Alexander D Roshal

List of Publications by Year
in descending order

85	1,027	516710 16	477307 29
papers	citations	h-index	g-index

85	85	85	913
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flavonols and Crown-Flavonols as Metal Cation Chelators. The Different Nature of Ba2+and Mg2+Complexes. Journal of Physical Chemistry A, 1998, 102, 5907-5914.	2.5	151
2	Tuning the mechanism of proton-transfer in a hydroxyflavone derivative. Chemical Physics Letters, 2003, 379, 53-59.	2.6	91
3	Flavonols as metal-ion chelators: complex formation with Mg2+ and Ba2+ cations in the excited state. Journal of Photochemistry and Photobiology A: Chemistry, 1999, 127, 89-100.	3.9	81
4	Exploring double proton transfer: A review on photochemical features of compounds with two proton-transfer sites. Dyes and Pigments, 2017, 138, 223-244.	3.7	71
5	Chemiluminogenic Features of 10-Methyl-9-(phenoxycarbonyl)acridinium Trifluoromethanesulfonates Alkyl Substituted at the Benzene Ring in Aqueous Media. Journal of Organic Chemistry, 2011, 76, 1072-1085.	3.2	49
6	Complexation effect of Î³-cyclodextrin on a hydroxyflavone derivative: Formation of excluded and included anions. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 188, 74-82.	3.9	37
7	Flavonol-based fluorescent indicator for determination of Î²-glucosidase activity. RSC Advances, 2016, 6, 42532-42536.	3.6	28
8	Single and double intramolecular proton transfers in the electronically excited state of flavone derivatives. RSC Advances, 2015, 5, 102191-102203.	3.6	24
9	Chemiluminogenic Properties of 10-Methyl-9-(phenoxycarbonyl)acridinium Cations in Organic Environments. Journal of Physical Chemistry A, 2010, 114, 10550-10562.	2.5	22
10	Tautomerism and Behavior of 3-Hydroxy-2-phenyl-4H-chromen-4-ones (Flavonols) and 3,7-Dihydroxy-2,8-diphenyl-4H,6H-pyrano[3,2-g]chromene-4,6-diones (Diflavonols) in Basic Media: Spectroscopic and Computational Investigations. Journal of Physical Chemistry A, 2013, 117, 9156-9167.	2.5	18
11	Synthesis, molecular structure and optical properties of glycidyl derivatives of quercetin. Structural Chemistry, 2016, 27, 285-294.	2.0	18
12	Strong interaction between a fluorescent Î²-diketone derivative and alkali and alkaline earth cations in solution studied by spectrophotometry. New Journal of Chemistry, 1998, 22, 1531-1538.	2.8	17
13	Progress and Achievements in Glycosylation of Flavonoids. Frontiers in Chemistry, 2021, 9, 637994.	3.6	17
14	UV/vis absorption and fluorescence spectroscopic study of some new 4-hydroxy-7-methoxycoumarin derivatives. Part I: Effect of substitution by a benzo-1,4-dioxanyl or an ethyl furoate group in the 3-position. New Journal of Chemistry, 1999, 23, 923-927.	2.8	16
15	Stepwise interactions, sodium ion photoejection and proton-transfer inhibition in a crown-ether and proton-transfer dye. Chemical Physics Letters, 2003, 381, 519-525.	2.6	16
16	7-Hydroxyflavone Revisited: Spectral, Acidâ€“Base Properties, and Interplay of the Protolytic Forms in the Ground and Excited States. Journal of Physical Chemistry A, 2014, 118, 3068-3080.	2.5	16
17	Structural and Spectral Features of 4â€²-Substituted 2â€²-Hydroxychalcones in Solutions and Crystals: Spectroscopic and Theoretical Investigations. Journal of Physical Chemistry A, 2018, 122, 2030-2038.	2.5	16
18	Spectral and Acidâ^'Base Features of 3,7-Dihydroxy-2,8-diphenyl-4H,6H-pyrano[3,2-g]chromene-4,6-dione (Diflavonol)A Potential Probe for Monitoring the Properties of Liquid Phases. Journal of Organic Chemistry, 2003, 68, 5860-5869.	3.2	15

