Warren W C Chan

List of Publications by Year
in descending order

156 papers	47,630 citations	9254 74 h-index	7511 151 g-index
167 all docs	167 docs citations	167 times ranked	47813 citing authors

#	Article	IF	Citations
1	The Impact of Patient Characteristics on Diagnostic Test Performance. Small Methods, 2022, , 2101233.	4.6	0
2	Impact of Tumor Barriers on Nanoparticle Delivery to Macrophages. Molecular Pharmaceutics, 2022, 19, 1917-1925.	2.3	7
3	Tanks and Truth. ACS Nano, 2022, 16, 4975-4976.	7.3	0
4	Why nanoparticles prefer liver macrophage cell uptake in vivo. Advanced Drug Delivery Reviews, 2022, 185, 114238.	6.6	66
5	Gold Nanoparticle Smartphone Platform for Diagnosing Urinary Tract Infections. ACS Nanoscience Au, 2022, 2, 324-332.	2.0	7
6	Macrophages Actively Transport Nanoparticles in Tumors After Extravasation. ACS Nano, 2022, 16, 6080-6092.	7.3	34
7	Subtherapeutic Photodynamic Treatment Facilitates Tumor Nanomedicine Delivery and Overcomes Desmoplasia. Nano Letters, 2021, 21, 344-352.	4.5	28
8	Nanotechnology for modern medicine: next step towards clinical translation. Journal of Internal Medicine, 2021, 290, 486-498.	2.7	88
9	Diagnosing Antibiotic Resistance Using Nucleic Acid Enzymes and Gold Nanoparticles. ACS Nano, 2021, 15, 9379-9390.	7.3	44
10	A Colorimetric Test to Differentiate Patients Infected with Influenza from COVIDâ€19. Small Structures, 2021, 2, 2100034.	6.9	19
11	Surveilling and Tracking COVID-19 Patients Using a Portable Quantum Dot Smartphone Device. Nano Letters, 2021, 21, 5209-5216.	4.5	38
12	Specific Endothelial Cells Govern Nanoparticle Entry into Solid Tumors. ACS Nano, 2021, 15, 14080-14094.	7.3	60
13	Endothelialized collagen based pseudo-islets enables tuneable subcutaneous diabetes therapy. Biomaterials, 2020, 232, 119710.	5.7	37
14	DNA-Controlled Encapsulation of Small Molecules in Protein Nanoparticles. Journal of the American Chemical Society, 2020, 142, 17938-17943.	6.6	11
15	The dose threshold for nanoparticle tumour delivery. Nature Materials, 2020, 19, 1362-1371.	13.3	295
16	A framework for designing delivery systems. Nature Nanotechnology, 2020, 15, 819-829.	15.6	305
17	Flow Rate Affects Nanoparticle Uptake into Endothelial Cells. Advanced Materials, 2020, 32, e1906274.	11.1	69
18	Suppressing Subcapsular Sinus Macrophages Enhances Transport of Nanovaccines to Lymph Node Follicles for Robust Humoral Immunity. ACS Nano, 2020, 14, 9478-9490.	7.3	33

