Andrew M Smith

List of Publications by Year
in descending order

72 papers	10,961 citations	109137 35 h-index	85405 71 g-index
75 all docs	75 docs citations	75 times ranked	16370 citing authors

#	Article	IF	Citations
1	Dextran-Mimetic Quantum Dots for Multimodal Macrophage Imaging In Vivo, Ex Vivo, and In Situ. ACS Nano, 2022, 16, 1999-2012.	7.3	17
2	Structural Design of Multidentate Copolymers as Compact Quantum Dot Coatings for Live-Cell Single-Particle Imaging. Chemistry of Materials, 2022, 34, 4621-4632.	3.2	2
3	Rapid quantification of microRNA-375 through one-pot primer-generating rolling circle amplification. Analyst, The, 2022, 147, 2936-2941.	1.7	1
4	Nanocarriers targeting adipose macrophages increase glucocorticoid anti-inflammatory potency to ameliorate metabolic dysfunction. Biomaterials Science, 2021, 9, 506-518.	2.6	12
5	Fluorescence In Situ Hybridization with Quantum Dot Labels in E. coli Cells. Methods in Molecular Biology, 2021, 2246, 141-155.	0.4	0
6	3D microscopy and deep learning reveal the heterogeneity of crown-like structure microenvironments in intact adipose tissue. Science Advances, 2021, 7, .	4.7	31
7	Inorganic-Ligand Quantum Dots Meet Inorganic-Ligand Semiconductor Nanoplatelets: A Promising Fusion to Construct All-Inorganic Assembly. Inorganic Chemistry, 2021, 60, 6994-6998.	1.9	0
8	Three-dimensional microscale hanging drop arrays with geometric control for drug screening and live tissue imaging. Science Advances, 2021, 7, .	4.7	34
9	Construction, release and cellular imaging application of triethylamine-responsive fluorescent quantum dots based on supramolecular self-assembly. European Polymer Journal, 2021, 148, 110353.	2.6	1
10	Antibody Self-Assembly Maximizes Cytoplasmic Immunostaining Accuracy of Compact Quantum Dots. Chemistry of Materials, 2021, 33, 4877-4889.	3.2	2
11	Multimodal Nanocarrier Probes Reveal Superior Biodistribution Quantification by Isotopic Analysis over Fluorescence. ACS Nano, 2020, 14, 509-523.	7.3	23
12	Optimizing Quantum Dot Probe Size for Single-Receptor Imaging. ACS Nano, 2020, 14, 8343-8358.	7.3	16
13	Zwitterion and Oligo(ethylene glycol) Synergy Minimizes Nonspecific Binding of Compact Quantum Dots. ACS Nano, 2020, 14, 3227-3241.	7.3	20
14	Short-Wave Infrared Quantum Dots with Compact Sizes as Molecular Probes for Fluorescence Microscopy. Journal of the American Chemical Society, 2020, 142, 3449-3462.	6.6	30
15	High-Fidelity Single Molecule Quantification in a Flow Cytometer Using Multiparametric Optical Analysis. ACS Nano, 2020, 14, 2324-2335.	7.3	22
16	Epigenetic regulation of the PGE2 pathway modulates macrophage phenotype in normal and pathologic wound repair. JCI Insight, 2020, 5, .	2.3	37
17	Compact Quantum Dots for Quantitative Cytology. Methods in Molecular Biology, 2020, 2064, 147-158.	0.4	1
18	Digital-resolution detection of microRNA with single-base selectivity by photonic resonator absorption microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19362-19367.	3.3	48

