Airat Khamatgalimov

List of Publications by Year
in descending order

62 papers	744 citations	516561 16 h-index	610775 24 g-index
65 all docs	65 docs citations	65 times ranked	640 citing authors

#	Article	IF	Citations
1	Open-shell fullerene C74: phenalenyl-radical substructures. Chemical Physics Letters, 2003, 377, 263-268.	1.2	54
2	Cationic amphiphiles bearing imidazole fragment: From aggregation properties to potential in biotechnologies. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 529, 990-997.	2.3	43
3	Zn and Co redox active coordination polymers as efficient electrocatalysts. Dalton Transactions, 2019, 48, 3601-3609.	1.6	41
4	Regularities in the molecular structures of stable fullerenes. Russian Chemical Reviews, 2006, 75, 981-988.	2.5	33
5	Synthesis and characterization of new second-order NLO chromophores containing the isomeric indolizine moiety for electro-optical materials. Dyes and Pigments, 2017, 147, 444-454.	2.0	32
6	Composite materials containing chromophores with 3,7-(di)vinylquinoxalinone Ï€-electron bridge doped into PMMA: Atomistic modeling and measurements of quadratic nonlinear optical activity. Dyes and Pigments, 2018, 158, 131-141.	2.0	29
7	High thermally stable Dâ€“Ï€â€“A chromophores with quinoxaline moieties in the conjugated bridge: Synthesis, DFT calculations and physical properties. Dyes and Pigments, 2018, 156, 175-184.	2.0	27
8	D-Ï€-A chromophores with a quinoxaline core in the Ï€-bridge and bulky aryl groups in the acceptor: Synthesis, properties, and femtosecond nonlinear optical activity of the chromophore/PMMA guest-host materials. Dyes and Pigments, 2021, 184, 108801.	2.0	27
9	Synthesis and antimicrobial activity evaluation of some novel water-soluble isatin-3-acylhydrazones. Monatshefte FÃ¼r Chemie, 2018, 149, 111-117.	0.9	24
10	Experimental vibrational spectra and computational study of 1,4-diazabicyclo[2.2.2]octane. Journal of Molecular Structure, 2012, 1028, 134-140.	1.8	23
11	Pushâ€“pull isomeric chromophores with vinyl- and divinylquinoxaline-2-one units as Ï€-electron bridge: Synthesis, photophysical, thermal and electro-chemical properties. Dyes and Pigments, 2017, 146, 82-91.	2.0	23
12	Electronic Structure and Stability of Fullerene C₈₂ Isolated-Pentagon-Rule Isomers. Journal of Physical Chemistry A, 2011, 115, 12315-12320.	1.1	22
13	Large nonlinear optical activity of chromophores with divinylquinoxaline conjugated Ï€-bridge. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 370, 58-66.	2.0	22
14	Unusual pentagon and hexagon geometry of three isomers (no 1, 20, and 23) of fullerene C₈₄. International Journal of Quantum Chemistry, 2008, 108, 1334-1339.	1.0	19
15	Electronic Structure and Stability of C₈₀Fullerene IPR Isomers. Fullerenes Nanotubes and Carbon Nanostructures, 2011, 19, 599-604.	1.0	19
16	Structural aspects of partial solid solution formation: two crystalline modifications of a chiral derivative of 1,5-dihydro-2<i>H</i>-pyrrol-2-one under consideration. CrystEngComm, 2017, 19, 7277-7286.	1.3	18
17	Molecular structures of unstable isolated-pentagon-rule fullerenes C72â€“C86. Russian Chemical Reviews, 2016, 85, 836-853.	2.5	16
18	Aggregation Capacity and Complexation Properties of a System Based on an Imidazole-Containing Amphiphile and Bovine Serum Albumin. Russian Journal of General Chemistry, 2017, 87, 2826-2831.	0.3	16

