Curriculum Vitae
Ali Reza Ashrafi

ADDRESS:

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PERSONAL:

BIRTH DATE: May 10, 1964

PLACE OF BIRTH: Tehran, Iran

NATIONALITY: Iranian

SEX: Male

MARITAL STATUS: Married

CHILDREN: Two daughters

EDUCATION:

- **1996 PHD**   Pure Mathematics: University of Tehran, Iran
   THESIS TOPIC: *The Irreducible Character Table of the Group Aut*(*PSL*(*5,3*))
- **1991 MSC**   Pure Mathematics: Shahid Beheshti University, Iran
   PROJECT TOPIC: *Monoidal Categories*
- **1989 BSC**   Pure Mathematics: Teacher Training University of Tehran

AWARDS AND HONORS:

- 2017 Distinctive Researcher: University of Kashan, I R Iran
- Vice–President of the International Academy of Mathematical Chemistry (IAMC)
- 2016 Distinctive Researcher: University of Kashan, I R Iran
- 2015 Distinctive Researcher: University of Kashan, I R Iran
- 2014 Distinctive Researcher: University of Kashan, I R Iran
- 2013 Distinctive Researcher: University of Kashan, I R Iran
- 2012 Distinctive Researcher: University of Kashan, I R Iran
- 2011 Distinctive Researcher: Isfahan Province, I R Iran
- 2010 Distinctive Researcher: University of Kashan, I R Iran
- 2010 Member of International Academy of Mathematical Chemistry (IAMC)
- 2010 The Third Iranian Scientist in Nanotechnology in the Fifth Top 10 Festival of Iran Nanotechnology Initiative Council
- 2009 Distinctive Researcher in Basic Sciences of the Country
- 2009 Distinctive Researcher: University of Kashan, I R Iran
- 2009 The Second Iranian Scientist in Nanotechnology in the Fourth Top 10 Festival of Iran Nanotechnology Initiative Council
- 2008 Distinctive Researcher: University of Kashan, I R Iran
- 2008 The Second Iranian Scientist in Nanotechnology in the Third Top 10 Festival of Iran Nanotechnology Initiative Council
- 2007 Distinctive Researcher: University of Kashan, I R Iran
- 2007 The First Iranian Scientist in Nanotechnology in the Second Top 10 Festival of Iran Nanotechnology Initiative Council
- 2006 Distinctive Researcher: University of Kashan, I R Iran
- 2006 The 8th Iranian Scientist in Nanotechnology in the First Top 10 Festival of Iran Nanotechnology Initiative Council
- 2005 Distinctive Researcher: University of Kashan, I R Iran
- 2004 Distinctive Researcher: University of Kashan, I R Iran
- 2004 Distinctive Researcher: Isfahan Province, I R Iran
- 2003 Distinctive Researcher: University of Kashan, I R Iran
- 2002 Distinctive Researcher: University of Kashan, I R Iran

- 2001 Distinctive Researcher: University of Kashan, I R Iran
- 1995 Top Student in PhD Class, University of Tehran, I R Iran

MAJOR EDITORIAL EXPERIENCES:

- Editorial Board Member (2016 – present)

  Fullerenes, Nanotubes and Carbon Nanostructures (Taylor & Francis, UK)

- Editorial Board Member (2016 – present)

  Italian Journal of Pure and Applied Mathematics

- Editorial Board Member (2014 – 2016)

- Bulletin of the Iranian Mathematical Society (Iranian Mathematical Society)

- Editor–in–Chief (2012–2013)

- Bulletin of the Iranian Mathematical Society (Iranian Mathematical Society)

- Editorial Board Member (2012 – present)

- International Journal of Group Theory (University of Isfahan)

- Editorial Board Member (2012 – present)

- Transaction on Combinatorics (University of Isfahan)

- Managing Editor (2011)

- Bulletin of the Iranian Mathematical Society (Iranian Mathematical Society)

- Editor–in–Chief (2010–present)

- Iranian Journal of Mathematical Chemistry (University of Kashan)

- Editorial Board Member (2008 – 2012)

- Journal of Advanced Mathematical Studies

- Editorial Board Member (2007 – present)

- Fuzzy Sets, Rough Sets and Multivalued Operations and Applications

- Editorial Board Member (2005 – present)

- MATCH Communications in Mathematical and in Computer Chemistry

- (University of Kragujevac, Serbia)

