Preston T Snee

List of Publications by Year in descending order

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71 papers 3,306 citations

147726 31 h-index 56 g-index

73 all docs

 $\begin{array}{c} 73 \\ \text{docs citations} \end{array}$

73 times ranked

4507 citing authors

#	Article	IF	CITATIONS
1	A Ratiometric CdSe/ZnS Nanocrystal pH Sensor. Journal of the American Chemical Society, 2006, 128, 13320-13321.	6.6	498
2	A Low-Threshold, High-Efficiency Microfluidic Waveguide Laser. Journal of the American Chemical Society, 2005, 127, 8952-8953.	6.6	297
3	Color-Saturated Green-Emitting QD-LEDs. Angewandte Chemie - International Edition, 2006, 45, 5796-5799.	7.2	250
4	Efficient Emission from Core/(Doped) Shell Nanoparticles:  Applications for Chemical Sensing. Nano Letters, 2007, 7, 3429-3432.	4.5	162
5	Blue semiconductor nanocrystal laser. Applied Physics Letters, 2005, 86, 073102.	1.5	154
6	Imparting Nanoparticle Function with Size-Controlled Amphiphilic Polymers. Journal of the American Chemical Society, 2008, 130, 3744-3745.	6.6	96
7	Poly(ethylene glycol) Carbodiimide Coupling Reagents for the Biological and Chemical Functionalization of Water-Soluble Nanoparticles. ACS Nano, 2009, 3, 915-923.	7.3	93
8	Triplet Organometallic Reactivity under Ambient Conditions:Â An Ultrafast UV Pump/IR Probe Study. Journal of the American Chemical Society, 2001, 123, 2255-2264.	6.6	82
9	Cluster-Seeded Synthesis of Doped CdSe:Cu ₄ Quantum Dots. ACS Nano, 2013, 7, 3190-3197.	7.3	81
10	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, 837-855.	1.3	80
11	Synthetic Developments of Nontoxic Quantum Dots. ChemPhysChem, 2016, 17, 598-617.	1.0	80
12	Ratiometric CdSe/ZnS Quantum Dot Protein Sensor. Analytical Chemistry, 2014, 86, 2380-2386.	3.2	73
13	Detection of toxic mercury ions using a ratiometric CdSe/ZnS nanocrystal sensor. Chemical Communications, 2011, 47, 7773.	2.2	72
14	Water-Soluble Semiconductor Nanocrystals Cap Exchanged with Metalated Ligands. ACS Nano, 2011, 5, 546-550.	7.3	71
15	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.	6.6	66
16	A nanocrystal-based ratiometric pH sensor for natural pH ranges. Chemical Science, 2012, 3, 2980.	3.7	60
17	Ultrafast UV Pump/IR Probe Studies of Câ^'H Activation in Linear, Cyclic, and Aryl Hydrocarbons. Journal of the American Chemical Society, 2002, 124, 10605-10612.	6.6	56
18	QD-Based FRET Probes at a Glance. Sensors, 2015, 15, 13028-13051.	2.1	52

