



Yaser Alizadeh
Department of
Mathematics and
Computer Science,
Hakim Sabzevari
University, Sabzevar,
Iran.
y.alizadeh@hsu.ac.
ir
Tel: (051) 4401-3684

Yaser Alizadeh

Associate Prof. Hakim Sabzevari University

About me

Birthday: June 1, 1983

Place of Birth: Hamedan, Iran.

Education

2008-2012, Tarbiat Modares university, Tehran

PhD. Pure Mathematics (Algebraic graph theory)

Supervisor: Prof. Ali Iranmanesh

2005-2008, Tarbiat Modares university, Tehran

M.Sc. Pure Mathematics (Algebraic graph theory)

Advisor: Prof. Ali Iranmanesh

2001-2005, Birjand university, Birjand

B.Sc. Pure Mathematics

Membership of societies

Iranian Mathematical Society

Publication

Yaser Alizadeh, Sandi Klavzar, Extremal results on stepwise transmission irregular graphs, *Filomat* 37:4 (2023), 12711276.

Yaser Alizadeh, Kexiang Xu, Sandi Klavzar, On the Mostar Index of Trees and Product Graphs, *Filomat* 35:14 (2021), 46374643

Y.Alizadeh, S. Klavžar, On the Difference Between the Eccentric Connectivity Index and Eccentric Distance Sum of Graphs, *Bull. Malays. Math. Sci. Soc.* 44(2021) 1123–1134.

Y.Alizadeh, On the Eccentric Sequence of Composite Graphs, *International J.Math. Combin.*4 (2019)112-121.

Y.Alizadeh, S. Klavžar, On the relation between degree distance and eccentric connectivity index. *MATCH Commun. Math. Comput. Chem.* 84 (2020) 647-659.

Y. Alizadeh, E. Deutsch, S. Klavžar, On the Irregularity of π -Permutation Graphs, Fibonacci Cubes, and Trees. *Bull. Malays. Math. Sci. Soc.* <https://doi.org/10.1007/s40840-020-00932-9>.

Y.Alizadeh, S. Klavžar, Complexity of the Szeged index, edge orbits, and some nanotubical fullerenes, *Hacet. J. Math. Stat.* 48 (2020) 87-95

Y. Alizadeh, E. Estaji, S. Klavžar, M. Petkovšek, Metric properties of generalized Sierpinski graphs over stars, *Discrete Applied Mathematics*. 266(2019) 48-55.

A. Alhevaz, M. Baghipur, E. Hashemi, Y. Alizadeh, Minimum covering reciprocal distance signless Laplacian energy of graphs, *Acta Univ. Sapientiae, Informatica*. 10 (2018) 218–240.

Y. Alizadeh, Szeged Dimension and PI_v Dimension of Composite Graphs, *Iranian Journal of Mathematical Sciences and Informatics*. 13 (2018) 45-57.

Y. Alizadeh, T. Dosli, K. Xu, On the Eccentric Complexity of Graphs, *Bull. Malays. Math. Sci. Soc.* (2017)1-17. <https://doi.org/10.1007/s40840-017-0564-y>.

Y. Alizadeh, S. Klavžar, On graphs whose Wiener complexity equals their order and on Wiener index of asymmetric graphs, *Appl. Math. Comput.* 328 (2018) 113118.

K. Xu, Y. Alizadeh, K.Ch.Das, On two eccentricity-based topological indices of graphs, *Discrete Applied Mathematics*. 233 (2017) 240-251

Y. Alizadeh, S. Klavžar, Complexity of Topological Indices: The Case of Connective Eccentric Index, *MATCH Commun. Math. Comput. Chem.* 76 (2016) 659-667.

Y. Alizadeh, A. Iranmanesh, T. Došlić, M. Azari, The edge Wiener index of suspensions, bottlenecks and thorny graphs, *Glasnik Matematički*, 49 (2014) 1-12.

Y. Alizadeh, S. Klavžar, Wiener Dimension: Fundamental Properties and (5,0)-Nanotubical Fullerenes, *MATCH Commun. Math. Comput. Chem.* 72 (2014) 279-294.

Y. Alizadeh, A. Iranmanesh, T. Došlić, Additively weighted Harary index of some composite graphs, *Discrete Mathematics*. 313, (2013) 26-34

Y. Alizadeh, On the Higher Randi Index, *Iranian J. Math. Chem.* 4(2) (2013) 257-263.

Y. Alizadeh, S. Klavžar, Interpolation Method and Topological Indices: 2-Parametric Families of Graphs, *MATCH Commun. Math. Comput. Chem.* 69, (2013) 523-534.

Y. alizadeh, S. Klavžar, Interpolation Method and Topological Indices: 2-Parametric Families of Graphs MATCH Commun. Math. Comput.Chem. 69, (2013) 523-534.

Y.Alizadeh, A. Iranmanesh, S. Klavžar, Interpolation method and topological indices: the case of fullerenes C_{12k+4} , MATCH Commun. Math. Comput.Chem. 68 (2012) 303-310.

Y.Alizadeh, A. Iranmanesh, Balaban and Randic Indices of IPR C_{80} Fullerene Isomers, Zigzag Nanotubes and Graphene, Int. J. Nanosci. Nanotechnol. 7 (2011)28-34.