- Editor-in-Chief (2004 – 2007)

- International Journal of Pure and Applied Mathematical Sciences(IJPAMS)

- Editorial Board Member (2004 – 2006)

- Journal of Applied Algebra and Discrete Structures (JAADS)

- Editor-in-Chief (2000 – 2003)

- International Journal of Science and Technology of the University of Kashan

MEMBERSHIP IN SOCIETIES:

- 1998–present Member of the American Mathematical Society
- 1991–present Member of the Iranian Mathematical Society

ACADEMIC EMPLOYMENT:

- 2014–present Vice–Dean in Research, Faculty of Mathematical Sciences, University of Kashan, Kashan, I R Iran.
- 2011–2015 Head of the Department of Nanocomputing, Institute for Nanoscience and Nanotechnology, University of Kashan, Kashan, I R Iran.
- 2008-2009 Head of the Department of Mathematics, University of Kashan, Kashan, I R Iran.
- 2005–present Professor of Mathematics, Department of Mathematics, University of Kashan, Kashan, I R Iran.
- 2001–2005 Associate Professor of Mathematics, Department of Mathematics, University of Kashan, Kashan, I R Iran.
- 2000–2001 Dean of the Faculty of Science, University of Kashan, Kashan, I R Iran.
- 1999 Vice Dean of the Faculty of Science, University of Kashan, Kashan, I R Iran.
- 1996–2000 Assistant Professor of Mathematics,Department of Mathematics, University of Kashan, Kashan, I R Iran.

SUBJECT TAUGHT:

- **Undergraduate Level:** Projective Geometry, Algebraic Topology, History of Mathematics, Philosophy of Mathematics, Number Theory, Algebra I, Algebra II, Algebra III, Linear Algebra, Graph Theory, Ordinary Differential Equation, Calculus I, Calculus II, Calculus III.
- **Postgraduate Level:** Category Theory, Lattice Theory, Finite Group Theory, Character Theory of Finite Groups, Advanced Algebra, Advances Linear Algebra, Linear Groups, Permutation Groups, Lie Algebras, Computational Group Theory, Applications of Group Theory in Physics, Graph Theory, Algebraic Graph Theory, Distance in Graphs, Cage Graphs, Combinatorics.

PRESENT RESEARCH WORKS:

Finite Groups, Subgroup Lattices, Partition Theory, Theory of Hyperstructures, Character Theory of Finite Groups, Mathematical Chemistry, Mathematical Physics, Mathematical Biology, Mathematical Nanoscience.

CONFERENCE ORGANIZERS:

➢ **Chair of the Academic Committee:** 9th Iranian Group Theory Conference (IGTC 2017), February 1–3, 2017, University of Kashan, I R Iran.

➢ **Chair of the Academic Committee:** The second conference on Computational Group Theory, Computational Number Theory and Applications (CACNA 2015), October 13–15, 2015, University of Kashan, I R Iran.

➢ **Chair of the Academic Committee:** The first conference on Computational Group Theory, Computational Number Theory and Applications (CACNA 2014), December 17–19, 2014, University of Kashan, I R Iran.

➢ **Chair of the Conference:** Iran–Belarus International Conference on Modern Applications of Nanotechnology, June 27–29, 2012, National Academy of Sciences of Belarus, Minsk, Belarus.

➢ **Chair of the Academic Committee:** 5th Conference on Algebraic Combinatorics and Graph Theory, July 3–4, ٢٠١٢, University of Kashan, I R Iran.

➢ **Member of Scientific Committees:** The 26th International Course & Conference on the Interfaces among Mathematics, Chemistry & Computer Sciences, June 07–12, 2011, Dubrovnik, Croatia.

➢ **Member of Scientific Committees:** The 25th International Course & Conference on the Interfaces among Mathematics, Chemistry & Computer Sciences, June 07-12, 2010, Dubrovnik, Croatia.

➢ **Member of Scientific Committees:** 3rd International Congress on Nanoscience and Nanotechnology, ICNN 2010, November 9–11, 2010, Shiraz, Iran.

➢ **Member of Academic & Organizing Committees:** The Third Conference and Workshop on Mathematical Chemistry, Tarbiat Modares University, Tehran, February, 2010.

➢ **Chair of the Academic Committee:** The Second Conference And Workshop on Mathematical Chemistry, University of Kashan, April 24–16, 2009.

