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List of Publications by Year in Descending Order

67 papers	2,855 citations	28 h-index	53 g-index
73 ext. papers	3,139 ext. citations	8.4 avg, IF	5.23 L-index

#	Paper	IF	Citations
67	Colloidal stability and aggregation kinetics of nanocrystal CdSe/ZnS quantum dots in aqueous systems: Effects of ionic strength, electrolyte type, and natural organic matter. *SN Applied Sciences*, **2022**, 4, 1	1.8	2
66	Leveraging lifetime information to perform real-time 3D single-particle tracking in noisy environments. *Journal of Chemical Physics*, **2021**, 155, 164201	3.9	1
65	DFT Calculations of InP Quantum Dots: Model Chemistries, Surface Passivation, and Open-Shell Singlet Ground States. *Journal of Physical Chemistry C*, **2021**, 125, 11765-11772	3.8	4
64	Experimental measurements and numerical simulations of the transport and retention of nanocrystal CdSe/ZnS quantum dots in saturated porous media: effects of pH, organic ligand, and natural organic matter. *Environmental Science and Pollution Research*, **2021**, 28, 8050-8073	5.1	3
63	Cytosolic delivery of membrane-penetrating QDs into T cell lymphocytes: implications in immunotherapy and drug delivery. *Nanoscale*, **2021**, 13, 5519-5529	7.7	3
62	Charge carrier pairing can impart efficient reduction efficiency to core/shell quantum dots: applications for chemical sensing. *Nanoscale*, **2020**, 12, 23052-23060	7.7	3
61	Semiconductor quantum dot FRET: Untangling energy transfer mechanisms in bioanalytical assays. *TrAC - Trends in Analytical Chemistry*, **2020**, 123, 115750	14.6	12
60	Sterically Encumbered Tris(trialkylsilyl) Phosphine Precursors for Quantum Dot Synthesis. *Inorganic Chemistry*, **2020**, 59, 15928-15935	5.1	4
59	Colloidal stability and aggregation kinetics of nanocrystal CdSe/ZnS quantum dots in aqueous systems: effects of pH and organic ligands. *Journal of Nanoparticle Research*, **2020**, 22, 1	2.3	2
58	Electronic Structure and Dynamics of Copper-Doped Indium Phosphide Nanocrystals Studied with Time-Resolved X-ray Absorption and Large-Scale DFT Calculations. *Journal of Physical Chemistry C*, **2018**, 122, 11145-11151	3.8	11
57	Colloidal Synthesis of Bulk-Bandgap Lead Selenide Nanocrystals. *Frontiers in Chemistry*, **2018**, 6, 562	5	2
56	The Role of Colloidal Stability and Charge in Functionalization of Aqueous Quantum Dots. *Accounts of Chemical Research*, **2018**, 51, 2949-2956	24.3	20
55	Anomalous Perturbation of the O2 Sensitivity of Poly(aromatic) Hydrocarbons by Magnetic Quantum Dots. *Journal of Physical Chemistry C*, **2017**, 121, 4060-4065	3.8	3
54	Synthesis of High-Quality AgSbSe2and AgBiSe2Nanocrystals with Antimony and Bismuth Silylamide Reagents. *Chemistry of Materials*, **2017**, 29, 4597-4602	9.6	8
53	Charge Carriers Modulate the Bonding of Semiconductor Nanoparticle Dopants As Revealed by Time-Resolved X-ray Spectroscopy. *ACS Nano*, **2017**, 11, 10070-10076	16.7	16
52	Quantitative Imaging and In Situ Concentration Measurements of Quantum Dot Nanomaterials in Variably Saturated Porous Media. *Journal of Nanomaterials*, **2016**, 2016, 1-10	3.2	6
51	Synthetic Developments of Nontoxic Quantum Dots. *ChemPhysChem*, **2016**, 17, 598-617	3.2	64

