

Yury P Rakovich

List of Publications by Year in descending order

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121
all docs

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docs citations

121
times ranked

5273
citing authors

#	ARTICLE	IF	CITATIONS
1	Strong coupling effects in a plexciton system of gold nanostars and J-aggregates. <i>Journal of Luminescence</i> , 2022, 242, 118557.	1.5	13
2	Metal-Polymer Heterojunction in Colloidal-Phase Plasmonic Catalysis. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 2264-2272.	2.1	2
3	A nano-hybrid plasmon-exciton material with an enhanced biexciton emission increases the efficiency of the photodetector at high excitation intensities. , 2022, , .		0
4	Strong increase in the effective two-photon absorption cross-section of excitons in quantum dots due to the nonlinear interaction with localized plasmons in gold nanorods. <i>Nanoscale</i> , 2021, 13, 4614-4623.	2.8	5
5	pH-Sensing Platform Based on Light-Matter Coupling in Colloidal Complexes of Silver Nanoplates and J-Aggregates. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1972-1979.	1.5	10
6	Strong exciton-photon coupling with colloidal quantum dots in a tunable microcavity. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	2
7	Strongly coupled exciton-plasmon nano hybrids reveal extraordinary resistance to harsh environmental stressors: temperature, pH and irradiation. <i>Nanoscale</i> , 2020, 12, 16875-16883.	2.8	9
8	Synergy of Excitation Enhancement and the Purcell Effect for Strong Photoluminescence Enhancement in a Thin-Film Hybrid Structure Based on Quantum Dots and Plasmon Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8018-8025.	2.1	21
9	Enhancement of the quantum dot photoluminescence using transfer-printed porous silicon microcavities. <i>Journal of Physics: Conference Series</i> , 2020, 1461, 012076.	0.3	1
10	Effect of Spectral Overlap and Separation Distance on Exciton and Biexciton Quantum Yields and Radiative and Nonradiative Recombination Rates in Quantum Dots Near Plasmon Nanoparticles. <i>Annalen Der Physik</i> , 2020, 532, 2000236.	0.9	11
11	Enhancement of the photoluminescence of semiconductor nanocrystals in transfer-printed microcavities based on freestanding porous silicon photonic crystals. <i>Journal of Physics: Conference Series</i> , 2020, 1439, 012018.	0.3	3
12	Double Rabi Splitting in a Strongly Coupled System of Core-Shell Au@Ag Nanorods and J-Aggregates of Multiple Fluorophores. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6137-6143.	2.1	30
13	Spectral and Spatial Characteristics of the Electromagnetic Modes in a Tunable Optical Microcavity Cell for Studying Hybrid Light-Matter States. <i>JETP Letters</i> , 2019, 109, 12-17.	0.4	6
14	Numerical modeling of the spectral and spatial distribution of the electromagnetic modes in a tunable microcavity for investigation of the light-matter interaction. <i>Journal of Physics: Conference Series</i> , 2019, 1410, 012160.	0.3	1
15	Induced Transparency in Plasmon-Exciton Nanostructures for Sensing Applications. <i>Laser and Photonics Reviews</i> , 2019, 13, 1800176.	4.4	35
16	Enhancement of Biexciton Emission Due to Long-Range Interaction of Single Quantum Dots and Gold Nanorods in a Thin-Film Hybrid Nanostructure. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 481-486.	2.1	20
17	Photocatalytic cofactor regeneration involving triethanolamine revisited: The critical role of glycolaldehyde. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 686-692.	10.8	36
18	Polariton-assisted splitting of broadband emission spectra of strongly coupled organic dye excitons in tunable optical microcavity. <i>Optics Express</i> , 2019, 27, 4077.	1.7	11

