Boris Furtula

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4816460/publications.pdf

Version: 2024-02-01

93 papers

2,789 citations

22 h-index

304602

50 g-index

96 all docs 96
docs citations

96 times ranked 778 citing authors

#	Article	IF	CITATIONS
1	A forgotten topological index. Journal of Mathematical Chemistry, 2015, 53, 1184-1190.	0.7	500
2	Topological index based on the ratios of geometrical and arithmetical means of end-vertex degrees of edges. Journal of Mathematical Chemistry, 2009, 46, 1369-1376.	0.7	478
3	Augmented Zagreb index. Journal of Mathematical Chemistry, 2010, 48, 370-380.	0.7	299
4	On structure-sensitivity of degree-based topological indices. Applied Mathematics and Computation, 2013, 219, 8973-8978.	1.4	121
5	Atom–bond connectivity index of trees. Discrete Applied Mathematics, 2009, 157, 2828-2835.	0.5	106
6	On atom-bond connectivity index. Chemical Physics Letters, 2011, 511, 452-454.	1.2	83
7	On difference of Zagreb indices. Discrete Applied Mathematics, 2014, 178, 83-88.	0.5	82
8	On Randić energy. Linear Algebra and Its Applications, 2014, 442, 50-57.	0.4	64
9	Randić index and information. AKCE International Journal of Graphs and Combinatorics, 2018, 15, 307-312.	0.4	59
10	Terminal Wiener index. Journal of Mathematical Chemistry, 2009, 46, 522-531.	0.7	50
11	On extremal Zagreb indices of trees with given domination number. Applied Mathematics and Computation, 2016, 279, 208-218.	1.4	46
12	A new geometric–arithmetic index. Journal of Mathematical Chemistry, 2010, 47, 477-486.	0.7	41
13	Degree-based energies of graphs. Linear Algebra and Its Applications, 2018, 554, 185-204.	0.4	40
14	Relation between second and third geometric–arithmetic indices of trees. Journal of Chemometrics, 2011, 25, 87-91.	0.7	39
15	On the first geometric–arithmetic index of graphs. Discrete Applied Mathematics, 2011, 159, 2030-2037.	0.5	37
16	The ABC index conundrum. Filomat, 2013, 27, 1075-1083.	0.2	37
17	On atom-bond connectivity index. Filomat, 2012, 26, 733-738.	0.2	35
18	On the Cycle-Dependence of Topological Resonance Energy. Journal of Chemical Information and Modeling, 2007, 47, 776-781.	2.5	34

#	Article	IF	CITATIONS
19	Comparative analysis of symmetric division deg index as potentially useful molecular descriptor. International Journal of Quantum Chemistry, 2018, 118, e25659.	1.0	34
20	Aromaticity of Nonplanar Fully Benzenoid Hydrocarbons. Journal of Physical Chemistry A, 2017, 121, 3616-3626.	1.1	32
21	On two types of geometric–arithmetic index. Chemical Physics Letters, 2009, 482, 153-155.	1.2	26
22	Computer search for trees with minimal ABC index. Applied Mathematics and Computation, 2012, 219, 767-772.	1.4	25
23	On relations between Sombor and other degree-based indices. Journal of Applied Mathematics and Computing, 2022, 68, 1-17.	1.2	25
24	Multicenter Wiener indices and their applications. Journal of the Serbian Chemical Society, 2015, 80, 1009-1017.	0.4	23
25	ALGORITHM FOR SIMULTANEOUS CALCULATION OF KEKULÉ AND CLAR STRUCTURE COUNTS, AND CLAR NUMBER OF BENZENOID MOLECULES. Polycyclic Aromatic Compounds, 2006, 26, 17-35.	1.4	22
26	Hyper-Wiener Index vs. Wiener Index. Two Highly Correlated Structure-Descriptors. Monatshefte FÃ $\frac{1}{4}$ r Chemie, 2003, 134, 975-981.	0.9	20
27	Predictive potential of eigenvalue-based topological molecular descriptors. Journal of Computer-Aided Molecular Design, 2020, 34, 975-982.	1.3	20
28	Relating Estrada index with spectral radius. Journal of the Serbian Chemical Society, 2007, 72, 1321-1327.	0.4	18
29	On spectral radius and energy of extended adjacency matrix of graphs. Applied Mathematics and Computation, 2017, 296, 116-123.	1.4	18
30	Coulson function and Hosoya index. Chemical Physics Letters, 2002, 355, 378-382.	1.2	17
31	PARTITIONING OF π-ELECTRONS IN RINGS OF AZA-DERIVATIVES OF POLYCYCLIC BENZENOID HYDROCARBONS. Polycyclic Aromatic Compounds, 2007, 27, 51-63.	1.4	17
32	Ï€-ELECTRON CONTENTS OF RINGS IN THE DOUBLE-HEXAGONAL-CHAIN HOMOLOGOUS SERIES (PYRENE,) Tj ETQ	<u>)</u> q0,0 0 rgI	3∏/Overlock
33	Relating Total π-Electron Energy and Resonance Energy of Benzenoid Molecules with Kekulé- and Clar-Structure-Based Parameters. Monatshefte Für Chemie, 2006, 137, 1127-1138.	0.9	16
34	Bicyclic molecular graphs with the greatest energy. Journal of the Serbian Chemical Society, 2008, 73, 431-433.	0.4	15
35	Extended energy and its dependence on molecular structure. Canadian Journal of Chemistry, 2017, 95, 526-529.	0.6	15
36	Arithmetic–geometric index and its relations with geometric–arithmetic index. Applied Mathematics and Computation, 2021, 391, 125706.	1.4	15