➢ **Member of Academic & Organizing Committees:** The First Conference and Workshop on Mathematical Chemistry, Tarbiat Modares University, Tehran, January 29–31, 2008.

➢ **Chair of the Academic Committee:** International Congress on Ghiyath Al-Din Jamshid Kashani, University of Kashan, November 9–11, 2000.

➢ **Member of Scientific Committees:** 16th Algebra Seminar, IASBS, Zanjan, 2004.

INVITED SPEAKER OF NATIONAL AND INTERNATIONAL MEETINGS:

- ➤ 48ᵀᴴ Annual Iranian Mathematics Conference, Bu-Ali Sina University, August 22–25, 2017, amedan, Iran
- ➤

JOURNAL PUBLICATIONS

PAPERS PUBLISHED IN MATHEMATICS JOURNALS

1995

1. M. R. Darafsheh and **A. R. Ashrafi**, The Irreducible character table of the automorphism group of the group $PSL_5(3)$, *Algebras, Groups and Geometries*, **12** (1995) 339–352.

1998

2. **A. R. Ashrafi**, On the n–sum Group, n = 6, 7, *Southeast Asian Bulletin of Mathematics*, **22** (1998) 111–114.
3. A. Madanshekaf and **A. R. Ashrafi**, Generalized action of a hypergroup on a set, *Italian Journal of Pure and Applied Mathematics*, No 3 (1998) 127–135.

1999

4. **A. R. Ashrafi**, The problem of intervals, *Southeast Asian Bulletin of Mathematics*, (1999) **23** 551–557.

2000

5. **A. R. Ashrafi**, On finite group with a given number of centralizers, *Algebra Coloquium*, **7** (2) (2000) 139–146.
6. **A. R. Ashrafi**, An exact expression for the partition function p(n), *Far East Journal of Mathematical Sciences* (FJMS) **2** (2)(2000) 271–278.
7. **A. R. Ashrafi**, Counting the centralizers of some finite groups, *Korean Journal of Computational & Applied Mathematics*, **7** (1) (2000) 115–124.
8. M. R. Darafsheh and **A. R. Ashrafi**, (2,p,q)–Generations of the Conway group Co_1, *Kumamoto Journal of Mathematics* **13** (2000) 1–20.
9. **A. R. Ashrafi** and A. Gordji, On existence of some k–SOLSSOMs, *Divulgaciones Matematicas*, **8** (1) (2000) 25–29.

2001

10. **A. R. Ashrafi**, About some Join spaces and Hyperlattices, *Italian Journal of Pure and Applied Mathematics* 10 (2001) 199–205.
11. M. R. Darafsheh, **A. R. Ashrafi** and M. Moghani, (p,q,r)–Generations of the Conway group Co_1, for odd p, *Kumamoto Journal of Mathematics* **14** (2001) 1–20.
12. **A. R. Ashrafi** and R. Soleimani, On the number of maximal theta pairs in a finite group, *Acta Mathematica et Informatica Universitatis Ostraviensis* **9** (2001) 5–12.
13. Zhao Yaoqing and **A. R. Ashrafi**, On s–completions and theta–completions for maximal subgroups, *International Journal of Mathematics, Game Theory and Algebra* **11** (4) (2001) 93–101.

2002

14. Zhao Yaoqing and **A. R. Ashrafi**, On S–completions and theta-completions for maximal subgroups, *International Journal of Mathematics, Game Theory and Algebra* **12** (3)(2002) 225–233.

15. **A. R. Ashrafi** and H. Sahraei, On finite groups whose normal subgroups have the same number of conjugacy classes, *Vietnam Journal of Mathematics* **30** (3)(2002) 289–294.

16. **A. R. Ashrafi**, Generating pairs for the Held group He, *Journal of Applied Mathematics & Computing* **10** (2002) 167–174.

17. **A. R. Ashrafi**, A. Hossein Zadeh and M. Yavari, Hypergraphs and join spaces, *Italian Journal of Pure and Applied Mathematics* **12** (2002) 185–196.

18. **A. R. Ashrafi** and G. A. Moghani, nX–Complementary generations of the Suzuki group Suz, *Buletinul A. S. a R. M. Matematica* **40** (3) (2002) 61–70.

2003

19. **A. R. Ashrafi**, (p,q,r)–Generations and nX–complementary generations of the sporadic group Th, *SUT Journal of Mathematics* **39** (1) (2003) 41–54.