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19	Modification of multiphoton emission properties of single quantum dot due to the long-range coupling with plasmon nanoparticles in thin-film hybrid material. , 2019, , .		0
20	Energy Transfer Between Single Semiconductor Quantum Dots and Organic Dye Molecules. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1513-1526.	1.4	6
21	Light-matter interaction in the strong coupling regime: configurations, conditions, and applications. Nanoscale, 2018, 10, 3589-3605.	2.8	179
22	A versatile tunable microcavity for investigation of light-matter interaction. Review of Scientific Instruments, 2018, 89, 053105.	0.6	9
23	Strong Magneto-Optical Response of Nonmagnetic Organic Materials Coupled to Plasmonic Nanostructures. Nano Letters, 2017, 17, 1808-1813.	4.5	36
24	Whispering gallery mode hybridization in photonic molecules. Laser and Photonics Reviews, 2017, 11, 1600278.	4.4	64
25	Photonic molecules and sensors based on coupling between whispering gallery modes in microspheres. , 2017, , .		0
26	Strong coupling effects in hybrid plexitonic systems. , 2017, , .		0
27	Exploring the Optical Nonlinearities of Plasmon-Exciton Hybrid Resonances in Coupled Colloidal Nanostructures. Journal of Physical Chemistry C, 2016, 120, 12226-12233.	1.5	25
28	Rabi Splitting in Photoluminescence Spectra of Hybrid Systems of Gold Nanorods and J-Aggregates. Journal of Physical Chemistry Letters, 2016, 7, 354-362.	2.1	132
29	Chiroptical activity in colloidal quantum dots coated with achiral ligands. Optics Express, 2016, 24, A65.	1.7	6
30	Anti-stokes emission in whispering gallery mode microcavities with semiconductor quantum dots. , 2015, , .		0
31	Strong excitonic-plasmonic coupling in hybrid system of metal nanoparticles and J-aggregates of organic dye. , 2015, , .		1
32	Linear and nonlinear optical effects induced by energy transfer from semiconductor nanoparticles to photosynthetic biological systems. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2014, 20, 17-32.	5.6	23
33	Whispering gallery mode emission from a composite system of J-aggregates and photonic microcavity. Journal of Luminescence, 2014, 145, 138-143.	1.5	7
34	Tunable plasmon modes in single silver nanowire optical antennas characterized by far-field microscope polarization spectroscopy. Nanoscale, 2014, 6, 9192-9197.	2.8	18
35	Coupling effect in hybrid system of plasmonic nanoparticles and J-aggregates yields double Rabi splitting. , 2014, , .		0
36	Strong plasmon-exciton coupling in a hybrid system of gold nanostars and J-aggregates. Nanoscale Research Letters, 2013, 8, 134.	3.1	57

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37	Preparation and Investigation of Quantum-Dot-Loaded Hollow Polymer Microspheres. Journal of Physical Chemistry C, 2013, 117, 24527-24536.	1.5	9
38	Optical resonators with Whispering Gallery Modes and J-aggregates. , 2013, , .		0
39	Resonance energy transfer in self-organized organic/inorganic dendrite structures. Nanoscale, 2013, 5, 9317.	2.8	12
40	Large Enhancement of Nonlinear Optical Response in a Hybrid Nanobiomaterial Consisting of Bacteriorhodopsin and Cadmium Telluride Quantum Dots. ACS Nano, 2013, 7, 2154-2160.	7.3	28
41	Strong Enhancement of Circular Dichroism in a Hybrid Material Consisting of J-Aggregates and Silver Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 13708-13712.	1.5	18
42	Plasmon-exciton strong coupling in a hybrid system of gold nanostars and J-aggregates. , 2013, , .		1
43	Highly-efficient Förster Resonance Energy Transfer in hybrid organic/inorganic semiconductor nanostructures. , 2012, , .		0
44	Observation of whispering gallery modes and directional emission from spherical microcavities integrated with TTBC dye J-aggregates. , 2012, , .		0
45	Enhancement effects in plasmonic nanocavities with quantum emitters. , 2012, , .		0
46	Hybrid organic/inorganic semiconductor nanostructures with highly efficient energy transfer. Journal of Materials Chemistry, 2012, 22, 10816.	6.7	44
47	Whispering gallery modes microcavities with J-aggregates and plasmonic hot spots. Proceedings of SPIE, 2012, , .	0.8	0
48	Semiconductor nanowires self-assembled from colloidal CdTe nanocrystal building blocks: optical properties and application perspectives. Journal of Materials Chemistry, 2012, 22, 20831.	6.7	9
49	Energy Transfer in Hybrid Organic/Inorganic Semiconductor Nanostructures. Journal of Nanoelectronics and Optoelectronics, 2012, 7, 297-301.	0.1	0
50	Photonic atoms with J-aggregates. , 2011, , .		0
51	Hybrid organic-inorganic nanostructures for integration with photonic atoms. , 2011, , .		0
52	The creation and annihilation of optical vortices using cascade conical diffraction. Optics Express, 2011, 19, 2580.	1.7	50
53	Whispering gallery mode resonators with J-aggregates. Optics Express, 2011, 19, 22280.	1.7	32
54	Two-photon polymerisation of novel shapes using a conically diffracted femtosecond laser beam. Optics Communications, 2011, 284, 3571-3574.	1.0	12