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19	Single quantum dot (QD) imaging of fluid flow near surfaces. Experiments in Fluids, 2005, 39, 784-786.	1.1	48
20	Ratiometric QD-FRET Sensing of Aqueous H ₂ S in Vitro. Analytical Chemistry, 2016, 88, 6050-6056.	3.2	47
21	A Solvent-Stable Nanocrystal-Silica Composite Laser. Journal of the American Chemical Society, 2006, 128, 3146-3147.	6.6	45
22	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, 184-198.	1.6	42
23	Effects of Surface Chemistry on Nonlinear Absorption, Scattering, and Refraction of PbSe and PbS Nanocrystals. Journal of Physical Chemistry C, 2010, 114, 16257-16262.	1.5	42
24	Applications of colloidal quantum dots. Microelectronics Journal, 2009, 40, 644-649.	1.1	41
25	Bright Type II Quantum Dots. Chemistry of Materials, 2015, 27, 7276-7281.	3.2	41
26	Femtosecond Infrared Study of the Dynamics of Solvation and Solvent Caging. Journal of the American Chemical Society, 2001, 123, 4204-4210.	6.6	36
27	Quantifying Quantum Dots through Förster Resonant Energy Transfer. Journal of Physical Chemistry C, 2011, 115, 19578-19582.	1.5	36
28	Ultrafast Infrared Studies of the Reaction Mechanism of Siliconâ^'Hydrogen Bond Activation by Î-5-CpV(CO)4. Journal of Physical Chemistry A, 1999, 103, 10426-10432.	1.1	34
29	A toolkit for bioimaging using near-infrared AgInS ₂ /ZnS quantum dots. Journal of Materials Chemistry B, 2015, 3, 8188-8196.	2.9	34
30	The Role of Colloidal Stability and Charge in Functionalization of Aqueous Quantum Dots. Accounts of Chemical Research, 2018, 51, 2949-2956.	7.6	34
31	In Vitro Detection of Hypoxia Using a Ratiometric Quantum Dot-Based Oxygen Sensor. ACS Sensors, 2016, 1, 1244-1250.	4.0	33
32	Synthesis and Characterization of Semiconductor Tantalum Nitride Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 647-652.	1.5	30
33	Semiconductor quantum dot FRET: Untangling energy transfer mechanisms in bioanalytical assays. TrAC - Trends in Analytical Chemistry, 2020, 123, 115750.	5.8	29
34	Acidic Domain in Dentin Phosphophoryn Facilitates Cellular Uptake. Journal of Biological Chemistry, 2013, 288, 16098-16109.	1.6	26
35	Synthesis and characterization of DNA–quantum dot conjugates for the fluorescence ratiometric detection of unlabelled DNA. Analyst, The, 2016, 141, 6251-6258.	1.7	23
36	Mechanism of Ligand Exchange Studied Using Transition Path Sampling. Journal of the American Chemical Society, 2005, 127, 1286-1290.	6.6	22

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37	Multivariable Response of Semiconductor Nanocrystal-Dye Sensors: The Case of pH. Journal of Physical Chemistry C, 2010, 114, 21348-21352.	1.5	21
38	Non-linear transduction strategies for chemo/biosensing on small length scales. Journal of Materials Chemistry, 2005, 15, 2697.	6.7	20
39	Formation of Sol–Gel-Derived TaO _{<i>x</i>} N _{<i>y</i>} Photocatalysts. Chemistry of Materials, 2011, 23, 4721-4725.	3.2	20
40	Arsenic Silylamide: An Effective Precursor for Arsenide Semiconductor Nanocrystal Synthesis. Chemistry of Materials, 2016, 28, 4058-4064.	3.2	20
41	Femtosecond Infrared Studies of a Prototypical One-Electron Oxidative-Addition Reaction:Â Chlorine Atom Abstraction by the Re(CO)5Radical. Journal of the American Chemical Society, 1999, 121, 9227-9228.	6.6	19
42	Monolayer Silaneâ€Coated, Waterâ€Soluble Quantum Dots. Small, 2015, 11, 6091-6096.	5.2	19
43	Charge Carriers Modulate the Bonding of Semiconductor Nanoparticle Dopants As Revealed by Time-Resolved X-ray Spectroscopy. ACS Nano, 2017, 11, 10070-10076.	7.3	17
44	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.	1.5	17
45	Shape-Controlled Colloidal Synthesis of Rock-Salt Lead Selenide Nanocrystals. ACS Nano, 2011, 5, 6465-6471.	7.3	16
46	Efficient functionalization of aqueous CdSe/ZnS nanocrystals using small-molecule chemical activators. Chemical Communications, 2011, 47, 3532.	2.2	15
47	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.	2.0	15
48	Primary charge carrier dynamics of water-solubilized CdZnS/ZnS core/shell and CdZnS/ZnS·Pd nanoparticle adducts. Chemical Physics Letters, 2013, 573, 56-62.	1.2	14
49	Synthesis of High-Quality AgSbSe ₂ and AgBiSe ₂ Nanocrystals with Antimony and Bismuth Silylamide Reagents. Chemistry of Materials, 2017, 29, 4597-4602.	3.2	10
50	Sterically Encumbered Tris(trialkylsilyl) Phosphine Precursors for Quantum Dot Synthesis. Inorganic Chemistry, 2020, 59, 15928-15935.	1.9	10
51	Leveraging lifetime information to perform real-time 3D single-particle tracking in noisy environments. Journal of Chemical Physics, 2021, 155, 164201.	1.2	8
52	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.	0.8	7
53	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.	1.5	7
54	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.	1.5	7

