Igor L Martynov

List of Publications by Year
in descending order

41 papers	401 citations	932766 10 h-index	794141 19 g-index
41 all docs	41 docs citations	41 times ranked	439 citing authors

#	Article	IF	Citations
1	Optoelectronic Properties of Semiconductor Quantum Dot Solids for Photovoltaic Applications. Journal of Physical Chemistry Letters, 2017, 8, 4129-4139.	2.1	71
2	Ligand-Mediated Photobrightening and Photodarkening of CdSe/ZnS Quantum Dot Ensembles. Journal of Physical Chemistry C, 2018, 122, 15761-15771.	1.5	39
3	The photophysics of porous silicon: technological and biomedical implications. Physical Chemistry Chemical Physics, 2012, 14, 13890.	1.3	30
4	Enhancement of spontaneous emission of semiconductor quantum dots inside one-dimensional porous silicon photonic crystals. Optics Express, 2020, 28, 22705.	1.7	29
5	Interaction of CdSe/ZnS core-shell semiconductor nanocrystals in solid thin films. Laser Physics, 2006, 16, 1625-1632.	0.6	28
6	Hybrid heterostructures based on aromatic polyimide and semiconductor CdSe quantum dots for photovoltaic applications. Applied Physics Letters, 2013, 103, .	1.5	27
7	Enhancement of Spontaneous Emission from CdSe/CdS/ZnS Quantum Dots at the Edge of the Photonic Band Gap in a Porous Silicon Bragg Mirror. Physics Procedia, 2015, 73, 126-130.	1.2	18
8	Photoconductivity of composites based on CdSe quantum dots and low-band-gap polymers. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 79, 206-211.	1.3	16
9	Ion mobility spectrometer with ion source based on laser-irradiated porous silicon. Technical Physics Letters, 2011, 37, 15-18.	0.2	14
10	Fabrication of composite materials from semiconductor quantum dots and organic polymers for optoelectronics and biomedicine: role of surface ligands. Russian Chemical Bulletin, 2016, 65, 2568-2577.	0.4	11
11	A laser ion-mobility spectrometer. Instruments and Experimental Techniques, 2009, 52, 253-259.	0.1	9
12	Surface-Assisted Laser Desorption/Ionization of Trinitrotoluene on Porous Silicon under Ambient Conditions. Journal of Physical Chemistry C, 2015, 119, 6382-6388.	1.5	9
13	Porous Silicon Microcavity Modulates the Photoluminescence Spectra of Organic Polymers and Quantum Dots. Materials Today: Proceedings, 2016, 3, 485-490.	0.9	8
14	Laser-induced photoprocesses in solutions and films of the CdSe/ZnS nanoparticles. Laser Physics, 2008, 18, 925-938.	0.6	7
15	Effect of surface ligands on the performance of organic light-emitting diodes containing quantum dots. Proceedings of SPIE, 2014, , .	0.8	7
16	Modulation of quantum dot photoluminescence in porous silicon photonic crystals as a function of the depth of their penetration. , 2016, , .		7
17	The influence of the quantum dot/polymethylmethacrylate composite preparation method on the stability of its optical properties under laser radiation. Optics and Spectroscopy (English Translation) Tj ETQq1 1 0.784314 rgBT /Overlo		
18	Influence of electro-chemical etching parameters on the reflectance spectra of porous silicon rugate filters. Journal of Physics: Conference Series, 2016, 737, 012026.	0.3	6

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19	Silicon photonic structures with embedded polymers for novel sensing methods. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2017, 122, 74-78.	0.2	6
20	Formation of anions of nitroaromatic compounds in gases during UV laser irradiation. Russian Journal of Physical Chemistry B, 2010, 4, 548-556.	0.2	5
21	Photoluminescence of CdSe/ZnS quantum dots in a porous silicon microcavity. Proceedings of SPIE, 2014, , .	0.8	5
22	Influence of the surface ligand molecules length on the optical properties and photoconductivity of PbS quantum dot condensates. Technical Physics Letters, 2017, 43, 879-881.	0.2	5
23	Influence of Surface Ligands on the Luminescent Properties of Cadmium Selenide Quantum Dots in a Polymethylmethacrylate Matrix. Physics Procedia, 2015, 73, 150-155.	1.2	5
24	New Unsymmetrically Substituted Benzothiadiazole-Based Luminophores: Synthesis, Optical, Electrochemical Studies, Charge Transport, and Electroluminescent Characteristics. Molecules, 2021, 26, 7596.	1.7	5
25	Ionization of the Nitroaromatic Compounds in an Ion Mobility Spectrometer with an Ion Source based on Porous Silicon Under Laser Irradiation. Physics Procedia, 2015, 73, 163-167.	1.2	4
26	The Embedment of Conjugated MDMOâ^'PPV Polymer in Microcavities of Porous Silicon at Excess Pressure from Solution. Technical Physics Letters, 2018, 44, 392-394.	0.2	4
27	PbS Quantum Dots with Inorganic Ligands: Physical Modeling of the Charge and Excitation Transport in Photovoltaic Cells. Journal of Physical Chemistry C, 2021, 125, 6020-6025.	1.5	4
28	Optical Properties and Upconversion Luminescence of BaTiO3 Xerogel Structures Doped with Erbium and Ytterbium. Gels, 2022, 8, 347.	2.1	4
29	The mechanism of laser-stimulated desorption/ionization of nitroaromatic compounds from a nanoporous silicon surface at atmospheric pressure. Journal of Optical Technology (A Translation of) Tj ETQq1 1 0.784314 rgBT /Over	0.2	3
30	Hybrid bulk heterojunction solar cells based on low band gap polymers and CdSe nanocrystals. Proceedings of SPIE, 2014, , .	0.8	2
31	Modeling of the optical properties of porous silicon photonic crystals in the visible spectral range. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2017, 122, 79-82.	0.2	2
32	<title>Laser induced luminescence of dense films of CdSe/ZnS nanoparticles</title>. , 2007, , .		1
33	Dissociation of Trinitrotoluene on the Surface of Porous Silicon Under Laser Irradiation. Physics Procedia, 2015, 73, 159-162.	1.2	1
34	Effects of surface ligands and solvents on quantum dot photostability under pulsed UV laser irradiation. , 2015, , .		1
35	Porous silicon microcavities with embedded conjugated polymers for explosives detection. , 2018, , .		1
36	<title>Anti-Stokes photoluminescence of CdSe/ZnS nanoparticles in solution and condensed phase</title>. , 2007, , .		0

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37	Luminescence-kinetic spectroscopy of compound complexes of polyphenylquinolines. Semiconductors, 2015, 49, 959-961.	0.2	0
38	A new approach for detection of explosives based on ion mobility spectrometry and laser desorption/ionization on porous silicon. Proceedings of SPIE, 2016, , .	0.8	0
39	Optimization of Excitation and Detection Modes to Detect Ultra-Small Amounts of Semiconductor Quantum Dots Based on Cadmium Selenide. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq1 1 0.784314 rgBT /Over	0.2	0
40	Effect of temperature on properties of explosives sensor based on porous silicon microcavity with an embedded conjugated polymer. , 2018, , .		0
41	Comparison of fluorescence excitation modes for cdse semi-conductor quantum dots used in medical research. Bulletin of Russian State Medical University, 2018, , 39-45.	0.3	0