20. M. R. Darafsheh and **A. R. Ashrafi**, Generating pairs for the sporadic group Ru, Journal of Applied Mathematics & Computing 12 (1–2) (2003) 143–154.

21. M. R. Darafsheh, **A. R. Ashrafi** and G.A. Moghani, (p,q,r)–Generations and nX–complementary generations of the sporadic group Ly, *Kumamoto Journal of Mathematics* **16** (2003) 13–25.

22. **A. R. Ashrafi**, nX–Complementary generations of the Harada–Norton group HN, *Acta Mathematica et Informatica Universitatis Ostraviensis* **11** (2003) 3–9.

23. **A. R. Ashrafi** and Zhao Yaoqing, On 5– and $\hat{r}$–decomposable finite groups, *Mathematica Slovaca* **53** (4) (2003) 373–383.

24. G.A. Moghani and **A. R. Ashrafi**, On some hypergroups and their hyperlattice structure, *Buletinul A. S. a R. M. Matematica* **43** (3)(2003) 15–24.

25. **A. R. Ashrafi**, On X–decomposable finite groups, *Mathematical Journal of the Armenian Academy of Sciences* 8 (5) (2003) 5–10.

26. G. A. Moghani, **A. R. Ashrafi** and B. Davvaz, On the finite join spaces associated to rough sets, *Pure Mathematics and Its Applications* **14** (3) (2003) 305–311.

2004

27. **A. R. Ashrafi** and M. Hamadanian, Group theory for tetraammine platinum(II) with C_{2v} and C_{4v} point group in the non–rigid system, *Journal of Applied Mathematics & Computing* **14** (2004) 289–303.

28. **A. R. Ashrafi**, On decomposability of finite groups, *Journal of the Korean Mathematical Society* **41** (2004) 479–487.

29. K. Mehrabadi, **A. R. Ashrafi** and A. Iranmanesh, (p,q,r)–Generations of the Suzuki group Suz, *International Journal of Pure and Applied Mathematics* **11** (4) (2004) 447–463.

30. M. R. Darafsheh, **A. R. Ashrafi** and M. Moghani, nX–Complementary generations of the sporadic group Co_1, *Acta Mathematica Vietnamica* **29** (1) (2004) 57–75.

31. **A. R. Ashrafi** and G. Venkataraman, On finite groups whose every normal subgroup is a union of a given number of conjugacy classes, *Proceedings of the Indian Academy of Science* (*Mathematical Science*) **114** (3) (2004) 217–224.

32. M. R. Darafsheh, **A. R. Ashrafi** and G. A. Moghani, nX–Complementary generations of the sporadic group ON, *Southeast Asian Bulletin of Mathematics* **28** (6) (2004), 1011–1019.

2005

33. **A. R. Ashrafi** and B. Taeri, On finite group with a certain number of centralizers, *Journal of Applied Mathematics & Computing* **17** (1–2) (2005) 217–227.

34. **A. R. Ashrafi**, On non–rigid group theory for some molecules, *MATCH Communications in Mathematics and in Computer Chemistry*, **53** (1) (2005) 161–174.

35. M. R. Darafsheh, Y. Farjami and **A. R. Ashrafi**, Computing the full non–rigid group of tetranitrocubane and octanitrocubane using wreath product, *MATCH Communications in Mathematics and in Computer Chemistry* **54** (1) (2005) 53–74.

36. M. R. Darafsheh, Y. Farjami and **A. R. Ashrafi**, Symmetries of weighted complete graph of tetranitrocubane and octanitrocubane, *MATCH Communications in Mathematics and in Computer Chemistry* **54** (2) (2005) 331–340.

37. **A. R. Ashrafi** and A. Iranmanesh, nX–Complementary generations of the Rudvalis group Ru, *Vietnam Journal of Mathematics* **33** (1) (2005) 1–7.

38. **A. R. Ashrafi** and Wujie Shi, On 7– and 8–decomposable finite groups, *Mathematica Slovaca* **55** (3)(2005) 253–262.

39. G. A. Mansoori, G.R. Vakili–Nezhad and A. R. **Ashrafi**, Some mathematical concepts applicable in nanothermodynamics, *International Journal of Pure and Applied Mathematical Science* **2** (1)(2005) 58–61.