#	Article	IF	Citations
19	Counting growth factors in single cells with infrared quantum dots to measure discrete stimulation distributions. Nature Communications, 2019, 10, 909.	5.8	17
20	Pixelated spatial gene expression analysis from tissue. Nature Communications, 2018, 9, 202.	5.8	24
21	Enhanced mRNA FISH with compact quantum dots. Nature Communications, 2018, 9, 4461.	5.8	35
22	Expanding the Dynamic Range of Fluorescence Assays through Single-Molecule Counting and Intensity Calibration. Journal of the American Chemical Society, 2018, 140, 13904-13912.	6.6	29
23	Structural Contributions to Hydrodynamic Diameter for Quantum Dots Optimized for Live-Cell Single-Molecule Tracking. Journal of Physical Chemistry C, 2018, 122, 17406-17412.	1.5	10
24	Single quantum dot tracking reveals the impact of nanoparticle surface on intracellular state. Nature Communications, 2018, 9, 1830.	5.8	38
25	Optical determination of crystal phase in semiconductor nanocrystals. Nature Communications, 2017, 8, 14849.	5.8	29
26	Compact characterization of liquid absorption and emission spectra using linear variable filters integrated with a CMOS imaging camera. Scientific Reports, 2016, 6, 29117.	1.6	20
27	Quantum dot surface engineering: Toward inert fluorophores with compact size and bright, stable emission. Coordination Chemistry Reviews, 2016, 320-321, 216-237.	9.5	74
28	Measuring and Predicting the Internal Structure of Semiconductor Nanocrystals through Raman Spectroscopy. Journal of the American Chemical Society, 2016, 138, 10887-10896.	6.6	38
29	Efficient Targeting of Adipose Tissue Macrophages in Obesity with Polysaccharide Nanocarriers. ACS Nano, 2016, 10, 6952-6962.	7.3	82
30	Multidentate Polymer Coatings for Compact and Homogeneous Quantum Dots with Efficient Bioconjugation. Journal of the American Chemical Society, 2016, 138, 3382-3394.	6.6	70
31	Lipoprotein Nanoplatelets: Brightly Fluorescent, Zwitterionic Probes with Rapid Cellular Entry. Journal of the American Chemical Society, 2016, 138, 64-67.	6.6	17
32	Rapid 3D Extrusion of Synthetic Tumor Microenvironments. Advanced Materials, 2015, 27, 5512-5517.	11.1	124
33	Physical Chemistry of Nanomedicine: Understanding the Complex Behaviors of Nanoparticles in Vivo. Annual Review of Physical Chemistry, 2015, 66, 521-547.	4.8	146
34	Activatable and Cell-Penetrable Multiplex FRET Nanosensor for Profiling MT1-MMP Activity in Single Cancer Cells. Nano Letters, 2015, 15, 5025-5032.	4.5	50
35	Brightness-equalized quantum dots: Engineering strategies derived from spectral trends. Proceedings of SPIE, 2015, , .	0.8	0
36	Brightness-equalized quantum dots. Nature Communications, 2015, 6, 8210.	5.8	105

#	Article	IF	Citations
37	Multiscale Imaging of Nanoparticle Drug Delivery. Current Drug Targets, 2015, 16, 560-570.	1.0	15
38	The more exotic shapes of semiconductor nanocrystals: emerging applications in bioimaging. Current Opinion in Chemical Engineering, 2014, 4, 137-143.	3.8	18
39	Stable Small Quantum Dots for Synaptic Receptor Tracking on Live Neurons. Angewandte Chemie - International Edition, 2014, 53, 12484-12488.	7.2	60
40	Small Quantum Dots Conjugated to Nanobodies as Immunofluorescence Probes for Nanometric Microscopy. Bioconjugate Chemistry, 2014, 25, 2205-2211.	1.8	29
41	Compact and Blinking-Suppressed Quantum Dots for Single-Particle Tracking in Live Cells. Journal of Physical Chemistry B, 2014, 118, 14140-14147.	1.2	61
42	Mapping the spatial distribution of charge carriers in quantum-confined heterostructures. Nature Communications, 2014, 5, 4506.	5.8	57
43	Development of Stable Small Quantum Dots for AMPA Receptor Tracking at Neuronal Synapses. Biophysical Journal, 2014, 106, 605a-606a.	0.2	2
44	Nanoparticles for Combination Drug Therapy. ACS Nano, 2013, 7, 9518-9525.	7.3	306
45	Semiconductor Quantum Dots for Bioimaging and Biodiagnostic Applications. Annual Review of Analytical Chemistry, 2013, 6, 143-162.	2.8	559
46	Compact Quantum Dots for Single-molecule Imaging. Journal of Visualized Experiments, 2012, , .	0.2	10
47	Bright and Compact Alloyed Quantum Dots with Broadly Tunable Near-Infrared Absorption and Fluorescence Spectra through Mercury Cation Exchange. Journal of the American Chemical Society, 2011, 133, 24-26.	6.6	155
48	Semiconductor Nanocrystals: Structure, Properties, and Band Gap Engineering. Accounts of Chemical Research, 2010, 43, 190-200.	7.6	1,517
49	Size-Minimized Quantum Dots for Molecular and Cellular Imaging. Springer Series in Chemical Physics, 2010, , 187-201.	0.2	1
50	The bright future: Imaging dynamic cellular events with quantum dots. Biochemist, 2010, 32, 12-17.	0.2	17
51	Imaging dynamic cellular events with quantum dots The bright future. Biochemist, 2010, 32, 12.	0.2	8
52	Proton-resistant quantum dots: Stability in gastrointestinal fluids and implications for oral delivery of nanoparticle agents. Nano Research, 2009, 2, 500-508.	5.8	44
53	Next-generation quantum dots. Nature Biotechnology, 2009, 27, 732-733.	9.4	159
54	Tuning the optical and electronic properties of colloidal nanocrystals by lattice strain. Nature Nanotechnology, 2009, 4, 56-63.	15.6	695

