizadeh, E. Dawson and A. Khodkar, *Cryptanalysis of the summation generator with three input LFSRs*, *Proceedings of International Symposium on Information Theory and Its Application 1996*, volume 1, pages 343–346. the University of Victoria, 1996.
14. P. Adams, D.E. Bryant and A. Khodkar, *On the existence of super-simple designs with block size 4*, *Aequationes Mathematicae* **51** (1996), 230–246.
15. D.E. Bryant and A. Khodkar, *A census of $(9; 1; 3, 2)$ balanced ternary designs*, *Journal of Combinatorial Mathematics and Combinatorial Computing* **23** (1997), 153–160.

16. P. Adams, D.E. Bryant, A. Khodkar and S.I. El-Zanati, *The intersection problem for 3-cubes*, Australasian Journal of Combinatorics **15** (1997), 127–134.
17. P. Adams, D.E. Bryant and A. Khodkar, *Uniform 3-Factorisations of K_{10}* , Congressus Numerantium **127** (1997), 23–32.
18. D.E. Bryant and A. Khodkar, *On orthogonal double covers of graphs*, Designs, Codes and Cryptography **13** (1998), 103–105.
19. P. Adams, D.E. Bryant and A. Khodkar, *3, 5-cycle decompositions*, Journal of Combinatorial Designs **6** (1998), 91–110.
20. A. Khodkar and D.G. Hoffman, *On the non-existence of Steiner $(v, k, 2)$ trades with certain volumes*, Australasian Journal of Combinatorics **18** (1998), 303–311.
21. A. Khodkar, *On smallest critical sets for the elementary abelian 2-group*, Utilitas Mathematica **54** (1998), 45–50.
22. D.E. Bryant and A. Khodkar, *5-cycle systems of $K_v \setminus F$ with a hole*, Utilitas Mathematica **54** (1998), 59–73.
23. D.E. Bryant, H.L. Fu and A. Khodkar, *(m, n) -cycle systems*, Journal of Statistical Planning and Inference **74** (1998), 365–370.
24. P. Adams, D.E. Bryant and A. Khodkar, *On the number of repeated triples in balanced ternary designs with index two*, Utilitas Mathematica **55** (1999), 55–64.
25. D.E. Bryant, A. Khodkar and S.I. El-Zanati, *Small embeddings for partial G -designs when G is bipartite*, Bulletin of the Institute of Combinatorics and its Applications **26** (1999), 86–90.
26. N. Hamilton and A. Khodkar, *On minimum possible volumes of strong Steiner trades*, Australasian Journal of Combinatorics **20** (1999), 197–203.
27. D.E. Bryant and A. Khodkar, *Maximum packings of $K_v - K_u$ with triples*, Ars Combinatoria **55** (2000), 259–270.
28. P. Adams, D.E. Bryant and A. Khodkar, *The fine structure of balanced ternary designs with block size three, index three and $\rho_2 = 1, 2$* , Ars Combinatoria **56** (2000), 299–308.
29. P. Adams and A. Khodkar, *Smallest critical sets for the groups of size eight*, Journal of Combinatorial Mathematics and Combinatorial Computing **32** (2000), 23–32.
30. P. Adams, D.E. Bryant and A. Khodkar, *The spectrum problem for λ -fold Petersen graph designs*, Journal of Combinatorial Mathematics and Combinatorial Computing **34** (2000), 159–176.
31. P. Adams, D.E. Bryant and A. Khodkar, *The spectrum problem for closed m -trail systems, $m \leq 10$* , Journal of Combinatorial Mathematics and Combinatorial Computing **34** (2000), 223–240.
32. P. Adams, D.E. Bryant and A. Khodkar, *On Alspach's conjecture with two even cycle lengths*, Discrete Mathematics **223** (2000), 1–12.