#	Article	IF	Citations
37	Structural Discrimination of Networks by Using Distance, Degree and Eigenvalue-Based Measures. PLoS ONE, 2012, 7, e38564.	1.1	15
38	The Total π-Electron Energy Saga. Croatica Chemica Acta, 2017, 90, .	0.1	14
39	Clar theory and resonance energy. Chemical Physics Letters, 2005, 413, 396-399.	1.2	13
40	Alkanes with Greatest Estrada Index. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2007, 62, 495-498.	0.7	12
41	Vertex-degree-based molecular structure descriptors of benzenoid systems and phenylenes. Journal of the Serbian Chemical Society, 2012, 77, 1031-1036.	0.4	12
42	A Kekulé structure basis for phenylenes. Computational and Theoretical Chemistry, 2006, 770, 67-71.	1.5	9
43	A novel method for measuring the structure sensitivity of molecular descriptors. Journal of Chemometrics, 2019, 33, e3138.	0.7	9
44	Note of the hyper-Wiener index. Journal of the Serbian Chemical Society, 2003, 68, 943-948.	0.4	9
45	Graph of atomic orbitals and the molecular structure-descriptors based on it. Journal of the Serbian Chemical Society, 2005, 70, 669-674.	0.4	9
46	ELECTRON AND ENERGY CONTENTS OF HEXAGONS IN BENZENOID HYDROCARBONS. Polycyclic Aromatic Compounds, 2005, 25, 87-94.	1.4	8
47	On some degree-and-distance-based graph invariants of trees. Applied Mathematics and Computation, 2016, 289, 1-6.	1.4	8
48	Wiener-type indices and internal molecular energy. Journal of the Serbian Chemical Society, 2003, 68, 401-408.	0.4	8
49	Electron content of rings of fully benzenoid hydrocarbons. Journal of the Serbian Chemical Society, 2005, 70, 1199-1204.	0.4	8
50	Energy of graphs with self-loops. Match, 2022, 87, 645-652.	0.8	7
51	A concealed difference between the structure-dependence of Dewar and topological resonance energy. Computational and Theoretical Chemistry, 2005, 757, 119-123.	1.5	6
52	Benzenoid Molecules with Uniform Distribution of π-Electrons within Rings. Monatshefte Fýr Chemie, 2006, 137, 277-284.	0.9	6
53	CYCLIC CONJUGATION IN PYRACYLENE. Polycyclic Aromatic Compounds, 2008, 28, 136-142.	1.4	6
54	Effect of benzocyclobutadieno-annelation on cyclic conjugation in fluoranthene congeners. Journal of the Serbian Chemical Society, 2011, 76, 733-741.	0.4	6