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55	Intramolecular Rearrangements on Ultrafast Timescales:Â Femtosecond Infrared Studies of Ring Slip in (Î-1-C5Cl5)Mn(CO)5. Journal of the American Chemical Society, 2001, 123, 7425-7426.	6.6	6
56	Dynamics of an Excess Electron at Metal/Polar Interfaces. Journal of Physical Chemistry B, 2003, 107, 13608-13615.	1.2	6
57	Quantitative Imaging and In Situ Concentration Measurements of Quantum Dot Nanomaterials in Variably Saturated Porous Media. Journal of Nanomaterials, 2016, 2016, 1-10.	1.5	6
58	Colloidal Synthesis of Bulk-Bandgap Lead Selenide Nanocrystals. Frontiers in Chemistry, 2018, 6, 562.	1.8	6
59	Cytosolic delivery of membrane-penetrating QDs into T cell lymphocytes: implications in immunotherapy and drug delivery. Nanoscale, 2021, 13, 5519-5529.	2.8	6
60	Fluorescent Artificial Antigens Revealed Extended Membrane Networks Utilized by Live Dendritic Cells for Antigen Uptake. Nano Letters, 2022, 22, 4020-4027.	4.5	6
61	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.	2.7	5
62	Ultrafast exciton dynamics in colloidal aluminum phosphide nanocrystals. Chemical Physics Letters, 2013, 557, 129-133.	1.2	4
63	Charge carrier pairing can impart efficient reduction efficiency to core/shell quantum dots: applications for chemical sensing. Nanoscale, 2020, 12, 23052-23060.	2.8	4
64	Water-Solubilization and Functionalization of Semiconductor Quantum Dots. Methods in Molecular Biology, 2013, 1025, 29-45.	0.4	4
65	Anomalous Perturbation of the O ₂ Sensitivity of Poly(aromatic) Hydrocarbons by Magnetic Quantum Dots. Journal of Physical Chemistry C, 2017, 121, 4060-4065.	1.5	3
66	Characterization of Domain Ordering in Polymer and Dendrimer Thin Films Using Photoluminescence and Third Harmonic Generation (THG) Near-field Scanning Optical Microscopy (NSOM). Japanese Journal of Applied Physics, 2003, 42, 4799-4803.	0.8	2
67	Synthesis and functionalization of non-toxic visible-emitting nanocrystals. Proceedings of SPIE, 2008,	0.8	1
68	Effects of surface chemistry and shape on nonlinear absorption, scattering, and refraction of PbSe nanocrystals. Proceedings of SPIE, 2011, , .	0.8	1
69	Safe Synthesis of InP Quantum Dots for Biological Applications. ECS Meeting Abstracts, 2021, MA2021-01, 915-915.	0.0	0
70	(Invited) Non-Blinking Long Lifetime Quantum Dots and Passive Cell Delivery Strategies. ECS Meeting Abstracts, 2021, MA2021-01, 914-914.	0.0	0
71	Whole Specimen Analysis of Lead Chalcogenide Nanostructure Morphologies: Implications for Alternative Energy Generation. ACS Applied Nano Materials, 0, , .	2.4	O