James B Delehanty

List of Publications by Year
in descending order

96 papers	6,919 citations	71102 41 h-index	58581 82 g-index
99 all docs	99 docs citations	99 times ranked	8840 citing authors

#	Article	IF	Citations
1	Liquid Crystal Nanoparticle Conjugates for Scavenging Reactive Oxygen Species in Live Cells. Pharmaceuticals, 2022, 15, 604.	3.8	4
2	Determining the Cytosolic Stability of Small DNA Nanostructures <i>In Cellula</i>. Nano Letters, 2022, 22, 5037-5045.	9.1	14
3	Sensing Nitric Oxide in Cells: Historical Technologies and Future Outlook. ACS Sensors, 2021, 6, 1695-1703.	7.8	18
4	Hydrodynamic Focusing-Enabled Blood Vessel Fabrication for in Vitro Modeling of Neural Surrogates. Journal of Medical and Biological Engineering, 2021, 41, 456-469.	1.8	1
5	In Situ Selfâ€Assembly of Quantum Dots at the Plasma Membrane Mediates Energy Transferâ€Based Activation of Channelrhodopsin. Particle and Particle Systems Characterization, 2021, 38, 2100053.	2.3	0
6	Quantum dot-enabled membrane-tethering and enhanced photoactivation of chlorin-e6. Journal of Nanoparticle Research, 2021, 23, 1.	1.9	1
7	Gold-Nanoparticle-Mediated Depolarization of Membrane Potential Is Dependent on Concentration and Tethering Distance from the Plasma Membrane. Bioconjugate Chemistry, 2020, 31, 567-576.	3.6	8
8	Recent Progress in Bioconjugation Strategies for Liposome-Mediated Drug Delivery. Molecules, 2020, 25, 5672.	3.8	124
9	Anionic Conjugated Polyelectrolytes for FRETâ€based Imaging of Cellular Membrane Potential. Photochemistry and Photobiology, 2020, 96, 834-844.	2.5	5
10	Nanoparticle-Mediated Visualization and Control of Cellular Membrane Potential: Strategies, Progress, and Remaining Issues. ACS Nano, 2020, 14, 2659-2677.	14.6	35
11	Semiconductor Quantum Dots for Visualization and Sensing in Neuronal Cell Systems. Neuromethods, 2020, , 1-18.	0.3	5
12	Active Cellular and Subcellular Targeting of Nanoparticles for Drug Delivery. Pharmaceutics, 2019, 11, 543.	4.5	72
13	Mechanisms of Actively Triggered Drug Delivery from Hard Nanoparticle Carriers. ACS Symposium Series, 2019, , 157-185.	0.5	0
14	Display of Potassium Channelâ€“Blocking Tertiapinâ€Q Peptides on Gold Nanoparticles Enhances Depolarization of Cellular Membrane Potential. Particle and Particle Systems Characterization, 2019, 36, 1800493.	2.3	6
15	Nanoparticleâ€“Peptideâ€“Drug Bioconjugates for Unassisted Defeat of Multidrug Resistance in a Model Cancer Cell Line. Bioconjugate Chemistry, 2019, 30, 525-530.	3.6	23
16	Cholesterol Functionalization of Gold Nanoparticles Enhances Photoactivation of Neural Activity. ACS Chemical Neuroscience, 2019, 10, 1478-1487.	3.5	33
17	Evaluating the potential of using quantum dots for monitoring electrical signals in neurons. Nature Nanotechnology, 2018, 13, 278-288.	31.5	96
18	Utility of PEGylated dithiolane ligands for direct synthesis of water-soluble Au, Ag, Pt, Pd, Cu and AuPt nanoparticles. Chemical Communications, 2018, 54, 1956-1959.	4.1	12