40. M. R. Darafsheh, **A. R. Ashrafi** and A. Darafsheh, Computing the full non–rigid group of tetra–tert–butyltetrahedrane using wreath product, *International Journal of Quantum Chemistry* **105** (5)(2005) 485–492.

2006

41. **A. R. Ashrafi**, (p,q,r)–Generations of the sporadic group HN, *Taiwanese Journal of Mathematics* **10** (3) (2006) 613–629.

42. **A. R. Ashrafi** and A. Loghman, PI index of zig–zag polyhex nanotubes, *MATCH Communications in Mathematics and in Computer Chemistry* 55 (2) (2006) 447–452.

43. S. Yousefi and **A. R. Ashrafi**, An exact expression for the Wiener index of a polyhex nanotorus, *MATCH Communications in Mathematics and in Computer Chemistry* **56** (1) (2006) 169–178.

44. **A. R. Ashrafi** and M. R. Ahmadi, Symmetry of fullerene C_{60}, *Iranian Journal of Mathematical Sciences and Informatics* **1** (1) (2006) 1–13.

45. **A. R. Ashrafi** and G. A. Moghani, nX–Complementary generations of the Fischer group Fi_{23}, *Journal of Applied Mathematics & Computing* **21** (1–2) (2006) 393–409.

46. **A. R. Ashrafi** and A. Loghman, PI index of armchair polyhex nanotubes, *Ars Combinatoria* **80** (2006) 193–199.

47. A. Iranmanesh and **A. R. Ashrafi**, Generalized Latin squares, *Journal of Applied Mathematics & Computing* **22** (1–2)(2006) 285–293.

48. **A. R. Ashrafi** and B. Taeri, On finite groups with exactly seven element centralizers, *Journal of Applied Mathematics & Computing* **22** (1-2)(2006) 403–410.

49. **A. R. Ashrafi**, B. Manoochehrian and H. Yousefi–Azari, PI polynomial of a graph, *Utilitas Mathematica* **71** (2006) 97–108.

50. M. Alaeiyan and **A. R. Ashrafi**, On a class of p–groups and its Cayley graphs, *Italian Journal of Pure and Applied Mathematics* **20** (2006) 169–176.

51. M. Ghorbani, M. Jalal–Abadi and **A. R. Ashrafi**, Computing orbits of the automorphism group of the subsequence poset $B_{m,n}$, *Order* **23** (2–3)(2006) 163–168.

52. A. Andikfar and **A. R. Ashrafi**, On finite groups all of whose proper subgroups are w–cyclic, *Carpathian Journal of Mathematics* **22** (1–2) (2006) 1–5.

2007

53. M. R. Darafsheh, **A. R. Ashrafi** and A. Darafsheh, Non-rigid group theory for 1,3,5–trimethylbenzene, International Journal of Quantum Chemistry **107** (2) (2007) 340–344.

54. **A. R. Ashrafi** and F. Rezaei, PI index of polyhex nanotori, *MATCH Communications in Mathematics and in Computer Chemistry* **57** (1) (2007) 243–250.

55. **A. R. Ashrafi** and S. Yousefi, Computing the Wiener index of a $TUC_4C_8(S)$ nanotorus, *MATCH Communications in Mathematics and in Computer Chemistry* **57** (2) (2007) 403–410.

56. B. Manoochehrian, H. Yousefi–Azari and **A. R. Ashrafi**, PI polynomial of some benzenoid graphs, *MATCH Communications in Mathematics and in Computer Chemistry* **57** (3) (2007) 653–664.

57. M.R. Darafsheh, Y. Farjami, **A. R. Ashrafi** and M. Hamadanian, Full non–rigid group of Sponge and Pina, *Journal of Mathematical Chemistry* **41** (3) (2007) 315–326.

58. **A. R. Ashrafi** and S. Yousefi, A note on equiseparable trees, *Iranian Journal of Mathematical Sciences and Informatics* **2** (1) (2007) 15–20.

59. M. R. Darafsheh, **A. R. Ashrafi** and A. Darafsheh, Non–rigid group theory for 2,3–dimethylbutane, *MATCH Communications in Mathematics and in Computer Chemistry* **58** (1) (2007) 47–56.

60. **A. R. Ashrafi**, B. Manoochehrian and H. Yousefi–Azari, On Szeged polynomial of a graph, *Bulletin of the Iranian Mathematical Society* **33** (1) (2007) 37–46.