33. P. Adams, D.E. Bryant and A. Khodkar, *The fine structure of $(v, 3)$ directed triple systems: $v \equiv 2 \pmod{3}$* , *Ars Combinatoria* **57** (2000), 3–11.
34. P. Adams, E.J. Billington, D.E. Bryant and A. Khodkar, *The μ -way intersection problem for m -cycle systems, $\mu \geq 3$* , *Discrete Mathematics* **231** (2001), 27–56.
35. A. Khodkar and S. Zahrai, *On single laws for varieties of quasigroups associated with 2-perfect extended cycle systems*, *Communications in Algebra* **29** (2001), 1669–1676.
36. P. Adams and A. Khodkar, *Smallest critical sets for the latin squares of orders six and seven*, *Journal of Combinatorial Mathematics and Combinatorial Computing* **37** (2001), 225–237.
37. P. Adams, A. Khodkar and C. Ramsay, *Smallest defining sets of some STS(19)*, *Journal of Combinatorial Mathematics and Combinatorial Computing*, **38** (2001), 225–230.
38. D.E. Bryant and A. Khodkar, *On the intersection problem for 1-factorizations and near 1-factorizations of K_v* , *Utilitas Mathematica* **60** (2001), 209–218.
39. P. Adams and A. Khodkar, *Smallest weak and smallest totally weak critical sets in the latin squares of order at most seven*, *Ars Combinatoria* **61** (2001), 287–300.
40. P. Adams and A. Khodkar, *On the direct product of two weak uniquely completable partial latin squares*, *Utilitas Mathematica* **60** (2001), 249–253.
41. A. Khodkar and S. Zahrai, *On single laws for varieties of groupoids associated with strongly 2-perfect m -cycle systems*, *Algebra Universalis* **46** (2001), 499–513.
42. D.M. Donovan, C.M. Fu and A. Khodkar, *A discussion of 2-critical sets in Abelian 2-groups*, *Proceedings of the Twelfth Australasian Workshop on Combinatorial Algorithms (AWOCA2001)*, Ed. Edy Tri Baskoro, Institut Teknologi, Bandung Indonesia, 2001, 88–97.
43. P. Adams, R. Bean and A. Khodkar, *Disjoint critical sets in Latin squares*, *Congressus Numerantium* **153** (2001), 33–48.
44. D. Donovan and A. Khodkar, *Premature Partial Latin Squares and Critical Sets*, *Proceedings of the Thirteenth Australasian Workshop on Combinatorial Algorithms (AWOCA2002)*, Eds. E.J. Billington, D. Donovan and A. Khodkar, the University of Queensland, Queensland Australia, 2002, 115–126.
45. D. Donovan, R.A.H. Gower, A. Khodkar, *Latin Interchanges and Direct Products*, *Ars Combinatoria* **64** (2002), 271–287.
46. D. Bryant and A. Khodkar, *Orthogonal quasigroups associated with m -cycle systems*, *Bulletin of the Institute of Combinatorics and its Applications* **36** (2002), 109–112.
47. R. Bean, D. Donovan, A. Khodkar and A.P. Street, *Steiner trades that give rise to completely decomposable latin interchanges*, *International Journal of Computer Mathematics* **79** (2002), 1273–1284.
48. D.M. Donovan, A. Khodkar, S. Sutinuntopas and S. Thappia, *A note on critical sets in latin squares of order $2^n - 1$* , *Congressus Numerantium* **159** (2002), 215–219.