50	Arsenic Silylamide: An Effective Precursor for Arsenide Semiconductor Nanocrystal Synthesis. *Chemistry of Materials*, **2016**, 28, 4058-4064	9.6	15
49	Ratiometric QD-FRET Sensing of Aqueous H2S in Vitro. *Analytical Chemistry*, **2016**, 88, 6050-6	7.8	37
48	Synthesis and characterization of DNA-quantum dot conjugates for the fluorescence ratiometric detection of unlabelled DNA. *Analyst, The*, **2016**, 141, 6251-6258	5	21
47	Detection of Hypoxia using a Ratiometric Quantum Dot-based Oxygen Sensor. *ACS Sensors*, **2016**, 1, 1244-1250	9.1	29
46	A toolkit for bioimaging using near-infrared AgInS/ZnS quantum dots. *Journal of Materials Chemistry B*, **2015**, 3, 8188-8196	7.3	27
45	Bright Type II Quantum Dots. *Chemistry of Materials*, **2015**, 27, 7276-7281	9.6	37
44	Monolayer Silane-Coated, Water-Soluble Quantum Dots. *Small*, **2015**, 11, 6091-6	11	16
43	QD-Based FRET Probes at a Glance. *Sensors*, **2015**, 15, 13028-51	3.8	44
42	A primer on the synthesis, water-solubilization, and functionalization of quantum dots, their use as biological sensing agents, and present status. *Physical Chemistry Chemical Physics*, **2014**, 16, 837-55	3.6	75
41	Ratiometric CdSe/ZnS quantum dot protein sensor. *Analytical Chemistry*, **2014**, 86, 2380-6	7.8	66
40	Cluster-seeded synthesis of doped CdSe:Cu4 quantum dots. *ACS Nano*, **2013**, 7, 3190-7	16.7	68
39	Primary charge carrier dynamics of water-solubilized CdZnS/ZnS core/shell and CdZnS/ZnS–Pd nanoparticle adducts. *Chemical Physics Letters*, **2013**, 573, 56-62	2.5	14
38	Ultrafast exciton dynamics in colloidal aluminum phosphide nanocrystals. *Chemical Physics Letters*, **2013**, 557, 129-133	2.5	4
37	Acidic domain in dentin phosphophoryn facilitates cellular uptake: implications in targeted protein delivery. *Journal of Biological Chemistry*, **2013**, 288, 16098-109	5.4	23
36	Water-solubilization and functionalization of semiconductor quantum dots. *Methods in Molecular Biology*, **2013**, 1025, 29-45	1.4	3
35	Energy Transfer of CdSe/ZnS Nanocrystals Encapsulated with Rhodamine-Dye Functionalized Poly(acrylic acid). *Journal of Photochemistry and Photobiology A: Chemistry*, **2012**, 248, 24-29	4.7	14
34	A Nanocrystal-based Ratiometric pH Sensor for Natural pH Ranges. *Chemical Science*, **2012**, 3, 2980-2985	9.4	56
33	Efficient functionalization of aqueous CdSe/ZnS nanocrystals using small-molecule chemical activators. *Chemical Communications*, **2011**, 47, 3532-4	5.8	15