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19	pH dependent spectral properties and electronic structure of benzothiazol containing cyanine dyes. Dyes and Pigments, 2009, 80, 355-360.	3.7	15
20	Tautomerism, structure and properties of 1,1â€²,1â€³-(2,4,6-trihydroxybenzene-1,3,5-triyl)triethanone. Tetrahedron Letters, 2011, 52, 2737-2740.	1.4	15
21	Quantum-Chemical Analysis of the Algarâ€“Flynnâ€“Oyamada Reaction Mechanism. Chemistry of Heterocyclic Compounds, 2014, 50, 396-403.	1.2	14
22	Tautomerism of acridin-9-amines substituted at the exocyclic nitrogen atom: Spectroscopic investigations and theoretical studies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2007, 66, 1016-1023.	3.9	13
23	Aminofluoresceins Versus Fluorescein: Peculiarity of Fluorescence. Journal of Physical Chemistry A, 2019, 123, 8860-8870.	2.5	13
24	On the use of acridinium indicators for the chemiluminescent determination of the total antioxidant capacity of dietary supplements. Luminescence, 2019, 34, 512-519.	2.9	13
25	In Search for the â€œPhenolateâ€•Monoanion of Fluorescein in Solution. Chemistry Letters, 2010, 39, 30-31.	1.3	12
26	Textures on the surface of BSA films with different concentrations of sodium halides and water state in solution. Nanoscale Research Letters, 2015, 10, 155.	5.7	12
27	Fluorescence behavior of chromones containing several protolytic centers. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 65, 397-405.	3.9	11
28	Aminofluoresceins Versus Fluorescein: Ascertained New Unusual Features of Tautomerism and Dissociation of Hydroxyxanthene Dyes in Solution. Journal of Physical Chemistry A, 2019, 123, 8845-8859.	2.5	11
29	Influence of structure 3,5,7,3 â€² ,4 â€² â€“Pentahydroxyflavone-based polymer films on their optical transparency. Optical Materials, 2017, 64, 166-170.	3.6	10
30	Identification and Structural Assessment of Alkaline-Earth Metal Complexes with Flavonols by FAB Mass Spectrometry. Russian Journal of General Chemistry, 2004, 74, 438-445.	0.8	9
31	7-Hydroxyflavone Revisited. 2. Substitution Effect on Spectral and Acidâ€“Base Properties in the Ground and Excited States. Journal of Physical Chemistry A, 2015, 119, 12672-12685.	2.5	9
32	Fluorescence of aminofluoresceins as an indicative process allowing one to distinguish between micelles of cationic surfactants and micelle-like aggregates. Methods and Applications in Fluorescence, 2016, 4, 034002.	2.3	9
33	Hybrid organicâ€“inorganic crystals based on ammonium dihydrogen phosphate and ammonium salicylate. Journal of Crystal Growth, 2011, 335, 84-89.	1.5	8
34	The Self-Assembly of Diblock Copolymers MePEG-b-PAAm into Micellar Structures and Their Interaction with Doxorubicin. Molecular Crystals and Liquid Crystals, 2011, 536, 166/[398]-172/[404].	0.9	8
35	Absorption and fluorescent properties of pyrylium compounds: I. The nature of electronic transitions and structural rearrangement in the excited state. Optics and Spectroscopy (English Translation of) Tj ETQq1 1 0.784314 rgBT /Overlock	0.8	8
36	Spectral features of substituted 9-(phenoxycarbonyl)-acridines and their protonated and methylated cation derivatives. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 70, 394-402.	3.9	7