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55	Pterin detection using surface-enhanced Raman spectroscopy incorporating a straightforward silver colloid-based synthesis technique. <i>Journal of Biomedical Optics</i> , 2011, 16, 077007.	1.4	9
56	Resonance Energy Transfer Improves the Biological Function of Bacteriorhodopsin within a Hybrid Material Built from Purple Membranes and Semiconductor Quantum Dots. <i>Nano Letters</i> , 2010, 10, 2640-2648.	4.5	80
57	CdTe Quantum Dot/Dye Hybrid System as Photosensitizer for Photodynamic Therapy. <i>Nanoscale Research Letters</i> , 2010, 5, 753-760.	3.1	90
58	Fluorescent Quantum Dots as Artificial Antennas for Enhanced Light Harvesting and Energy Transfer to Photosynthetic Reaction Centers. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7217-7221.	7.2	167
59	Emerging applications of fluorescent nanocrystals quantum dots for micrometastases detection. <i>Proteomics</i> , 2010, 10, 700-716.	1.3	31
60	Mode manipulation in system of coupled microcavities with whispering gallery modes. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2010, 108, 385-390.	0.2	1
61	Solution-grown CdTe nanowires: Self-assembly, optical properties and strong temperature dependent electronic coupling. , 2010, , .		1
62	Photosensitizer Methylene Blue-Semiconductor Nanocrystals Hybrid System for Photodynamic Therapy. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 2656-2662.	0.9	17
63	Generation of continuously tunable fractional optical orbital angular momentum using internal conical diffraction. <i>Optics Express</i> , 2010, 18, 16480.	1.7	56
64	Conical diffraction of linearly polarised light controls the angular position of a microscopic object. <i>Optics Express</i> , 2010, 18, 27319.	1.7	36
65	Controlling the properties of Photonic Jets. , 2010, , .		2
66	Optical Studies of the Methylene Blue-Semiconductor Nanocrystals Hybrid System. <i>E-Journal of Surface Science and Nanotechnology</i> , 2009, 7, 349-353.	0.1	5
67	Synthesis and Formation of One-Dimensional Au Nanoparticle Chains. <i>E-Journal of Surface Science and Nanotechnology</i> , 2009, 7, 327-329.	0.1	0
68	The photoluminescent lifetime of polyelectrolytes in thin films formed via layer by layer self-assembly. <i>Nanotechnology</i> , 2009, 20, 095707.	1.3	4
69	Energy transfer processes in semiconductor quantum dots: bacteriorhodopsin hybrid system. , 2009, , .		5
70	Anti-Stokes cooling in semiconductor nanocrystal quantum dots: A feasibility study. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 2497-2509.	0.8	28
71	Conical diffraction and Bessel beam formation with a high optical quality biaxial crystal. <i>Optics Express</i> , 2009, 17, 12891.	1.7	86
72	Alignment and FLIM imaging of Ag nanowires with CdTe quantum dots. , 2009, , .		0

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73	Photonic Structures of Luminescent Semiconductor Nanocrystals and Spherical Microcavities. , 2009, , 653-703.		1
74	Multifunctional Magnetic-fluorescent Nanocomposites for Biomedical Applications. Nanoscale Research Letters, 2008, 3, .	3.1	436
75	CdTe Nanoparticles Display Tropism to Core Histones and Histoneâ€™Rich Cell Organelles. Small, 2008, 4, 2006-2015.	5.2	77
76	Anti-Stokes photoluminescence in semiconductor nanocrystal quantum dots. , 2008, , 257-275.		9
77	Mode manipulation in spherical microcavity using radiation pressure. , 2008, , .		0
78	Mode manipulation in small microsphere systems. , 2008, , .		0
79	<title>Photonic molecule modes in coupled spherical microcavities with CdTe nanocrystals</title>. , 2008, , .		0
80	Surface plasmon enhanced FÃ¶rster resonance energy transfer between the CdTe quantum dots. Applied Physics Letters, 2008, 93, .	1.5	90
81	Symmetric photonic molecules formed from coupled microspheres. , 2008, , .		0
82	Optically switchable emission of CdTe nanocrystals. Semiconductor Science and Technology, 2007, 22, 145-148.	1.0	2
83	Highly emissive CdTe nanowires grown in a phosphate buffer solution. , 2007, , .		0
84	Confined modes in photonic microtube structures. , 2007, , .		0
85	Enhanced F rster resonance energy transfer between the CdTe quantum dots in proximity to gold nanoparticles. , 2007, , .		2
86	Radiation-pressure-induced mode splitting in a spherical microcavity with an elastic shell. Optics Express, 2007, 15, 3597.	1.7	25
87	Nanojets and directional emission in symmetric photonic molecules. Optics Express, 2007, 15, 17343.	1.7	47
88	CdTe Nanowire Networks:â€™ Fast Self-Assembly in Solution, Internal Structure, and Optical Properties. Journal of Physical Chemistry C, 2007, 111, 18927-18931.	1.5	47
89	The Fabrication, Fluorescence Dynamics, and Whispering Gallery Modes of Aluminosilicate Microtube Resonators. Advanced Functional Materials, 2007, 17, 1106-1114.	7.8	15
90	Synthesis, Characterisation, and Biological Studies of CdTe Quantum Dotâ€™Naproxen Conjugates. ChemMedChem, 2007, 2, 183-186.	1.6	31