Y.Alizadeh, A. Iranmanesh, Computing the Szeged and PI indices of $VC_5C_7[p, q]$ and $HC_5C_7[p, q]$ nanotubes, Int. J. Mol. Sci. 9 (2008) 131-144.

A. Iranmanesh, Y.Alizadeh, Dig J Nanomater Bios, Computing Szeged and Schultz indices of $HAC_5C_6C_7[p, q]$ nanotube by GAP program, 4 (2009)67-72.

A. Iranmanesh, Y.Alizadeh, Computing Schultz polynomial, Schultz index of C_{60} Fulleren by GAP program, Dig J Nanomater Bios, 4 (2009) 7-10.

Y.Alizadeh, A. Iranmanesh, Computing Zagreb indices of C_{80} fullerene and $TUZYC_6$ nanotube by GAP program, 4 (2009) 885 889.

A. Iranmanesh, Y.Alizadeh, Computing Hyper Wiener and Schultz Indices of $TUZYC_6[P, Q]$ Nanotubes by GAP Program, Dig J Nanomater Bios, 4 (2009) 607 611

A. Iranmanesh, Y.Alizadeh, Computing Wiener Polynomial, Wiener Index, Hyper Wiener index of C_{80} Fullerene by GAP Program, Fullerenes, Nanotubes and Carbon Nanostructures.17 (2009) 560-566.

Y. Alizadeh, A. Iranmanesh, Eccentric Connectivity Index of $HAC_5C_7[p, q]$ and $HAC_5C_6C_7[p, q]$ Nanotubes, MATCH Commun. Math. Comput.Chem. 69 (2013) 175-182.

Y.Alizadeh, A. Iranmanesh, Computing Wiener index of $HAC_5C_7[p, q]$ Nanotube by GAP program, Iranian J. Math. Sci. Inf. 3(2008) 1-12.

Y.Alizadeh, A. Iranmanesh, An algorithm for computing the Randic and Zagreb indices of a graph, J. Optoelectron. Adv. M. 4 (2010)50-52.

Y. Alizadeh, M. Azari, T. Došlic, Computing the eccentricity-related invariants of single-defeat carbon nanocones, J. Comput. Theor. 10 (2013) 1297-1300

Y.Alizadeh, Wiener index of $SC_5C_7[p, q]$ nanotubes, J. Optoelectron. Adv. M.7(11) 2013, 943-946.

Y. Alizadeh, Szeged Dimension and PI_v Dimension of Composite Graphs, Iranian J. Math. Sci. Inf.2 (2018)45-57

Scientific Paper Presented in Conferences:

With Z. Molaee on k-STI graphs, 54th Annual Iranian Mathematics Conference, Zanjan University, 2023.

With Z. Mohammadpoor Wiener Complexity and Mostar Index in Trees, 54th Annual Iranian Mathematics Conference, Zanjan University, 2023.

With Z. Molaee, On the metric properties of STI graphs, 53th Annual Iranian Mathematics Conference, University of Science and Technology of Mazandaran, 2022.

With Z. Molaee Extremal transmission irregular trees with respect to Wiener index, 46th Annual Iranian Mathematics Conference, Hakim Sabzevari University, Sabzevar, 2021.

On the Wiener Index and Total Eccentricity Index, 8th Conference and Workshop on Mathematical Chemistry (ECWMC), Tarbiat Modares University, 2018.

With Z. Arfaei, Wiener complexity and eccentric complexity of graphs, 10th Conference on Algebraic Combinatorics and Graph Theory, Yazd University, 2018.

With Z. Arfaei, On the Eccentric Complexity and Transmission Complexity, 9th Conference on Algebraic Combinatorics and Graph Theory, Amir Kabir University, Tehran, 2017.

With E. Estaji, On the topological dimension of graphs, 8th Conference on Algebraic Combinatorics and Graph Theory, Imam Khomeini University, Ghazvin, 2016.

With E. Estaji, An algorithmic approach to distinguishing number problem, 8th Conference on Algebraic Combinatorics and Graph Theory, Imam Khomeini University, Ghazvin, 2016.

With E. Estaji, On the Wiener index of Sierpinski graphs, 46th Annual Iranian Mathematics Conference, Yazd University, Yazd, 2015.

With E. Estaji, d-self Center Graphs and Graph Operations, 46th Annual Iranian Mathematics Conference, Yazd University, Yazd, 2015.

Eccentric dimension of graphs, 7th Conference and workshop in Mathematical Chemistry, Saveh University, Saveh, 2015.

Masters Students Advised

N. Khorshidi, : Complexity of Wiener index and eccentricity of graphs, 2023.

L. Bedarieh, On the irregularity of composite graphs and comparison with total irregularity of graphs,2020.

Z. Arfaei, On the relations between topological indices based on eccentricity in graphs, 2018.

F. Pourhoseini, Self Center Graphs and Graph Operations, 2017.

H. Bidkhori, Eccentricity in composite graphs, 2016.

M. Shaddel, On the Wiener Index and the Wiener Dimension of Graphs, 2016.

Honors

2013: Distinguished Student Researcher of Tarbiat Modares University.

2009: Distinguished Student Researcher of Tarbiat Modares University.

Present Research Work:

Graph Theory and Combinatorics, Algebraic Graph Theory, Distance in Graphs, Computational Group Theory.