Mikhail Zamkov

List of Publications by Year
in descending order

56 papers	2,561 citations	186265 28 h-index	189892 50 g-index
56 all docs	56 docs citations	56 times ranked	3850 citing authors

#	Article	IF	Citations
1	Quantum Shells Boost the Optical Gain of Lasing Media. ACS Nano, 2022, 16, 3017-3026.	14.6	18
2	Shape Control of Colloidal Semiconductor Nanocrystals through Thermodynamically Driven Aggregative Growth. Chemistry of Materials, 2022, 34, 2484-2494.	6.7	8
3	Colloidal Quantum Shells: An Emerging 2D Semiconductor for Energy Applications. ACS Energy Letters, 2022, 7, 1202-1213.	17.4	8
4	Photoinduced Rotation of Colloidal Semiconductor Nanocrystals in an Electric Field. Nano Letters, 2021, 21, 4787-4794.	9.1	8
5	Ambient Tip-Enhanced Photoluminescence with 5 nm Spatial Resolution. Journal of Physical Chemistry C, 2021, 125, 12251-12255.	3.1	14
6	Tuning the Dimensionality of Excitons in Colloidal Quantum Dot Molecules. Nano Letters, 2021, 21, 7339-7346.	9.1	9
7	Influence of QD photosensitizers in the photocatalytic production of hydrogen with biomimetic [FeFe]-hydrogenase. Comparative performance of CdSe and CdTe. Chemosphere, 2021, 278, 130485.	8.2	8
8	Quantum Computing with Exciton Qubits in Colloidal Semiconductor Nanocrystals. Journal of Physical Chemistry C, 2021, 125, 22195-22203.	3.1	12
9	Energy Transport in CsPbBr₃ Perovskite Nanocrystal Solids. ACS Photonics, 2020, 7, 154-164.	6.6	19
10	Enabling Narrow Emission Line Widths in Colloidal Nanocrystals through Coalescence Growth. Chemistry of Materials, 2020, 32, 7524-7534.	6.7	9
11	Low-threshold laser medium utilizing semiconductor nanoshell quantum dots. Nanoscale, 2020, 12, 17426-17436.	5.6	9
12	Progress and Prospects of Solution-Processed Two-Dimensional Semiconductor Nanocrystals. Journal of Physical Chemistry C, 2020, 124, 21895-21908.	3.1	32
13	Nanoshell quantum dots: Quantum confinement beyond the exciton Bohr radius. Journal of Chemical Physics, 2020, 152, 110902.	3.0	39
14	Prospects and applications of plasmon-exciton interactions in the near-field regime. Nanophotonics, 2019, 8, 613-628.	6.0	28
15	Self-Assembled PbS/CdS Quantum Dot Films with Switchable Symmetry and Emission. Chemistry of Materials, 2019, 31, 7855-7863.	6.7	5
16	Delayed Photoluminescence in Metal-Conjugated Fluorophores. Journal of the American Chemical Society, 2019, 141, 11286-11297.	13.7	26
17	Sustained Biexciton Populations in Nanoshell Quantum Dots. ACS Photonics, 2019, 6, 1041-1050.	6.6	15
18	Colloidal semiconductor nanocrystals in energy transfer reactions. Chemical Communications, 2019, 55, 3033-3048.	4.1	31

#	Article	IF	Citations
19	Just Add Ligands: Self-Sustained Size Focusing of Colloidal Semiconductor Nanocrystals. Chemistry of Materials, 2018, 30, 1391-1398.	6.7	38
20	Thermally activated delayed photoluminescence from pyrenyl-functionalized CdSe quantum dots. Nature Chemistry, 2018, 10, 225-230.	13.6	129
21	Ion-Mediated Ligand Exchange and Size Focusing of Semiconductor Nanocrystals in Ligand-Saturated Solutions. Journal of Physical Chemistry C, 2018, 122, 23623-23630.	3.1	6
22	Challenges and Prospects of Photocatalytic Applications Utilizing Semiconductor Nanocrystals. Frontiers in Chemistry, 2018, 6, 353.	3.6	42
23	Competition of Charge and Energy Transfer Processes in Donorâ€“Acceptor Fluorescence Pairs: Calibrating the Spectroscopic Ruler. ACS Nano, 2018, 12, 5657-5665.	14.6	38
24	Solar hydrogen generation: Exceeding 100% efficiency. Nature Energy, 2017, 2, .	39.5	11
25	One-Dimensional Carrier Confinement in â€œGiantâ€•CdS/CdSe Excitonic Nanoshells. Journal of the American Chemical Society, 2017, 139, 7815-7822.	13.7	44
26	Tracking the Energy Flow on Nanoscale <i>via</i> Sample-Transmitted Excitation Photoluminescence Spectroscopy. ACS Nano, 2017, 11, 4191-4197.	14.6	15
27	Enhanced Emission of Nanocrystal Solids Featuring Slowly Diffusive Excitons. Journal of Physical Chemistry C, 2017, 121, 1477-1487.	3.1	20
28	Energy Transfer in Quantum Dot Solids. ACS Energy Letters, 2017, 2, 154-160.	17.4	87
29	Double-Well Colloidal Nanocrystals Featuring Two-Color Photoluminescence. Chemistry of Materials, 2017, 29, 7852-7858.	6.7	19
30	Plasmon-Induced Energy Transfer: When the Game Is Worth the Candle. ACS Photonics, 2017, 4, 2290-2297.	6.6	20
31	Lifting the Spectral Crosstalk in Multifluorophore Assemblies. Journal of Physical Chemistry C, 2017, 121, 26226-26232.	3.1	15
32	Colloidal Synthesis of Monodisperse Semiconductor Nanocrystals through Saturated Ionic Layer Adsorption. Chemistry of Materials, 2016, 28, 2823-2833.	6.7	14
33	Oneâ€dimensional growth of colloidal PbSe nanorods in chloroalkanes. Physica Status Solidi - Rapid Research Letters, 2016, 10, 833-837.	2.4	4
34	Direct observation of triplet energy transfer from semiconductor nanocrystals. Science, 2016, 351, 369-372.	12.6	336
35	Mapping the Exciton Diffusion in Semiconductor Nanocrystal Solids. ACS Nano, 2015, 9, 2926-2937.	14.6	56
36	Exciton Generation in Semiconductor Nanocrystals via the Near-Field Plasmon Energy Transfer. Journal of Physical Chemistry C, 2015, 119, 15562-15571.	3.1	18