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91	“Jelly Dots”: Synthesis and Cytotoxicity Studies of CdTe Quantum Dot-Gelatin Nanocomposites. <i>Small</i> , 2007, 3, 1152-1156.	5.2	99
92	Whispering gallery mode emission from microtube cavity. <i>Optics and Spectroscopy (English)</i> Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702	0.2	4
93	Nonfunctionalized Nanocrystals Can Exploit a Cell's Active Transport Machinery Delivering Them to Specific Nuclear and Cytoplasmic Compartments. <i>Nano Letters</i> , 2007, 7, 3452-3461.	4.5	219
94	Aqueous Synthesis of Thiol-Capped CdTe Nanocrystals: A State-of-the-Art. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14628-14637.	1.5	703
95	Off-resonance surface plasmon enhanced spontaneous emission from CdTe quantum dots. <i>Applied Physics Letters</i> , 2006, 89, 253118.	1.5	109
96	Emission properties of colloidal quantum dots on polyelectrolyte multilayers. <i>Nanotechnology</i> , 2006, 17, 4117-4122.	1.3	38
97	Optimisation of the synthesis and modification of CdTe quantum dots for enhanced live cell imaging. <i>Journal of Materials Chemistry</i> , 2006, 16, 2896.	6.7	154
98	Whispering Gallery Mode Emission from Photonic Microtubes. , 2006, , .		0
99	Radiation pressure induced splitting of resonant modes in a nanocrystal-coated microcavity. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 3689-3692.	0.8	1
100	Whispering gallery modes in photoluminescence and Raman spectra of a spherical microcavity with CdTe quantum dots: anti-Stokes emission and interference effects. <i>Nanoscale Research Letters</i> , 2006, 1, 68-73.	3.1	13
101	Confined optical modes and amplified spontaneous emission from a microtube cavity formed by vacuum assisted filtration. <i>Applied Physics Letters</i> , 2006, 89, 143113.	1.5	8
102	Interaction of surface plasmons with CdTe quantum dot excitons. , 2005, , .		2
103	Three-dimensional photon confinement in a spherical microcavity with CdTe quantum dots: Raman spectroscopy. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2005, 26, 28-32.	1.3	7
104	Modification of Photon States in Photonic Molecules with Semiconductor Nanocrystals. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2005, 99, 493.	0.2	1
105	Spontaneous emission from semiconductor nanocrystals in coupled spherical microcavities. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 858-861.	0.8	5
106	Tunable photon lifetime in photonic molecules: a concept for delaying an optical signal. <i>Optics Letters</i> , 2005, 30, 2775.	1.7	11
107	Highly efficient Förster resonance energy transfer between CdTe nanocrystals and Rhodamine B in mixed solid films. <i>Chemical Physics Letters</i> , 2004, 388, 100-104.	1.2	40
108	Confined optical modes in small photonic molecules with semiconductor nanocrystals. <i>Journal of Applied Physics</i> , 2004, 96, 6761-6765.	1.1	22

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109	Highly efficient Forster resonance energy transfer between CdTe nanocrystals and two different dye molecules. , 2004, , .		2
110	Up-conversion luminescence via a below-gap state in CdSe/ZnS quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 99-100.	1.3	27
111	Control of efficiency of photon energy up-conversion in CdSe/ZnS quantum dots. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2003, 94, 859-863.	0.2	28
112	Raman scattering and anti-Stokes emission from a single spherical microcavity with a CdTe quantum dot monolayer. Applied Physics Letters, 2003, 83, 2539-2541.	1.5	34
113	Whispering gallery mode emission from a composite system of CdTe nanocrystals and a spherical microcavity. Semiconductor Science and Technology, 2003, 18, 914-918.	1.0	69
114	The three-dimensional imaging of microspheres in confocal and conventional polarization microscopes. , 2003, , .		0
115	Size-selective photoluminescence excitation spectroscopy in CdTe quantum dots. , 2003, 4876, 432.		6
116	Anti-Stokes Photoluminescence in II-VI Colloidal Nanocrystals. Physica Status Solidi (B): Basic Research, 2002, 229, 449-452.	0.7	60
117	Exciton Diffusion in GaN Epitaxial Layers. Physica Status Solidi (B): Basic Research, 2001, 228, 493-496.	0.7	4
118	Self-reversal of the lines of exciton photoluminescence in CdS single crystals. Journal of Applied Spectroscopy, 1994, 60, 234-239.	0.3	0
119	Effect of the orientation of the crystallographic surface of CdS crystals on the shape of exciton radiation bands (letter to the editor). Journal of Applied Spectroscopy, 1993, 59, 615-618.	0.3	0