61. H. Yousefi–Azari, B. Manoochehrian and **A. R. Ashrafi**, PI and Szeged indices of some benzenoid graphs related to nanostructures, *Ars Combinatoria* **84** (2007) 255–267.

62. **A. R. Ashrafi** and A. Iranmanesh, Counting the number of theta pairs in a finite group, *International Journal of Applied Mathematics and Statistics* **11** (N07) (2007) 7–12.

63. S. Yousefi and **A. R. Ashrafi**, An exact expression for the Wiener index of a $TUC_4C_8(R)$ nanotorus, *Journal of Mathematical Chemistry* **42** (4) (2007) 1031–1039.

64. B. Manoochehrian and **A. R. Ashrafi**, A simple algorithm for computing detour index of nanoclusters, *Iranian Journal of Mathematical Sciences and Informatics* **2** (2) (2007) 25–28.

2008

65. B. Manoochehrian, H. Yousefi–Azari and **A. R. Ashrafi**, Szeged index of a zig–zag polyhex nanotube, *Ars Combinatoria* **86** (2008) 371–379.

66. M.R. Darafsheh, **A. R. Ashrafi** and M. Khademi, Some designs related to group actions, *Ars Combinatoria* 86 (2008) 65–75.

67. M. R. Darafsheh, **A. R. Ashrafi** and A. Darafsheh, The symmetry group of non–rigid tetramethylsilane, *International Journal of Quantum Chemistry* **108** (3) (2008) 440–446.

68. **A. R. Ashrafi** and M. Ghorbani, A note on markaracter tables of finite groups, *MATCH Communications in Mathematics and in Computer Chemistry* **59** (3) (2008) 595–603.

69. I. Gutman and A. R. Ashrafi, On the PI index of phenylenes and their hexagonal squeezes, *MATCH Communications in Mathematics and in Computer Chemistry* **60** (1) (2008) 135–142.

70. **A. R. Ashrafi** and W. J. Shi, On 9– and 10–decomposable finite group, Journal of Applied Mathematics & Computing 26 (1–2) (2008) 169–182.

71. M. R. Darafsheh, **A. R. Ashrafi** and A. Darafsheh, Erratum: The symmetry group of nonrigid tetramethylsilane, *International Journal of Quantum Chemistry* **108** (8) (2008) 1411–1413.

72. H. Yousefi-Azari, B. Manoochehrian and **A. R. Ashrafi**, The PI index of product graphs, Applied Mathematics Letters **21** (6) (2008) 624–627.
 [**Top 25 Hottest Articles–April to June 2008, No 22**].

73. **A. R. Ashrafi** and M. Ghorbani, Computer application of GAP to the evaluation of numbers of permutational isomers of hetero fullerenes, *MATCH Communications in Mathematics and in Computer Chemistry* **60** (2) (2008) 359–367.

74. **A. R. Ashrafi** and M. Mirzargar, The edge Szeged polynomial of graphs, *MATCH Communications in Mathematics and in Computer Chemistry* 60 (3) (2008) 897–904.

75. **A. R. Ashrafi**, M. Jalali, M. Ghorbani and M. V. Diudea, Computing PI and omega polynomials of an infinite family of fullerenes, *MATCH Communications in Mathematics and in Computer Chemistry* **60** (3) (2008) 905–916.

76. M. V. Diudea, A. E. Vizitiu, F. Gholaminezhad and **A. R. Ashrafi**, Omega polynomial in twisted (4,4) tori, *MATCH Communications in Mathematics and in Computer Chemistry* **60** (3) (2008) 945–953.

77. M. H. Khalifeh, H. Yousefi–Azari and A. R. Ashrafi, The hyper–Wiener index of graph operations, *Computer and Mathematics with Applications* **56** (5) (2008) 1402–1407.

78. G. H. Fath–Tabar, **A. R. Ashrafi**, I. Gutman, Note on Laplacian energy of graphs, *Bulletin de l'Academie Serbe des Sciences et des Arts* (*Classe des Sciences Mathematiques et Naturelles*) **33** (2008) 1–10.

79. M. H. Khalifeh, H. Yousefi-Azari and **A. R. Ashrafi**, Vertex and edge PI indices of Cartesian product graphs, Discrete Applied Mathematics **156** (2008) 1780–1789.
   [**Top 25 Hottest Articles–October to December 2007, No 9**].