32	Synthesis and Characterization of Semiconductor Tantalum Nitride Nanoparticles. *Journal of Physical Chemistry C*, **2011**, 115, 647-652	3.8	28
31	Detection of toxic mercury ions using a ratiometric CdSe/ZnS nanocrystal sensor. *Chemical Communications*, **2011**, 47, 7773-5	5.8	68
30	Shape-controlled colloidal synthesis of rock-salt lead selenide nanocrystals. *ACS Nano*, **2011**, 5, 6465-71	16.7	15
29	Formation of Sol□Gel-Derived TaOxNy Photocatalysts. *Chemistry of Materials*, **2011**, 23, 4721-4725	9.6	18
28	Water-soluble semiconductor nanocrystals cap exchanged with metalated ligands. *ACS Nano*, **2011**, 5, 546-50	16.7	65
27	Quantifying Quantum Dots through F□ster Resonant Energy Transfer. *Journal of Physical Chemistry C*, **2011**, 115, 19578-19582	3.8	31
26	Effects of surface chemistry and shape on nonlinear absorption, scattering, and refraction of PbSe nanocrystals **2011**,		1
25	Multivariable Response of Semiconductor Nanocrystal-Dye Sensors: The Case of pH. *Journal of Physical Chemistry C*, **2010**, 114, 21348-21352	3.8	19
24	Effects of Surface Chemistry on Nonlinear Absorption, Scattering, and Refraction of PbSe and PbS Nanocrystals. *Journal of Physical Chemistry C*, **2010**, 114, 16257-16262	3.8	39
23	Coupled effects of solution chemistry and hydrodynamics on the mobility and transport of quantum dot nanomaterials in the vadose zone. *Journal of Contaminant Hydrology*, **2010**, 118, 184-98	3.9	35
22	Applications of colloidal quantum dots. *Microelectronics Journal*, **2009**, 40, 644-649	1.8	35
21	Poly(ethylene glycol) carbodiimide coupling reagents for the biological and chemical functionalization of water-soluble nanoparticles. *ACS Nano*, **2009**, 3, 915-23	16.7	82
20	Imparting nanoparticle function with size-controlled amphiphilic polymers. *Journal of the American Chemical Society*, **2008**, 130, 3744-5	16.4	90
19	Synthesis and functionalization of non-toxic visible-emitting nanocrystals **2008**,		1
18	Efficient emission from core/(doped) shell nanoparticles: applications for chemical sensing. *Nano Letters*, **2007**, 7, 3429-32	11.5	157
17	Color-saturated green-emitting QD-LEDs. *Angewandte Chemie - International Edition*, **2006**, 45, 5796-9	16.4	233
16	Color-Saturated Green-Emitting QD-LEDs. *Angewandte Chemie*, **2006**, 118, 5928-5931	3.6	16
15	A ratiometric CdSe/ZnS nanocrystal pH sensor. *Journal of the American Chemical Society*, **2006**, 128, 13320-1	16.4	471

14	A solvent-stable nanocrystal-silica composite laser. *Journal of the American Chemical Society*, **2006**, 128, 3146-7	16.4	43
13	Non-linear transduction strategies for chemo/biosensing on small length scales. *Journal of Materials Chemistry*, **2005**, 15, 2697		19
12	A low-threshold, high-efficiency microfluidic waveguide laser. *Journal of the American Chemical Society*, **2005**, 127, 8952-3	16.4	207
11	Mechanism of ligand exchange studied using transition path sampling. *Journal of the American Chemical Society*, **2005**, 127, 1286-90	16.4	21
10	Blue semiconductor nanocrystal laser. *Applied Physics Letters*, **2005**, 86, 073102	3.4	139
9	Single quantum dot (QD) imaging of fluid flow near surfaces. *Experiments in Fluids*, **2005**, 39, 784-786	2.5	38
8	Dynamics of an Excess Electron at Metal/Polar Interfaces. *Journal of Physical Chemistry B*, **2003**, 107, 13608-13615	3.4	5
7	Ultrafast UV pump/IR probe studies of C-H activation in linear, cyclic, and aryl hydrocarbons. *Journal of the American Chemical Society*, **2002**, 124, 10605-12	16.4	49
6	Dynamics of Photosubstitution Reactions of Fe(CO)5: An Ultrafast Infrared Study of High Spin Reactivity. *Journal of the American Chemical Society*, **2001**, 123, 6909-6915	16.4	58
5	Intramolecular rearrangements on ultrafast timescales: femtosecond infrared studies of ring slip in (eta(1)-C(5)Cl(5))Mn(CO)(5). *Journal of the American Chemical Society*, **2001**, 123, 7425-6	16.4	3
4	Triplet organometallic reactivity under ambient conditions: an ultrafast UV pump/IR probe study. *Journal of the American Chemical Society*, **2001**, 123, 2255-64	16.4	72
3	Femtosecond infrared study of the dynamics of solvation and solvent caging. *Journal of the American Chemical Society*, **2001**, 123, 4204-10	16.4	31
2	Femtosecond Infrared Studies of a Prototypical One-Electron Oxidative-Addition Reaction: Chlorine Atom Abstraction by the Re(CO)5 Radical. *Journal of the American Chemical Society*, **1999**, 121, 9227-9228	16.4	11
1	Ultrafast Infrared Studies of the Reaction Mechanism of Silicon–Hydrogen Bond Activation by η5-CpV(CO)4. *Journal of Physical Chemistry A*, **1999**, 103, 10426-10432	2.8	26