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19	Cellular delivery of doxorubicin mediated by disulfide reduction of a peptide-dendrimer bioconjugate. International Journal of Pharmaceutics, 2018, 545, 64-73.	5.2	14
20	Intracellularly Actuated Quantum Dotâ€"Peptideâ€"Doxorubicin Nanobioconjugates for Controlled Drug Delivery via the Endocytic Pathway. Bioconjugate Chemistry, 2018, 29, 136-148.	3.6	44
21	Synthesis of a Reactive Oxygen Species-Responsive Doxorubicin Derivative. Molecules, 2018, 23, 1809.	3.8	5
22	A Quantum Dot-Protein Bioconjugate That Provides for Extracellular Control of Intracellular Drug Release. Bioconjugate Chemistry, 2018, 29, 2455-2467.	3.6	23
23	The role of nanoparticles in the improvement of systemic anticancer drug delivery. Therapeutic Delivery, 2018, 9, 527-545.	2.2	8
24	Hybrid Liquid Crystal Nanocarriers for Enhanced Zinc Phthalocyanine-Mediated Photodynamic Therapy. Bioconjugate Chemistry, 2018, 29, 2701-2714.	3.6	14
25	Nanoparticle bioconjugate for controlled cellular delivery of doxorubicin. , 2018, , .		0
26	Energy Transfer with Semiconductor Quantum Dot Bioconjugates: A Versatile Platform for Biosensing, Energy Harvesting, and Other Developing Applications. Chemical Reviews, 2017, 117, 536-711.	47.7	575
27	Semiconductor quantum dots as FÃ¶rster resonance energy transfer donors for intracellularly-based biosensors. , 2017, , .		1
28	Cellular Applications of Semiconductor Quantum Dots at the U.S. Naval Research Laboratory: 2006â€"2016. Reviews in Fluorescence, 2017, , 203-242.	0.5	0
29	Quantum Dotâ€"Peptideâ€"Fullerene Bioconjugates for Visualization of <i>in Vitro</i> and <i>in Vivo</i> Cellular Membrane Potential. ACS Nano, 2017, 11, 5598-5613.	14.6	68
30	Multifunctional nanoparticle composites: progress in the use of soft and hard nanoparticles for drug delivery and imaging. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2017, 9, e1466.	6.1	57
31	Targeting therapeutics to the plasma membrane: opportunities for nanoparticle-mediated delivery abound. Therapeutic Delivery, 2017, 8, 235-237.	2.2	3
32	Purple-, Blue-, and Green-Emitting Multishell Alloyed Quantum Dots: Synthesis, Characterization, and Application for Ratiometric Extracellular pH Sensing. Chemistry of Materials, 2017, 29, 7330-7344.	6.7	74
33	Targeted Plasma Membrane Delivery of a Hydrophobic Cargo Encapsulated in a Liquid Crystal Nanoparticle Carrier. Journal of Visualized Experiments, 2017, , .	0.3	2
34	Nanoparticle cellular uptake by dendritic wedge peptides: achieving single peptide facilitated delivery. Nanoscale, 2017, 9, 10447-10464.	5.6	28
35	Cover Image, Volume 9, Issue 6. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2017, 9, e1501.	6.1	1
36	Emerging Physicochemical Phenomena along with New Opportunities at the Biomolecularâ€"Nanoparticle Interface. Journal of Physical Chemistry Letters, 2016, 7, 2139-2150.	4.6	41

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37	Nanomaterial-based sensors for the detection of biological threat agents. Materials Today, 2016, 19, 464-477.	14.2	67
38	Controlled actuation of therapeutic nanoparticles: an update on recent progress. Therapeutic Delivery, 2016, 7, 335-352.	2.2	15
39	Quantum dotâ€mediated delivery of siRNA to inhibit sphingomyelinase activities in brainâ€derived cells. Journal of Neurochemistry, 2016, 139, 872-885.	3.9	19
40	Lipid Raft-Mediated Membrane Tethering and Delivery of Hydrophobic Cargos from Liquid Crystal-Based Nanocarriers. Bioconjugate Chemistry, 2016, 27, 982-993.	3.6	14
41	The influence of cell penetrating peptide branching on cellular uptake of QDs. , 2016, , .		1
42	A Label-free Technique for the Spatio-temporal Imaging of Single Cell Secretions. Journal of Visualized Experiments, 2015, , .	0.3	3
43	Modulation of Intracellular Quantum Dot to Fluorescent Protein FÃ¶rster Resonance Energy Transfer via Customized Ligands and Spatial Control of Donorâ€"Acceptor Assembly. Sensors, 2015, 15, 30457-30468.	3.8	12
44	Intracellular FRET-based probes: a review. Methods and Applications in Fluorescence, 2015, 3, 042006.	2.3	80
45	Delivery and Tracking of Quantum Dot Peptide Bioconjugates in an Intact Developing Avian Brain. ACS Chemical Neuroscience, 2015, 6, 494-504.	3.5	67
46	Optimizing Nanoplasmonic Biosensor Sensitivity with Orientated Single Domain Antibodies. Plasmonics, 2015, 10, 1649-1655.	3.4	15
47	Membrane-targeting peptides for nanoparticle-facilitated cellular imaging and analysis. Proceedings of SPIE, 2015, , .	0.8	1
48	Peptides for Specifically Targeting Nanoparticles to Cellular Organelles: <i>Quo Vadis</i>?. Accounts of Chemical Research, 2015, 48, 1380-1390.	15.6	118
49	Electric Field Modulation of Semiconductor Quantum Dot Photoluminescence: Insights Into the Design of Robust Voltage-Sensitive Cellular Imaging Probes. Nano Letters, 2015, 15, 6848-6854.	9.1	85
50	Examining the Polyproline Nanoscopic Ruler in the Context of Quantum Dots. Chemistry of Materials, 2015, 27, 6222-6237.	6.7	30
51	The Role of Negative Charge in the Delivery of Quantum Dots to Neurons. ASN Neuro, 2015, 7, 175909141559238.	2.7	39
52	Continuing progress toward controlled intracellular delivery of semiconductor quantum dots. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2015, 7, 131-151.	6.1	36
53	In vitro interaction of colloidal nanoparticles with mammalian cells: What have we learned thus far?. Beilstein Journal of Nanotechnology, 2014, 5, 1477-1490.	2.8	130
54	Controlling the intracellular fate of nano-bioconjugates: pathways for realizing nanoparticle-mediated theranostics. Proceedings of SPIE, 2014, , .	0.8	0