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37	Cinnamoyl pyrones in proton-donating media: Electronic structure and spectral properties of protolytic forms. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2011, 83, 221-230.	3.9	7
38	Relaxation behavior and nonlinear properties of thermally stable polymers based on glycidyl derivatives of quercetin. Optical Materials, 2016, 57, 179-184.	3.6	7
39	The properties of 4â€²-N,N-dimethylaminoflavonol in the ground and excited states. Russian Journal of Physical Chemistry A, 2008, 82, 1464-1469.	0.6	6
40	2-(4-Fluorophenyl)-3-hydroxy-4H-chromen-4-one. Acta Crystallographica Section E: Structure Reports Online, 2010, 66, o3122-o3122.	0.2	6
41	Optical properties and component composition of layers of cyanine dyes on dielectric supports: influence of asymmetry of the molecular electron density distribution. Optical and Quantum Electronics, 2017, 49, 1.	3.3	6
42	Effect of gamma-irradiation of bovine serum albumin solution on the formation of zigzag film textures. Radiation Physics and Chemistry, 2018, 144, 231-237.	2.8	6
43	Synthesis and Structure of Borane Complexes with 3-Hydroxyflavone. Chemistry of Heterocyclic Compounds, 2002, 38, 1412-1418.	1.2	5
44	Doping of KDP single crystals with cerium: Growth and optical properties. Crystallography Reports, 2008, 53, 708-712.	0.6	5
45	Structure and spectal properties of cinnamoyl pyrones and their vinylogs. Open Chemistry, 2010, 8, 347-355.	1.9	5
46	3-Hydroxy-2-(4-methoxyphenyl)-4H-chromen-4-one. Acta Crystallographica Section E: Structure Reports Online, 2011, 67, o440-o440.	0.2	5
47	2-(4-Hydroxyphenyl)-3-methoxy-4H-chromen-4-one. Acta Crystallographica Section E: Structure Reports Online, 2013, 69, o895-o895.	0.2	5
48	Spirophosphoranes Dâ€² Î±-Cetoacides. Structure Cristalline. Induction Asymetrique. Phosphorus, Sulfur and Silicon and the Related Elements, 2002, 177, 1255-1269.	1.6	4
49	New (S)â€1â€phenylethylamineNâ€arylidene derivatives as chiral dopants to liquid crystalline systems. Liquid Crystals, 2007, 34, 1193-1200.	2.2	4
50	Structure, tautomerism, and features of 1-(5-acetyl-2,4-dihydroxyphenyl)-3-(furan-2-yl)prop-2-en-1-one (FC) and 1,1â€²-(4,6-dihydroxybenzene-1,3-diyl)bis[3-(furan-2-yl)prop-2-en-1-one] (FDC). Structural Chemistry, 2014, 25, 969-977.	2.0	4
51	Second-Order Polarizability and Temporal Stability of Epoxy Polymers Doped with Chromophore and with Chromophore Moieties in the Main Chain. Polymers and Polymer Composites, 2015, 23, 129-136.	1.9	4
52	Origin of Spectral Features and Acidâ€“Base Properties of 3,7-Dihydroxyflavone and Its Monofunctional Derivatives in the Ground and Excited States. Journal of Physical Chemistry A, 2016, 120, 4325-4337.	2.5	4
53	Composite materials based on SiO2-matrices saturated with DAST. Journal of Non-Crystalline Solids, 2020, 535, 119957.	3.1	4
54	Laser-heated pedestal growth and optical properties of Nd3+-doped Li1 â^' xNb1 â^' xWxO3 single-crystal fibers. Journal of Luminescence, 1996, 69, 257-263.	3.1	3

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55	SPIROPHOSPHORANES MACROCYCLIQUES PREPARES A PARTIR D'ISOPROPYLIDENE-MANNITOLS. Phosphorus, Sulfur and Silicon and the Related Elements, 2001, 174, 177-192.	1.6	3
56	Equilibre Ester Phosphorique, Hydroxyphosphorane Role des Liaisons Hydrogene, Acidite de Bronsted. Phosphorus, Sulfur and Silicon and the Related Elements, 2003, 178, 2117-2125.	1.6	3
57	Influence of the rigidity of the steroid core in the structure of chiral dopants on the temperature dependence of cholesteric short pitch. Displays, 2015, 36, 34-40.	3.7	3
58	Influence of residual solvent on relaxation behavior of polymer films based on glycidyl derivatives of 3, 5, 7, 3',4'-pentahydroxyflavone. Functional Materials, 2017, 23, 068-075.	0.1	3
59	Two polymorphs of 2-(4-chlorophenyl)-4-methylchromenium perchlorate. Acta Crystallographica Section C: Crystal Structure Communications, 2007, 63, o626-o630.	0.4	2
60	Potassium dihydrogen phosphate doped with organic complexes of rare-earth metals. Inorganic Materials, 2009, 45, 533-537.	0.8	2
61	New chiral 3-aryl-7-arylmethylidene-3,3a,4,5,6,7-hexahydroindazoles: Synthesis, structure, and twisting power in nematic liquid crystals. Russian Journal of Organic Chemistry, 2010, 46, 1207-1213.	0.8	2
62	2,2-Difluoro-4-phenyl-1,3,2-dioxaborolo[4,5-c]chromen-5-ium-2-ide. Acta Crystallographica Section E: Structure Reports Online, 2010, 66, o3354-o3355.	0.2	2
63	2-(4-Fluorophenyl)-2H-chromen-4(3H)-one. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, o253-o254.	0.2	2
64	Global and local interactions in the structure of crystalline 7-(diethylamino)-2-(2-oxo-2H-chromen-3-yl)chromenium perchlorate. Structural Chemistry, 2016, 27, 637-649.	2.0	2
65	Prospective biologically active compounds based on 5-formylthiazole. Functional Materials, 2021, 28, .	0.1	2
66	Investigations of solvatochromism of 2-(3-coumaroyl)-benzopyrylium dye and its di-substituted derivatives. Functional Materials, 2013, 20, 366-372.	0.1	2
67	Hydroxyflavone-containing polymers: theoretical prediction of spectral and nonlinear optical properties. Functional Materials, 2019, 26, 164-173.	0.1	2
68	Spectral Properties of Dyes with Interfragmental Charge Transfer: Solvatochromism and Solvatofluorochromism of 2-(3-Coumaroyl)-benzopyrylium Perchlorates. International Journal of Spectroscopy, 2014, 2014, 1-8.	1.6	1
69	Quantum-Chemical Investigation of the Structure and Spectral Characteristics of 2-(3-Coumaroyl)Benzopyrylium Cations. Chemistry of Heterocyclic Compounds, 2014, 50, 371-378.	1.2	1
70	Photochromic and Thermochromic Spirans 41*. Quantum-Chemical Study of the Geometry and Electronic Structure of 1,3,3-Trimethyl-1â€²,2â€²-Diphenylspiro[Indoline- 2,7â€²-Furo[3,2-f]Chromene] in the Ground and Excited States. Chemistry of Heterocyclic Compounds, 2014, 50, 364-370.	1.2	1
71	Influence of thallium and salicylic acid impurities as well as of the solution stoichiometry on the growth kinetics of prismatic ADP crystal faces. Journal of Crystal Growth, 2015, 415, 100-105.	1.5	1
72	Electronic absorption spectra and fluorescent properties of non-associated 16,17-bis(alkoxy)violanthrone dyes and their dependence on the nature of substituent and solvent's parameters. Dyes and Pigments, 2018, 156, 45-52.	3.7	1

