Alexey N Romanov

List of Publications by Year
in descending order

36	681	567281 15	552781 26
papers	citations	h-index	g-index

36	36	36	474
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On the origin of near-IR luminescence in Bi-doped materials (II) Subvalent monocation Bi^+ and cluster Bi_5 ^3+ luminescence in AlCl_3/ZnCl_2/BiCl_3 chloride glass. Optics Express, 2012, 20, 7212.	3.4	87
2	Surface Generalized Born Method:Â A Simple, Fast, and Precise Implicit Solvent Model beyond the Coulomb Approximation. Journal of Physical Chemistry A, 2004, 108, 9323-9327.	2.5	56
3	On the origin of near-IR luminescence in Bi-doped materials (I). Generation of low-valence bismuth species by Bi3+ and Bi0 synproportionation. Optical Materials, 2011, 33, 631-634.	3.6	53
4	Near-IR luminescence from subvalent bismuth species in fluoride glass. Optical Materials, 2011, 34, 155-158.	3.6	49
5	Spectral properties and NIR photoluminescence of Bi+ impurity in CsCdCl3 ternary chloride. Journal of Luminescence, 2014, 149, 292-296.	3.1	46
6	New Synthetic Thrombin Inhibitors: Molecular Design and Experimental Verification. PLoS ONE, 2011, 6, e19969.	2.5	45
7	Subvalent bismuth monocation Bi+ photoluminescence in ternary halide crystals KAlCl4 and KMgCl3. Journal of Luminescence, 2013, 134, 180-183.	3.1	38
8	Near infrared photoluminescence of the univalent bismuth impurity center in leucite and pollucite crystal hosts. Journal of Materials Chemistry C, 2015, 3, 3592-3598.	5.5	29
9	Luminescent properties of Bi-doped polycrystalline KAlCl4. Applied Physics B: Lasers and Optics, 2012, 108, 733-736.	2.2	26
10	Application of Molecular Modeling to Urokinase Inhibitors Development. BioMed Research International, 2014, 2014, 1-15.	1.9	23
11	NIR photoluminescence of bismuth-doped CsCdBr3 â€“ The first ternary bromide phase with a univalent bismuth impurity center. Journal of Luminescence, 2015, 167, 371-375.	3.1	22
12	Estimation of Bi+ monocation crystal ionic radius by quantum chemical simulation. Computational and Theoretical Chemistry, 2013, 1017, 159-161.	2.5	20
13	On the origin of near-IR luminescence in SiO 2 glass with bismuth as the single dopant. Formation of the photoluminescent univalent bismuth silanolate by SiO 2 surface modification. Journal of Luminescence, 2017, 183, 233-237.	3.1	18
14	Dissociative recombination eâ^'â€‰+â€‰O2+â€‰â†'â€‰O(1D)â€‰+â€‰O(3P) in a strong laser field. Physical Chemistry Chemical Physics, 2003, 5, 3174-3182.	2.8	16
15	Optical properties of the Bi+ center in KAlCl4. Journal of Luminescence, 2014, 151, 247-255.	3.1	16
16	Dissociative recombination of electrons and O 2 + molecular ions in the field of intense visible laser radiation. Journal of Experimental and Theoretical Physics, 2002, 94, 489-497.	0.9	15
17	Cavitation Free Energy for Organic Molecules Having Various Sizes and Shapes. Journal of Physical Chemistry B, 2007, 111, 13748-13755.	2.6	15
18	The spectral properties and the NIR photoluminescence of univalent bismuth Bi+ in RbAlCl4, CsAlCl4, RbMgCl3, CsMgCl3, KCdCl3 and RbCdCl3 crystal phases. Russian Journal of Physical Chemistry B, 2016, 10, 388-393.	1.3	14

#	Article	IF	Citations
19	Electronically excited states of membrane fluorescent probe 4-dimethylaminochalcone. Results of quantum chemical calculations. Physical Chemistry Chemical Physics, 2011, 13, 9518.	2.8	13
20	Role of oxygen hole centres in the photodarkening of ytterbium-doped phosphosilicate fibre. Quantum Electronics, 2013, 43, 1037-1042.	1.0	13
21	Scanning tunneling microscopy study of cytochrome P450 2B4 incorporated in proteoliposomes. Biochimie, 1996, 78, 780-784.	2.6	10
22	Preparation of optical media with <scp>NIR</scp> luminescent Bi⁺ impurity centers by ion exchange. Journal of the American Ceramic Society, 2019, 102, 2745-2751.	3.8	10
23	Optical properties of bismuth-doped TlCdCl3 crystal. Russian Journal of Physical Chemistry B, 2016, 10, 1-4.	1.3	9
24	Ab Initio Calculation of Torsion and Inversion Barriers of the Amino Group in Aminopyrimidines. Journal of Physical Chemistry A, 2005, 109, 3244-3249.	2.5	7
25	Stability of HIV-1 integraseâ€“ligand complexes: the role of coordinating bonds. Structural Chemistry, 2012, 23, 185-195.	2.0	6
26	IR photoluminescence of Bi+ impurity centers in the RbY2Cl7 ternary chloride. Russian Journal of Physical Chemistry B, 2016, 10, 735-739.	1.3	6
27	Computation of entropy contribution to protein-ligand binding free energy. Biochemistry (Moscow), 2007, 72, 785-792.	1.5	5
28	Computation of the Contribution from the Cavity Effect to Proteinâ^'Ligand Binding Free Energy. Journal of Physical Chemistry B, 2008, 112, 15355-15360.	2.6	4
29	IR luminescence of bismuth-containing centers in materials prepared by impregnation and thermal treatment of porous glasses. Russian Journal of Physical Chemistry B, 2016, 10, 211-214.	1.3	4
30	Broadband infrared photoluminescence of TlCdI3 iodide doped with bismuth. Russian Journal of Physical Chemistry B, 2017, 11, 83-86.	1.3	4
31	The thermodynamic characteristics of formation of organic molecule complexes with the magnesium ion in water: The results of quantum-chemical modeling. Russian Journal of Physical Chemistry A, 2009, 83, 565-574.	0.6	1
32	Modeling processes of non-radiative relaxation of electronically excited states of fluorescent probe 4-dimethylaminochalcone and its complexes with water using non-adiabatic molecular dynamics. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 278, 89-96.	3.9	1
33	An effective model for calculations of the hydrophobic component of the Gibbs energy of solution of small- and medium-sized molecules. Russian Journal of Physical Chemistry A, 2010, 84, 195-202.	0.6	0
34	Quantum chemical simulation of the interaction of membrane fluorescent probe 4-dimethylaminochalcone with hydroxy groups of the environment. Russian Chemical Bulletin, 2013, 62, 1143-1155.	1.5	0
35	Optical absorption spectra of the Bi+ impurity center in CsCdBr3 ternary bromide. Russian Journal of Physical Chemistry B, 2016, 10, 897-901.	1.3	0
36	10.1007/s11504-008-4002-6. , 2010, , .		0