#	Article	IF	Citations
55	Bounds for the spectral radius and energy of extended adjacency matrix of graphs. Linear and Multilinear Algebra, 2021, 69, 1813-1824.	0.5	6
56	Minimum augmented Zagreb index of <mml:math altimg="si5.svg" display="inline" id="d1e93" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>c</mml:mi></mml:math> -cyclic graphs. Discrete Applied Mathematics, 2021, 295, 32-38.	0.5	6
57	Partitioning of π-electrons in rings of aza-derivatives of naphthalene. Journal of the Serbian Chemical Society, 2007, 72, 655-663.	0.4	6
58	A Concealed Property of the Topological IndexZ. Bulletin of the Chemical Society of Japan, 2004, 77, 491-496.	2.0	5
59	Generalizations of Szőkefalvi Nagy and Chebyshev inequalities with applications in spectral graph theory. Applied Mathematics and Computation, 2017, 313, 235-244.	1.4	5
60	Magnetically Induced Current Density in Nonplanar Fully Benzenoid Hydrocarbons. Journal of Physical Chemistry A, 2020, 124, 371-378.	1.1	5
61	Comparative study on structural sensitivity of eigenvalue–based molecular descriptors. Journal of Mathematical Chemistry, 2021, 59, 476-487.	0.7	5
62	Comparing energy and Randic energy. Macedonian Journal of Chemistry and Chemical Engineering, 2013, 32, 117.	0.2	5
63	Equiseparable chemical trees. Journal of the Serbian Chemical Society, 2003, 68, 549-555.	0.4	5
64	On the relation between Zenkevich and Wiener indices of alkanes. Journal of the Serbian Chemical Society, 2004, 69, 265-271.	0.4	5
65	Annelated perylenes: Benzenoid molecules violating the Kekul \tilde{A} ©-structure-based cyclic conjugation models. Journal of the Serbian Chemical Society, 2005, 70, 1023-1032.	0.4	4
66	Effect of a ring on the cyclic conjugation in another ring: Applications to acenaphthylene-type polycyclic conjugated molecules. Journal of the Serbian Chemical Society, 2010, 75, 83-90.	0.4	4
67	On Structure Descriptors Related with Intramolecular Energy of Alkanes. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59, 694-698.	0.7	3
68	Graphenes — Aromatic giants. Resonance, 2008, 13, 730-737.	0.2	3
69	Why plerograms are not used in chemical graph theory? The case of terminal-Wiener index. Chemical Physics Letters, 2013, 568-569, 195-197.	1.2	3
70	Some new lower bounds for augmented Zagreb index. Journal of Applied Mathematics and Computing, 2019, 61, 405-415.	1.2	3
71	On Relationships of Eigenvalue–Based Topological Molecular Descriptors. Acta Chimica Slovenica, 2020, 67, 312-318.	0.2	3
72	Constructing NSSD Molecular Graphs. Croatica Chemica Acta, 2016, 89, .	0.1	3

#	Article	IF	CITATIONS
73	Steiner degree distance indices: Chemical applicability and bounds. International Journal of Quantum Chemistry, 2020, 120, e26209.	1.0	2
74	Effect of a Ring onto Values of Eigenvalue–Based Molecular Descriptors. Symmetry, 2021, 13, 1515.	1.1	2
75	Assessing π-Electron Contents of Rings in Polycyclic Aromatic Compounds. Current Organic Chemistry, 2015, 19, 331-347.	0.9	2
76	A graph theoretical approach to cis/trans isomerism. Journal of the Serbian Chemical Society, 2014, 79, 805-813.	0.4	2
77	On atom-bond connectivity molecule structure descriptors. Journal of the Serbian Chemical Society, 2016, 81, 271-276.	0.4	2
78	Application of spectral graph theory on the enthalpy change of formation of acyclic saturated ketones. Journal of the Serbian Chemical Society, 2018, 83, 1339-1349.	0.4	2
79	RESOLVENT ENERGY AND ESTRADA INDEX OF BENZENOID HYDROCARBONS. Journal of the Serbian Society for Computational Mechanics, 2020, , 37-44.	0.2	2
80	The generalized Zhang–Zhang polynomial of benzenoid systems – theory and applications. Applied Mathematics and Computation, 2022, 418, 126822.	1.4	2
81	Trees with Minimum Weighted Szeged Index Are of a Large Diameter. Symmetry, 2020, 12, 793.	1.1	1
82	Metric-Extremal Graphs. Discrete Mathematics and Its Applications, 2014, , 111-139.	0.1	1
83	Relating vibrational energy with Kekulé―and Clarâ€structureâ€based parameters. International Journal of Quantum Chemistry, 2022, 122, .	1.0	1
84	On the minimum Harary index of graphs with a given diameter or independence number. Discrete Applied Mathematics, 2022, 320, 331-345.	0.5	1
85	Relation between Pauling and Coulson Bond Orders in Benzenoid Hydrocarbons. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59, 699-704.	0.7	0
86	Some properties of the topological bond order. Chemical Physics Letters, 2005, 407, 73-77.	1.2	0
87	Equivalence of Two Models for Partitioning of π-Electrons in Rings of Benzenoid Hydrocarbons. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2006, 61, 281-285.	0.7	0
88	Graphenes — Aromatic giants. Resonance, 2011, 16, 1238-1245.	0.2	0
89	Dependence of the Enthalpy of Formation of Phenols on Molecular Structure – Semiempirical Study. Polycyclic Aromatic Compounds, 2019, , 1-12.	1.4	0
90	Two Stability Criteria for Benzenoid Hydrocarbons and Their Relation. Croatica Chemica Acta, 2020, 92, 473-475.	0.1	0

Boris Furtula

#	Article	IF	CITATIONS
91	High performance computing in multi-scale modeling, graph science and meta-heuristic optimization. Journal of the Serbian Society for Computational Mechanics, 2016, 10, 50-70.	0.2	O
92	Evaluation of the constructed 3D models of RNAs: A review. Facta Universitatis - Series Physics Chemistry and Technology, 2020, 18, 39-45.	0.2	0
93	On Relationships of Eigenvalue-Based Topological Molecular Descriptors. Acta Chimica Slovenica, 2020, 67, 312-318.	0.2	O