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73	Changes in cell membranes of white blood cells treated with a common food additive E407a. Turkish Journal of Biochemistry, 2021, 46, 557-562.	0.5	1
74	Synthesis and Characterization of Dye-Doped Polymer Films for Non-linear Optical Applications. Chemistry and Chemical Technology, 2019, 13, 459-464.	1.1	1
75	Effects of semi-refined carrageenan (food additive E407a) on cell membranes of leukocytes assessed in vivo and in vitro. Medicinski Glasnik, 2021, 18, 176-183.	0.4	1
76	Absorption and fluorescent properties of pyrylium compounds: II. Spectra and cross sections for absorption from the ground and excited states of the structurally rearranged form. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2000, 89, 712-720.	0.6	0
77	Photochemistry of pyrylium compounds: excitation-induced rearrangement of a molecule-solvent complex. , 2002, 4749, 376.		0
78	Molecular complexes of 4,10-dihydrothieno[3â€²,2â€²:5,6]pyrimido[2,1-a]isoindol-4-ones with Î²-cyclodextrin. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2007, 57, 415-417.	1.6	0
79	Molecular and crystal structures of 4â€²-hydroxy derivative of (3R,6R)-3-methyl-6-isopropyl-2-(4-phenylbenzylidene)cyclohexanone. Crystallography Reports, 2008, 53, 455-461.	0.6	0
80	Formation of Nanoscale Protective Coatings on Iron Alloys from Podand-Containing Solutions. Materials Science, 2012, 48, 203-207.	0.9	0
81	The study of phospholipid bilayer of cell membranes in leukocytes incubated with high concentrations of the food additive E407a. Journal of Clinical Medicine of Kazakhstan, 2021, 18, 49-52.	0.3	0
82	Growth peculiarities of doped lithium dihydrogen phosphate single crystals from nonstoichiometric solution. Functional Materials, 2017, 24, 005-236.	0.1	0
83	METHOD OF ESTIMATION OF THE INFLUENCE OF CHEMICAL AND PHYSICAL FACTORS ON BIOPOLYMERS BY THE TEXTURES OF THEIR FILMS. Radiofizika I Elektronika, 2019, 24, 58-68.	0.2	0
84	Nonlinear activity and long-term stability of thin polymer films based on poly(3,5,7,3â€²,4â€²-pentahydroxyflavone-8-sulfonic acid) sodium salt. Polymers and Polymer Composites, 2022, 30, 096739112110729.	1.9	0
85	Influence of environmental factors on functional properties of optical polymer films. Functional Materials, 2021, 28, .	0.1	0