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55	Peptide-Functionalized Quantum Dot Biosensors. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 115-126.	2.9	11
56	Quantum dotâ€"based multiphoton fluorescent pipettes for targeted neuronal electrophysiology. Nature Methods, 2014, 11, 1237-1241.	19.0	70
57	A New Family of Pyridine-Appended Multidentate Polymers As Hydrophilic Surface Ligands for Preparing Stable Biocompatible Quantum Dots. Chemistry of Materials, 2014, 26, 5327-5344.	6.7	94
58	Multifunctional Liquid Crystal Nanoparticles for Intracellular Fluorescent Imaging and Drug Delivery. ACS Nano, 2014, 8, 6986-6997.	14.6	57
59	Evaluation of diverse peptidyl motifs for cellular delivery of semiconductor quantum dots. Analytical and Bioanalytical Chemistry, 2013, 405, 6145-6154.	3.7	26
60	Controlled actuation of therapeutic nanoparticles: moving beyond passive delivery modalities. Therapeutic Delivery, 2013, 4, 127-129.	2.2	7
61	Cytotoxicity of Quantum Dots Used for <i>In Vitro</i> Cellular Labeling: Role of QD Surface Ligand, Delivery Modality, Cell Type, and Direct Comparison to Organic Fluorophores. Bioconjugate Chemistry, 2013, 24, 1570-1583.	3.6	113
62	Recent development of dihydrolipoic acid appended ligands for robust and biocompatible quantum dots. Proceedings of SPIE, 2013, , .	0.8	1
63	PEGylated Luminescent Gold Nanoclusters: Synthesis, Characterization, Bioconjugation, and Application to Oneâ€•and Twoâ€Photon Cellular Imaging. Particle and Particle Systems Characterization, 2013, 30, 453-466.	2.3	108
64	Site-specific cellular delivery of quantum dots with chemoselectively-assembled modular peptides. Chemical Communications, 2013, 49, 7878.	4.1	37
65	Selecting Improved Peptidyl Motifs for Cytosolic Delivery of Disparate Protein and Nanoparticle Materials. ACS Nano, 2013, 7, 3778-3796.	14.6	124
66	Optimizing Protein Coordination to Quantum Dots with Designer Peptidyl Linkers. Bioconjugate Chemistry, 2013, 24, 269-281.	3.6	45
67	Fluorescent nanocolloids for differential labeling of the endocytic pathway and drug delivery applications. Proceedings of SPIE, 2013, , .	0.8	0
68	Controlling the actuation of therapeutic nanomaterials: enabling nanoparticle-mediated drug delivery. Therapeutic Delivery, 2013, 4, 1411-1429.	2.2	19
69	Nanoparticle Targeting to Neurons in a Rat Hippocampal Slice Culture Model. ASN Neuro, 2012, 4, AN20120042.	2.7	61
70	Active cellular sensing with quantum dots: Transitioning from research tool to reality; a review. Analytica Chimica Acta, 2012, 750, 63-81.	5.4	71
71	Quantum Dots and Fluorescent Protein FRET-Based Biosensors. Advances in Experimental Medicine and Biology, 2012, 733, 63-74.	1.6	25
72	Elaborate Nanoparticleâ€Based Traps for Catching Cytosolic Players in the Act. ChemBioChem, 2012, 13, 30-33.	2.6	4