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19	Diagnosing COVID-19: The Disease and Tools for Detection. ACS Nano, 2020, 14, 3822-3835.	7.3	1,360
20	Nano Research for COVID-19. ACS Nano, 2020, 14, 3719-3720.	7.3	97
21	Tunable and precise miniature lithium heater for point-of-care applications. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4632-4641.	3.3	5
22	Liposome Imaging in Optically Cleared Tissues. Nano Letters, 2020, 20, 1362-1369.	4.5	28
23	The entry of nanoparticles into solid tumours. Nature Materials, 2020, 19, 566-575.	13.3	1,036
24	Nanoparticle Uptake in a Spontaneous and Immunocompetent Woodchuck Liver Cancer Model. ACS Nano, 2020, 14, 4698-4715.	7.3	20
25	Transcribing In Vivo Blood Vessel Networks into In Vitro Perfusable Microfluidic Devices. Advanced Materials Technologies, 2020, 5, 2000103.	3.0	16
26	An Analysis of the Binding Function and Structural Organization of the Protein Corona. Journal of the American Chemical Society, 2020, 142, 8827-8836.	6.6	96
27	Growing Contributions of Nano in 2020. ACS Nano, 2020, 14, 16163-16164.	7.3	1
28	Engineering Steps for Mobile Point-of-Care Diagnostic Devices. Accounts of Chemical Research, 2019, 52, 2406-2414.	7.6	43
29	Assessing micrometastases as a target for nanoparticles using 3D microscopy and machine learning. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14937-14946.	3.3	55
30	Nanoparticle Size Influences Antigen Retention and Presentation in Lymph Node Follicles for Humoral Immunity. Nano Letters, 2019, 19, 7226-7235.	4.5	140
31	The Future of Nanotechnology: Cross-disciplined Progress to Improve Health and Medicine. Accounts of Chemical Research, 2019, 52, 2405-2405.	7.6	21
32	Supervised Learning and Mass Spectrometry Predicts the in Vivo Fate of Nanomaterials. ACS Nano, 2019, 13, 8023-8034.	7.3	109
33	Redefining the Experimental and Methods Sections. ACS Nano, 2019, 13, 4862-4864.	7.3	16
34	Elimination Pathways of Nanoparticles. ACS Nano, 2019, 13, 5785-5798.	7.3	343
35	Characterizing the protein corona of sub-10â€¯nm nanoparticles. Journal of Controlled Release, 2019, 304, 102-110.	4.8	38
36	Synthesis of Patient-Specific Nanomaterials. Nano Letters, 2019, 19, 116-123.	4.5	40

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37	Helmuth MÃ¶hwald (1946â€“2018). ACS Nano, 2018, 12, 3053-3055.	7.3	0
38	What Is the Value of Publishing?. ACS Nano, 2018, 12, 6345-6346.	7.3	4
39	Quantifying the Ligand-Coated Nanoparticle Delivery to Cancer Cells in Solid Tumors. ACS Nano, 2018, 12, 8423-8435.	7.3	444
40	Yeast Populations Evolve to Resist CdSe Quantum Dot Toxicity. Bioconjugate Chemistry, 2017, 28, 1205-1213.	1.8	13
41	Nanoscience and Nanotechnology Cross Borders. ACS Nano, 2017, 11, 1123-1126.	7.3	4
42	Peptideâ€“MHC-based nanomedicines for autoimmunity function as T-cell receptor microclustering devices. Nature Nanotechnology, 2017, 12, 701-710.	15.6	114
43	Accelerating Advances in Science, Engineering, and Medicine through Nanoscience and Nanotechnology. ACS Nano, 2017, 11, 3423-3424.	7.3	11
44	Three-Dimensional Imaging of Transparent Tissues via Metal Nanoparticle Labeling. Journal of the American Chemical Society, 2017, 139, 9961-9971.	6.6	60
45	Cancer: Nanoscience and Nanotechnology Approaches. ACS Nano, 2017, 11, 4375-4376.	7.3	24
46	Diverse Applications of Nanomedicine. ACS Nano, 2017, 11, 2313-2381.	7.3	976
47	Nanomedicine 2.0. Accounts of Chemical Research, 2017, 50, 627-632.	7.6	105
48	Phenotype Determines Nanoparticle Uptake by Human Macrophages from Liver and Blood. ACS Nano, 2017, 11, 2428-2443.	7.3	180
49	State of diagnosing infectious pathogens using colloidal nanomaterials. Biomaterials, 2017, 146, 97-114.	5.7	37
50	Our First and Next Decades at ACS Nano. ACS Nano, 2017, 11, 7553-7555.	7.3	0
51	Making vessels more permeable. Nature Biomedical Engineering, 2017, 1, 629-631.	11.6	5
52	Effect of removing Kupffer cells on nanoparticle tumor delivery. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10871-E10880.	3.3	217
53	Simplifying Assays by Tableting Reagents. Journal of the American Chemical Society, 2017, 139, 17341-17349.	6.6	15
54	The Role of Nanoparticle Design in Determining Analytical Performance of Lateral Flow Immunoassays. Nano Letters, 2017, 17, 7207-7212.	4.5	149