80. M. H. Khalifeh, H. Yousefi-Azari and **A. R. Ashrafi**, A matrix method for computing Szeged and vertex PI indices of join and composition of graphs, Linear Algebra Applications **429** (11–12) (2008) 2702–2709.

81. **A. R. Ashrafi** and M. Mirzargar, PI, Szeged and edge Szeged indices of nanostar dendrimers, *Utilitas Mathematica* 77 (2008) 249–255.

82. A. Iranmanesh and **A. R. Ashrafi**, On two methods for computing the non–rigid group of molecules, *Iranian Journal of Mathematical Sciences and Informatics* **3** (2) (2008) 21–28.

2009

83. M. H. Khalifeh, H. Yousefi-Azari and **A. R. Ashrafi**, The first and second Zagreb indices of some graph operations, Discrete Applied Mathematics **157** (4) (2009) 804–811.

84. M. H. Khalifeh, H. Yousefi–Azari, **A. R. Ashrafi** and S. Wagner, Some new results on distance–based graph invariants, European Journal of Combinatorics **30** (5) (2009) 1149–1163.
   [**Top 25 Hottest Articles–October to December 2008, No 1; January to March 2009, No 17; April to June 2009, No 3; July to September 2009, No 2; January to March 2010, No 19; April to June 2010, No 6; October 2009 – September 2010 Academic Year, No 11; October to December 2010, No 6; April to June 2011, No 9; July to September 2011, No 12; October to December 2011, No 7; January to December 2011 Full Year, No 7; January to March 2012, No 1; July to September 2012, No 19; October to December 2012, No 19; January to December 2012 Full Year, No 2**].

85. H. Yousefi–Azari, **A. R. Ashrafi** and N. Sedigh, On the Szeged index of some benzenoid graphs applicable in nanostructures, *Ars Combinatoria* **90** (2009) 55–64.

86. **A. R. Ashrafi** and M. Mirzargar, The study of an infinite class of dendrimer nanostars by topological index approaches, *Journal of Applied Mathematics & Computing* **31** (1–2) (2009) 289–294.

87. M. Ghorbani, M. Jalal–Abadi and **A. R. Ashrafi**, Computing orbits of the automorphism group of the subsequence poset $B_{m,n}$, *Southeast Asian Bulletin of Mathematics* **33** (2009) 847–851.

88. M. Mogharrab, H. R. Maimani and **A. R. Ashrafi**, A note on the vertex PI index of graphs, Journal of Advanced Mathematical Studies 2 (2) (2009) 53–56.

89. G. H. Fath–Tabar, **A. R. Ashrafi** and I. Gutman, Note on Estrada and L–Estrada indices of graphs, *Bulletin de l'Academie Serbe des Sciences et des Arts* (*Classe des Sciences Mathematiques et Naturelles*) **139** (2009) 1–16.

90. M. J. Nadjafi–Arani, G. H. Fath–Tabar and **A. R. Ashrafi**, Extremal graphs with respect to the vertex PI index, *Applied Mathematics Letters* **22** (2009) 1838–1840.

91. **A. R. Ashrafi**, M. R. Darafsheh and M. Khademi, On designs constructed by group actions, *Journal of Combinatorial Mathematics and Combinatorial Computing* (JCMCC) **70** (2009) 235–245.

92. S. Hossein–Zadeh, A. Hamzeh and **A. R. Ashrafi**, Wiener–type invariants of some graph operations, *FILOMAT* 23 (3) (2009) 103–113.

2010

93. A. Karbasioun, **A. R. Ashrafi** and M. V. Diudea, Distance and detour matrices of an infinite class of dendrimer nanostars, *MATCH Communications in Mathematics and in Computer Chemistry* **63** (1) (2010) 239–246.

94. G. H. Fath–Tabar, M. J. Nadjafi–Arani, M. Mogharrab and **A. R. Ashrafi**, Some inequalities for Szeged–like topological indices of graphs, *MATCH Communications in Mathematics and in Computer Chemistry* 63 (1) (2010) 145–150.

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- Journal of Inequalities and Applications,
- Journal of Science, University of Tehran,
- Linear Algebra and its Applications,
- MATCH Communications in Mathematical and in Computer Chemistry,
- Mathematical Review,
- Optoelectronic Advanced Materials – Rapid Communications,
- Transaction on Combinatorics,
- TWMS Journal of Pure and Applied Mathematics.