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73	Multifunctional Compact Zwitterionic Ligands for Preparing Robust Biocompatible Semiconductor Quantum Dots and Gold Nanoparticles. Journal of the American Chemical Society, 2011, 133, 9480-9496.	13.7	276
74	Cellular Uptake and Fate of PEGylated Gold Nanoparticles Is Dependent on Both Cell-Penetration Peptides and Particle Size. ACS Nano, 2011, 5, 6434-6448.	14.6	381
75	Semiconductor Quantum Dots in Bioanalysis: Crossing the Valley of Death. Analytical Chemistry, 2011, 83, 8826-8837.	6.5	318
76	Spatiotemporal Multicolor Labeling of Individual Cells Using Peptide-Functionalized Quantum Dots and Mixed Delivery Techniques. Journal of the American Chemical Society, 2011, 133, 10482-10489.	13.7	115
77	Reactive Semiconductor Nanocrystals for Chemoselective Biolabeling and Multiplexed Analysis. ACS Nano, 2011, 5, 5579-5593.	14.6	80
78	Multidentate Poly(ethylene glycol) Ligands Provide Colloidal Stability to Semiconductor and Metallic Nanocrystals in Extreme Conditions. Journal of the American Chemical Society, 2010, 132, 9804-9813.	13.7	187
79	Quantum-dot/dopamine bioconjugates function as redox coupled assemblies for in vitro and intracellular pH sensing. Nature Materials, 2010, 9, 676-684.	27.5	433
80	Peptides for specific intracellular delivery and targeting of nanoparticles: implications for developing nanoparticle-mediated drug delivery. Therapeutic Delivery, 2010, 1, 411-433.	2.2	87
81	Combining Chemoselective Ligation with Polyhistidine-Driven Self-Assembly for the Modular Display of Biomolecules on Quantum Dots. ACS Nano, 2010, 4, 267-278.	14.6	91
82	Delivering quantum dot-peptide bioconjugates to the cellular cytosol: escaping from the endolysosomal system. Integrative Biology (United Kingdom), 2010, 2, 265.	1.3	124
83	Modification of Poly(ethylene glycol)-Capped Quantum Dots with Nickel Nitrilotriacetic Acid and Self-Assembly with Histidine-Tagged Proteins. Journal of Physical Chemistry C, 2010, 114, 13526-13531.	3.1	43
84	Intracellular Bioconjugation of Targeted Proteins with Semiconductor Quantum Dots. Journal of the American Chemical Society, 2010, 132, 5975-5977.	13.7	92
85	Quantum dots: a powerful tool for understanding the intricacies of nanoparticle-mediated drug delivery. Expert Opinion on Drug Delivery, 2009, 6, 1091-1112.	5.0	94
86	Delivering quantum dots into cells: strategies, progress and remaining issues. Analytical and Bioanalytical Chemistry, 2009, 393, 1091-1105.	3.7	312
87	Immobilized Proanthocyanidins for the Capture of Bacterial Lipopolysaccharides. Analytical Chemistry, 2008, 80, 2113-2117.	6.5	28
88	Modular poly(ethylene glycol) ligands for biocompatible semiconductor and gold nanocrystals with extended pH and ionic stability. Journal of Materials Chemistry, 2008, 18, 4949.	6.7	205
89	Intracellular Delivery of Quantum Dotâ˘Protein Cargos Mediated by Cell Penetrating Peptides. Bioconjugate Chemistry, 2008, 19, 1785-1795.	3.6	155
90	New Biological Activities of Plant Proanthocyanidins. ACS Symposium Series, 2008, , 101-114.	0.5	0

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91	Enhancing the Stability and Biological Functionalities of Quantum Dots via Compact Multifunctional Ligands. Journal of the American Chemical Society, 2007, 129, 13987-13996.	13.7	486
92	Binding and Neutralization of Lipopolysaccharides by Plant Proanthocyanidins. Journal of Natural Products, 2007, 70, 1718-1724.	3.0	58
93	Self-Assembled Quantum Dotâ˜'Peptide Bioconjugates for Selective Intracellular Delivery. Bioconjugate Chemistry, 2006, 17, 920-927.	3.6	246
94	RNA hydrolysis and inhibition of translation by a Co(III)-cyclen complex. Rna, 2005, 11, 831-836.	3.5	21
95	Printing Functional Protein Microarrays Using Piezoelectric Capillaries. , 2004, 264, 135-144.		18
96	Transfected Cell Microarrays for the Expression of Membrane-Displayed Single-Chain Antibodies. Analytical Chemistry, 2004, 76, 7323-7328.	6.5	45