49. D.M. Donovan, A. Khodkar and A.P. Street, *On minimal defining sets in $AG(d, 3)$* , in Designs 2003: further combinatorial and constructive design theory (edited W.D. Wallis) Kluwer Academic Press, Norwell, Massachusetts, USA, 2003, 103–131.
50. D.M. Donovan, A. Khodkar and A.P. Street, *Doubling and tripling constructions for defining sets in Steiner triple systems*, Graphs and Combinatorics **19** (2003), 65–89.
51. A. Khodkar, M.A. Shahabi and S.M. Sheikholeslami, *2-critical sets for a class of groups*, Congressus Numerantium **164** (2003), 53-64.
52. N.J. Cavenagh and A. Khodkar, *Balanced critical sets in Latin squares*, Utilitas Mathematica **64** (2003), 229–249.
53. D. Donovan and A. Khodkar, *Product constructions for critical sets in latin squares*, Proceedings of the Fifteenth Midwest Conference on Combinatorics, Cryptography and Computing (Las Vegas, NV, 2001), Journal of Combinatorial Mathematics and Combinatorial Computing **46** (2003), 227–254.
54. P. Adams, R. Bean and A. Khodkar, *A census of critical sets in the Latin squares of order at most six*, Ars Combinatoria **68** (2003), 203–223.
55. A. Khodkar, M.A. Shahabi and S.M. Sheikholeslami, *Families of 2-critical sets for dihedral groups*, Australasian Journal of Combinatorics **29** (2004), 173–186.
56. A. Khodkar and S. Zahrai, *2-perfect m -cycle systems can be defined by single laws*, Bulletin of the Institute of Combinatorics and its Applications **40** (2004), 40–48.
57. D.M. Donovan and A. Khodkar, *Uniform critical sets in Latin squares*, Journal of Combinatorial Mathematics and Combinatorial Computing **48** (2004), 3–23.
58. N.J. Cavenagh, A. Khodkar, S.I. El-Zanati and C. Vanden Eynden, *On a generalization of the Oberwolfach Problem*, Journal of Combinatorial Theory Ser. A **106** (2004), 255–275.
59. D.M. Donovan, C.M. Fu and A. Khodkar, *An investigation of 2-critical sets in Latin squares*, Ars Combinatoria **72** (2004), 223-234.
60. D. Donovan, C. Hamalainen, A. Khodkar and N. Cavenagh, *On greedy critical sets in latin squares*, AWOCA, Proceedings of fifteenth Australasian Workshop on Combinatorial Algorithms, 6–9 July 2004, University of Sydney, Editor Seok-Hee Hong.
61. A. Khodkar, S.M. Sheikholeslami and H. Hasanzadeh, *Bounds on double domination numbers of graphs*, Congressus Numerantium **177** (2005), 77–87.
62. A. Khodkar and D. Leach, *On $(2, r)$ -regular graphs*, Bulletin of the Institute of Combinatorics and its Applications **46** (2006), 27–34.
63. D. Mojdeh, A. Ahmadi Haji, H. Abdollahzadeh Ahangar and A. Khodkar, *The graph $K_{2,2,r}$ has the property $M(3)$ for $4 \leq r \leq 8$* , Bulletin of the Institute of Combinatorics and its Applications **47** (2006), 63-70.
64. D. Mojdeh, N. Jafari Rad and A. Khodkar, *The defining numbers for vertex colorings of certain graphs*, Australasian Journal of Combinatorics **35** (2006), 17–30.

65. R. Khoeilar, S.M. Sheikholeslami and A. Khodkar, *The forcing semi-H-cordial numbers of certain graphs*, Journal of Combinatorial Mathematics and Combinatorial Computing **59** (2006), 151–164.
66. A. Khodkar, D. Mojdeh and A.P. Kazemi, *Domination in Harary graphs*, Bulletin of the Institute of Combinatorics and its Applications **49** (2007), 61–78.
67. A. Khodkar and S.M. Sheikholeslami, *On perfect double dominating sets in grids, cylinders and tori*, Australasian Journal of Combinatorics **37** (2007), 131–139.
68. N.J. Cavenagh, D.M. Donovan and A. Khodkar, *On the spectrum of critical sets in back circulant latin squares*, Ars Combinatoria **82** (2007), 287–319.
69. A. Khodkar and S.M. Sheikholeslami, *The forcing domination numbers of some graphs*, Ars Combinatoria **82** (2007), 365–379.
70. A. Khodkar and R. Xu, *More on even $[a, b]$ -factors in graphs*, Discussiones Mathematicae Graph Theory **27** (2007), 193–204.
71. M. Atapour, A. Khodkar and S.M. Sheikholeslami, *Characterization of double domination subdivision number of trees*, Discrete Applied Mathematics **155** (2007), 1700–1707.
72. A. Khodkar and B. Landman, *Recent Progress in Ramsey Theory on the Integers*, Integers: Electronic Journal of Combinatorial Number Theory (2007), 305–313.
73. D. Mojdeh, A. Ahmadi Haji, H. Abdollahzadeh Ahangar and A. Khodkar, *Graphs $K_{1*4,5}$, $K_{1*5,4}$, $K_{1*4,4}$, $K_{2,3,4}$ have the property $M(3)$* , Ars Combinatoria **84** (2007), 171–190.
74. A. Khodkar, D. Leach and D. Robinson, *Every $(2, r)$ -regular graph is regular*, Utilitas Mathematica **73** (2007), 169–172.
75. H. Karami, A. Khodkar, and S.M. Sheikholeslami, *Trees whose double domination number is twice their domination number*, Congressus Numerantium **186** (2007), 49–56.
76. A. Khodkar and W. de Launey, *On the Range of Influences in Back-Circulant Latin Squares*, Discrete Mathematics **308** (2008), 2896–2900.
77. N. Cavenagh, D. Donovan, A. Khodkar and J. van Rees, *When is a partial latin square uniquely completable, but not its completable product?*, Discrete Mathematics **308** (2008), 2830–2843.
78. H. Karami, A. Khodkar, R. Khoeilar and S.M. Sheikholeslami, *Trees whose total domination subdivision numbers is one*, Bulletin of the Institute of Combinatorics and its Applications, **53** (2008), 57–67.
79. . Karami, A. Khodkar and S.M. Sheikholeslami, *Some notes on signed edge domination in graphs*, Graphs and Combinatorics, **24** (2008), 29–35.
80. H. Karami, A. Khodkar, and S.M. Sheikholeslami, *Signed edge majority domination numbers in graphs*, Australasian Journal of Combinatorics **41** (2008), 291–296.