#	Article	IF	Citations
55	Second window for in vivo imaging. Nature Nanotechnology, 2009, 4, 710-711.	15.6	2,257
56	Nanocrystal Synthesis in an Amphibious Bath: Spontaneous Generation of Hydrophilic and Hydrophobic Surface Coatings. Angewandte Chemie - International Edition, 2008, 47, 9916-9921.	7.2	37
57	Minimizing the Hydrodynamic Size of Quantum Dots with Multifunctional Multidentate Polymer Ligands. Journal of the American Chemical Society, 2008, 130, 11278-11279.	6.6	193
58	Bioconjugated quantum dots for in vivo molecular and cellular imagingâˆ†. Advanced Drug Delivery Reviews, 2008, 60, 1226-1240.	6.6	1,067
59	One-Pot Synthesis, Encapsulation, and Solubilization of Size-Tuned Quantum Dots with Amphiphilic Multidentate Ligands. Journal of the American Chemical Society, 2008, 130, 12866-12867.	6.6	81
60	Minimizing Nonspecific Cellular Binding of Quantum Dots with Hydroxyl-Derivatized Surface Coatings. Analytical Chemistry, 2008, 80, 3029-3034.	3.2	129
61	Oxidative Quenching and Degradation of Polymer-Encapsulated Quantum Dots: New Insights into the Long-Term Fate and Toxicity of Nanocrystals in Vivo. Journal of the American Chemical Society, 2008, 130, 10836-10837.	6.6	261
62	Quantum dots and multifunctional nanoparticles: new contrast agents for tumor imaging. Nanomedicine, 2006, 1, 209-217.	1.7	201
63	Multicolor quantum dots for molecular diagnostics of cancer. Expert Review of Molecular Diagnostics, 2006, 6, 231-244.	1.5	322
64	A systematic examination of surface coatings on the optical and chemical properties of semiconductor quantum dots. Physical Chemistry Chemical Physics, 2006, 8, 3895.	1.3	413
65	Engineering Luminescent Quantum Dots for In Vivo Molecular and Cellular Imaging. Annals of Biomedical Engineering, 2006, 34, 3-14.	1.3	175
66	Molecular profiling of single cancer cells and clinical tissue specimens with semiconductor quantum dots. International Journal of Nanomedicine, 2006, 1, 473-481.	3.3	41
67	Quantum Dot Nanocrystals for In Vivo Molecular and Cellular ImagingÂ¶. Photochemistry and Photobiology, 2004, 80, 377.	1.3	148
68	Quantum dots in biology and medicine. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 25, 1-12.	1.3	337
69	Chemical analysis and cellular imaging with quantum dots. Analyst, The, 2004, 129, 672.	1.7	216
70	Quantum Dot Nanocrystals for In Vivo Molecular and Cellular Imaging^{Â¶}. Photochemistry and Photobiology, 2004, 80, 377-385.	1.3	9
71	Quantum Dot Nanocrystals for In Vivo Molecular and Cellular ImagingÂ¶. Photochemistry and Photobiology, 2004, 80, 377.	1.3	128
72	Regulation of tubulin polypeptides and microtubule function: Rki1p interacts with the Î²-tubulin binding protein Rbl2p. Chromosoma, 1998, 107, 471-478.	1.0	15