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19	Isomeric indolizine-based Ï€-expanded pushâ€“pull NLO-chromophores: Synthesis and comparative study. Journal of Molecular Structure, 2018, 1156, 74-82.	1.8	16
20	A nickel-based pectin coordination polymer as an oxygen reduction reaction catalyst for proton-exchange membrane fuel cells. Inorganic Chemistry Frontiers, 2018, 5, 780-784.	3.0	15
21	Deformation and thermodynamic instability of a C84 fullerene cage. Russian Journal of Physical Chemistry A, 2010, 84, 636-641.	0.1	13
22	Stability of Isolated-Pentagon-Rule Isomers of Fullerene C₇₆. Fullerenes Nanotubes and Carbon Nanostructures, 2015, 23, 148-152.	1.0	13
23	Nonlinear optical activity of pushâ€“pull indolizine-based chromophores with various acceptor moieties. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 364, 764-772.	2.0	13
24	Substructural Approach for Assessing the Stability of Higher Fullerenes. International Journal of Molecular Sciences, 2021, 22, 3760.	1.8	10
25	The structure of fullerene C66, which does not obey the rule of isolated pentagons, and endohedral metallofullerene Sc2@C66: Quantum-chemical calculations. Russian Journal of Physical Chemistry A, 2008, 82, 1164-1169.	0.1	9
26	Stability of the Nonâ€‘IPR Isomers 6140 (D₃) and 6275 (D₃) of Fullerene C₆₈. Fullerenes Nanotubes and Carbon Nanostructures, 2008, 16, 542-545.	1.0	9
27	IR and Raman spectra, hydrogen bonds, and conformations of N-(2-hydroxyethyl)-4,6-dimethyl-2-oxo-1,2-dihydropyrimidine (drug Xymedone). Russian Chemical Bulletin, 2012, 61, 1199-1206.	0.4	9
28	24 IPR isomers of fullerene C₈₄: Cage deformation as geometrical characteristic of local strains. International Journal of Quantum Chemistry, 2012, 112, 1055-1065.	1.0	9
29	Synthesis and physicochemical properties of antianemic iron and calcium complexes with sodium polygalacturonate. Doklady Physical Chemistry, 2016, 467, 45-48.	0.2	9
30	Investigation of hydrogen bonding in p-sulfonatocalix[4]arene and its thermal stability by vibrational spectroscopy. Journal of Molecular Structure, 2019, 1195, 403-410.	1.8	9
31	Indolizine-based chromophores with octatetraene Ï€-bridge and tricyanofurane acceptor: Synthesis, photophysical, electrochemical and electro-optic properties. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 386, 112125.	2.0	9
32	Kinetic Analysis of the Thermal Decomposition of Lowland and High-Moor Peats. Solid Fuel Chemistry, 2020, 54, 154-162.	0.2	9
33	Radical IPR Fullerenes C₇₄ (D_{3h}) and C₇₆ (T_d): Dimer, Trimer, etc. Experiments and Theory. Journal of Physical Chemistry C, 2018, 122, 3146-3151.	1.5	8
34	Mitochondria-targeted mesoporous silica nanoparticles noncovalently modified with triphenylphosphonium cation: Physicochemical characteristics, cytotoxicity and intracellular uptake. International Journal of Pharmaceutics, 2021, 604, 120776.	2.6	7
35	Ythrene: From the Real Radical Fullerene Substructure to Hypothetical (yet?) Radical Molecules. Journal of Physical Chemistry C, 2019, 123, 1954-1959.	1.5	6
36	Thermally Stable Nitrothiacalixarene Chromophores: Conformational Study and Aggregation Behavior. International Journal of Molecular Sciences, 2020, 21, 6916.	1.8	6