81. D.M. Donovan, N. Cavenagh and A. Khodkar, *Minimal defining sets of 1-factorizations of complete graphs*, *Utilitas Mathematica* **76** (2008), 191–211.
82. M. Atapour, S.M. Sheikholeslami, A. Hansberg, L. Volkmann and A. Khodkar, *2-dominance subdivision number of graphs*, *AKCE Journal of Graphs and Combinatorics* **5** (2008), 169–177.
83. A. Khodkar, B.P. Mobaraky and S.M. Sheikholeslami, *Upper bounds for the Roman domination subdivision number of a graph*, *AKCE Journal of Graphs and Combinatorics* **5** (2008), 7–14.
84. H. Karami, A. Khodkar and S.M. Sheikholeslami, *Lower bounds on signed edge total domination numbers in graphs*, *Czechoslovak Mathematical Journal* **58**(133) (2008), 595–603.
85. H. Karami, A. Khodkar, and S.M. Sheikholeslami, *Lower bounds on signed domination numbers of directed graphs*, *Discrete Mathematics* **309** (2009), 2567–2570.
86. H. Karami, A. Khodkar, and S.M. Sheikholeslami, *An improved upper bound for signed edge domination numbers in graphs*, *Utilitas Mathematica* **78** (2009), 121–128.
87. A.N. Ghameshlou, A. Khodkar, R. Saei and S.M. Sheikholeslami, *Negative k -subdecision numbers in graphs*, *AKCE International Journal of Graphs and Combinatorics* **6** (2009), 361–371.
88. S. Cichacz, D. Froncek, A. Khodkar and W. Xu, *Super edge-graceful paths and cycles*, *Bulletin of the Institute of Combinatorics and its Applications* **57** (2009), 79–90.
89. H. Karami, A. Khodkar and S.M. Sheikholeslami, *Signed edge domination numbers in trees*, *Ars Combinatoria* **93** (2009), 451–457.
90. M. Atapour, S.M. Sheikholeslami and A. Khodkar, *Roman domination subdivision numbers of graphs*, *Aequationes Mathematicae* **78** (2009), 237–245.
91. H. Karami, R. Khoelari, S.M. Sheikholeslami and A. Khodkar, *An upper bound for the total domination subdivision numbers in graphs*, *Graphs and Combinatorics* **25** (2009), 727–733.
92. K. Ventullo and A. Khodkar, *A three dimensional silver cube of order seven*, *Bulletin of the Institute of Combinatorics and its Applications* **56** (2009), 81–84.
93. A. Khodkar and D. Leach, *The chromatic number of $K^2(9, 4)$ is 11*, *Journal of Combinatorial Mathematics and Combinatorial Computing* **70** (2009), 217–220.
94. A. Khodkar, S. Nolen and J.T. Perconti, *Super Edge-Graceful Labelings of Complete Bipartite Graphs*, *Australasian Journal of Combinatorics* **46** (2010), 241–261.
95. A.N. Ghameshlou, A. Khodkar, R. Saei and S.M. Sheikholeslami, *Signed (b, k) -edge covers in graphs*, *Intelligent Information Management* **2** (2010), 143–148.
96. M. Atapour, S.M. Sheikholeslami and A. Khodkar, *Trees whose Roman domination subdivision number is 2*, *Utilitas Mathematica* **82** (2010), 227–240.