#	Article	IF	Citations
37	Measuring the Time-Dependent Monomer Concentration during the Hot-Injection Synthesis of Colloidal Nanocrystals. Chemistry of Materials, 2015, 27, 6102-6108.	6.7	9
38	Photocatalytic Applications of Colloidal Heterostructured Nanocrystals: Whatâ€™s Next?. Journal of Physical Chemistry Letters, 2015, 6, 4352-4359.	4.6	47
39	Electric field enhancement in a self-assembled 2D array of silver nanospheres. Journal of Chemical Physics, 2014, 141, 214308.	3.0	20
40	Plasmonic Nanocrystal Solar Cells Utilizing Strongly Confined Radiation. ACS Nano, 2014, 8, 12549-12559.	14.6	50
41	Infrared Emitting PbS Nanocrystal Solids through Matrix Encapsulation. Chemistry of Materials, 2014, 26, 4256-4264.	6.7	47
42	Enhanced Lifetime of Excitons in Nonepitaxial Au/CdS Core/Shell Nanocrystals. ACS Nano, 2014, 8, 352-361.	14.6	81
43	Suppressed Carrier Scattering in CdS-Encapsulated PbS Nanocrystal Films. ACS Nano, 2013, 7, 6964-6977.	14.6	41
44	Improving the Catalytic Activity of Semiconductor Nanocrystals through Selective Domain Etching. Nano Letters, 2013, 13, 2016-2023.	9.1	84
45	Photocatalytic Activity of Core/Shell Semiconductor Nanocrystals Featuring Spatial Separation of Charges. Journal of Physical Chemistry C, 2012, 116, 22786-22793.	3.1	38
46	Inorganic Solids of CdSe Nanocrystals Exhibiting High Emission Quantum Yield. Advanced Functional Materials, 2012, 22, 3714-3722.	14.9	36
47	Fabrication of All-Inorganic Nanocrystal Solids through Matrix Encapsulation of Nanocrystal Arrays. Journal of the American Chemical Society, 2011, 133, 20488-20499.	13.7	50
48	Dye-sensitized photovoltaic properties of hydrothermally prepared TiO2 nanotubes. Energy and Environmental Science, 2011, 4, 998.	30.8	49
49	Suppression of the Plasmon Resonance in Au/CdS Colloidal Nanocomposites. Nano Letters, 2011, 11, 1792-1799.	9.1	173
50	The Role of Hole Localization in Sacrificial Hydrogen Production by Semiconductorâ€“Metal Heterostructured Nanocrystals. Nano Letters, 2011, 11, 2919-2926.	9.1	187
51	Synthesis of PbS/TiO₂ Colloidal Heterostructures for Photovoltaic Applications. Journal of Physical Chemistry C, 2010, 114, 12496-12504.	3.1	81
52	Tuning the Morphology of Au/CdS Nanocomposites through Temperature-Controlled Reduction of Gold-Oleate Complexes. Chemistry of Materials, 2010, 22, 5929-5936.	6.7	44
53	The effect of dielectric friction on the rate of charge separation in type II ZnSe/CdS semiconductor nanorods. Applied Physics Letters, 2009, 94, .	3.3	22
54	Radiative Recombination of Spatially Extended Excitons in (ZnSe/CdS)/CdS Heterostructured Nanorods. Journal of the American Chemical Society, 2009, 131, 1328-1334.	13.7	129

#	Article	IF	Citations
55	Composition-Tunable Properties of CdS<i>_x</i>Te_{1âˆ’<i>x</i>} Alloy Nanocrystals. Journal of Physical Chemistry C, 2008, 112, 12795-12800.	3.1	72
56	Synthesis and Characterization of Type II ZnSe/CdS Core/Shell Nanocrystals. Journal of Physical Chemistry C, 2008, 112, 9301-9307.	3.1	91