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37	Features of molecular structure of small non-IPR fullerenes: the two isomers of C50. Theoretical Chemistry Accounts, 2020, 139, 1.	0.5	6
38	Electronic structure and stability of C₈₆ fullerene Isolatedâ€Pentagonâ€Rule isomers. International Journal of Quantum Chemistry, 2011, 111, 2966-2971.	1.0	5
39	Stabilization of IPR open-shell fullerenes C₇₄ (D_{3h}) and C₇₆ (T_d) in radical addition reactions. Fullerenes Nanotubes and Carbon Nanostructures, 2017, 25, 128-132.	1.0	5
40	On the Effect of the Nature of Substituents on the Antimicrobial Activity of Water-Soluble Acylhydrazones on the Isatin Scaffold. Doklady Chemistry, 2020, 494, 136-140.	0.2	5
41	Design of Novel 4-Aminobenzofuroxans and Evaluation of Their Antimicrobial and Anticancer Activity. International Journal of Molecular Sciences, 2020, 21, 8292.	1.8	5
42	Open-shell nature of non-IPR fullerene Ð¡40: isomers 29 (C2) and 40 (Td). Journal of Molecular Modeling, 2021, 27, 22.	0.8	5
43	ELECTRONIC STRUCTURE AND STABILITY OF HIGHER FULLERENES. , 2007, , 437-441.		5
44	Electronic structures of some of C84 fullerene isomers and the structures of their perfluoroalkyl derivatives. Russian Journal of Physical Chemistry A, 2014, 88, 103-107.	0.1	4
45	Molecular structures of the open-shell IPR isomers of fullerene C90. Fullerenes Nanotubes and Carbon Nanostructures, 2017, 25, 179-184.	1.0	4
46	Thermogravimetric and kinetic analyses of the thermal decomposition of fuel wood. Solid Fuel Chemistry, 2017, 51, 83-87.	0.2	4
47	New polymethacrylic nonlinear optical materials containing multichromophores in the side chain. Mendeleev Communications, 2018, 28, 272-274.	0.6	4
48	The key feature of instability of small non-IPR closed-shell fullerenes: three isomers of C40. Mendeleev Communications, 2020, 30, 725-727.	0.6	4
49	Chemoselective oxidation of 1-alkenylisatins with m-chloroperbenzoic acid. Synthesis of new derivatives of isatoic anhydride. Russian Journal of General Chemistry, 2015, 85, 2030-2036.	0.3	3
50	New complexes of pectic polysaccharides with nonsteroidal anti-inflammatory drugs. Russian Chemical Bulletin, 2020, 69, 572-580.	0.4	3
51	DFT Quantum-Chemical Calculation of Thermodynamic Parameters and DSC Measurement of Thermostability of Novel Benzofuroxan Derivatives Containing Triazidoisobutyl Fragments. International Journal of Molecular Sciences, 2022, 23, 1471.	1.8	3
52	Nanosized carriers for hydrophobic compounds based on mesoporous silica: synthesis and adsorption properties. Russian Chemical Bulletin, 2019, 68, 1358-1365.	0.4	2
53	Methacrylic copolymers with quinoxaline chromophores in the side chain exhibiting quadratic nonlinear optical response. Journal of Applied Polymer Science, 2022, 139, .	1.3	2
54	Molecular weight parameters of cellulose nitrates modified with alcohols. Russian Journal of General Chemistry, 2014, 84, 758-762.	0.3	1

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55	Synthesis, Self-Association, and Solubilizing Ability of an Amphiphilic Derivative of Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.3	1
56	Synthesis, Physicochemical Properties and Antiâ€Fatigue Effect of Magnesium, Zinc and Chromium Polygalacturonate Based Composition. ChemistrySelect, 2019, 4, 4331-4338.	0.7	1
57	Radical character of non-IPR isomer 17418 (C1) of fullerene C76. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 678-684.	1.0	1
58	Reaction of rhodium trichloride with oxyethylated calix[4]resorcinarene. Russian Journal of General Chemistry, 2010, 80, 478-484.	0.3	0
59	Fullerenes C100 and C108: new substructures of higher fullerenes. Structural Chemistry, 2021, 32, 2283-2290.	1.0	0
60	Features of molecular structures of some IPR isomers of C96 fullerene. Structural Chemistry, 0, , 1.	1.0	0
61	Radical character of non-IPR isomer 28324 of C80 fullerene. Russian Chemical Bulletin, 2021, 70, 1651-1656.	0.4	0
62	Instability of molecular structure of non-IPR isomer 17984 (C1) of the C76 fullerene and probable ways of its stabilization. Butlerovskie SoobÅ¡eniÃ¢, 2020, 63, 1-9.	0.1	0