97. A.N. Ghameshlou, A. Khodkar and S.M. Sheikholeslami, *The signed bad numbers in graphs*, Discrete Mathematics, Algorithms and Applications **3** (2011), 33–41.
98. E.J. Billington and A. Khodkar, *Twofold 2-perfect 8-cycle systems with an extra property*, Journal of Combinatorial Mathematics and Combinatorial Computing **77** (2011), 243–252.
99. M. Atapour, S.M. Sheikholeslami and A. Khodkar, *Global signed total domination in graphs*, Publicationes Mathematicae Debrecen **79** (2011), 7–22.
100. A. Khodkar, *Super Edge-Graceful Labelings of Complete Tripartite Graphs*, Journal of Combinatorial Mathematics and Combinatorial Computing **76** (2011), 137–158.
101. H. Karami, A. Khodkar, and S.M. Sheikholeslami, *An upper bound for total domination subdivision numbers*, Ars Combinatoria **102** (2011), 321–331.
102. A. Khodkar and K. Vinhage, *Super edge-graceful labelings of total stars and total cycles*, Journal of Combinatorial Mathematics and Combinatorial Computing **76** (2011), 233–247.
103. A. Khodkar and S.M. Sheikholeslami, *Signed total k -domatic numbers of graphs*, Journal of the Korean Mathematical Society **48** (2011), 551–563.
104. A. Carney and A. Khodkar, *Signed edge k -domination numbers in graphs*, Bulletin of the Institute of Combinatorics and its Applications **62** (2011), 66–78.
105. E.J. Billington, N. Cavenagh and A. Khodkar, *Super-simple twofold 4-cycle systems*, Bulletin of the Institute of Combinatorics and its Applications **63** (2011), 48–50.
106. H. Karami, A. Khodkar, and S.M. Sheikholeslami, *Signed edge majority total domination numbers in graphs*, Ars Combinatoria (accepted 10/20/2007).
107. A. Khodkar, R. Saei and S.M. Sheikholeslami, *Signed edge k -subdomination numbers in graphs*, Ars Combinatoria (accepted 3/2/2008).
108. A. Khodkar, B.P. Mobaraky and S.M. Sheikholeslami, *Roman domination subdivision number of a graph and its complement*, Ars Combinatoria (accepted 6/1/2008).
109. A. Khodkar, R. Rasi and S.M. Sheikholeslami, *Super edge-gracefulness of complete graphs*, Utilitas Mathematica (accepted 5/22/2009).
110. H. Karami, A. Khodkar, S.M. Sheikholeslami and D.B. West, *Inequalities of Nordhaus–Gaddum type for connected domination*, Graphs and Combinatorics (accepted 1/5/2011).
111. H. Karami, R. Khoeilar, S.M. Sheikholeslami and A. Khodkar, *Global signed domination in graphs*, Bulletin of the Malaysian Mathematical Sciences (accepted 7/23/2011).
112. N. Jafari Rad and A. Khodkar, *$3-\gamma_t$ -critical connected graphs of diameter 3*, Discrete Applied Mathematics (accepted 9/27/2011).
113. E.J. Billington. A. Khodkar and C.C. Lindner, *Complete sets of metamorphoses: paired stars into 4-cycles*, Journal of Combinatorial Mathematics and Combinatorial Computing (accepted 10/5/2011).

114. D. Donovan, J. Lefevre, T. McCourt, N. Cavenagh and A. Khodkar, *Identifying flaws in the security of critical sets in Latin squares via triangulations*, Australasian Journal of Combinatorics (accepted 11/16/2011).

Submitted papers:

115. M. Atapour, S.M. Sheikholeslami and A. Khodkar, *Trees whose 2-domination subdivision number is 2*, (submitted).
116. E.J. Billington, N. Cavenagh and A. Khodkar, *Complete sets of metamorphoses: twofold 4-cycle systems into twofold 6-cycle systems*, (submitted).