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55	Exploring Passive Clearing for 3D Optical Imaging of Nanoparticles in Intact Tissues. Bioconjugate Chemistry, 2017, 28, 253-259.	1.8	39
56	A Big Year Ahead for Nano in 2018. ACS Nano, 2017, 11, 11755-11757.	7.3	1
57	Highly efficient adenoviral transduction of pancreatic islets using a microfluidic device. Lab on A Chip, 2016, 16, 2921-2934.	3.1	16
58	Clarifying intact 3D tissues on a microfluidic chip for high-throughput structural analysis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14915-14920.	3.3	62
59	Nanoscience and Nanotechnology Impacting Diverse Fields of Science, Engineering, and Medicine. ACS Nano, 2016, 10, 10615-10617.	7.3	22
60	Clinical Validation of Quantum Dot Barcode Diagnostic Technology. ACS Nano, 2016, 10, 4742-4753.	7.3	107
61	Three-Dimensional Optical Mapping of Nanoparticle Distribution in Intact Tissues. ACS Nano, 2016, 10, 5468-5478.	7.3	73
62	A versatile plasmonic thermogel for disinfection of antimicrobial resistant bacteria. Biomaterials, 2016, 97, 154-163.	5.7	29
63	Tuning the Drug Loading and Release of DNAâ€Assembled Goldâ€Nanorod Superstructures. Advanced Materials, 2016, 28, 8511-8518.	11.1	88
64	Patients, Here Comes More Nanotechnology. ACS Nano, 2016, 10, 8139-8142.	7.3	43
65	Mechanism of hard-nanomaterial clearance by theÂliver. Nature Materials, 2016, 15, 1212-1221.	13.3	686
66	Analysis of nanoparticle delivery to tumours. Nature Reviews Materials, 2016, 1, .	23.3	3,393
67	Controlling DNAâ€“nanoparticle serum interactions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13600-13605.	3.3	62
68	Reply to â€œEvaluation of nanomedicines: stick to the basicsâ€• Nature Reviews Materials, 2016, 1, .	23.3	35
69	Thermal Contrast Amplification Reader Yielding 8-Fold Analytical Improvement for Disease Detection with Lateral Flow Assays. Analytical Chemistry, 2016, 88, 11774-11782.	3.2	81
70	Quantitative Comparison of Photothermal Heat Generation between Gold Nanospheres and Nanorods. Scientific Reports, 2016, 6, 29836.	1.6	114
71	Nanoparticleâ€“liver interactions: Cellular uptake and hepatobiliary elimination. Journal of Controlled Release, 2016, 240, 332-348.	4.8	869
72	DNA-controlled dynamic colloidal nanoparticle systems for mediating cellular interaction. Science, 2016, 351, 841-845.	6.0	180

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73	Tailoring nanoparticle designs to target cancer based on tumor pathophysiology. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1142-51.	3.3	228
74	Engineering the Structure and Properties of DNA-Nanoparticle Superstructures Using Polyvalent Counterions. Journal of the American Chemical Society, 2016, 138, 4565-4572.	6.6	46
75	Improving nanoparticle diffusion through tumor collagen matrix by photo-thermal gold nanorods. Nanoscale, 2016, 8, 12524-12530.	2.8	85
76	Guiding principles for a successful multidisciplinary research collaboration. Future Science OA, 2015, 1, FSO7.	0.9	6
77	How Nanoparticles Interact with Cancer Cells. Cancer Treatment and Research, 2015, 166, 227-244.	0.2	16
78	Integrated Quantum Dot Barcode Smartphone Optical Device for Wireless Multiplexed Diagnosis of Infected Patients. ACS Nano, 2015, 9, 3060-3074.	7.3	157
79	Prediction of nanoparticles-cell association based on corona proteins and physicochemical properties. Nanoscale, 2015, 7, 9664-9675.	2.8	118
80	Nanoparticleâ€“blood interactions: the implications on solid tumour targeting. Chemical Communications, 2015, 51, 2756-2767.	2.2	226
81	Protein Corona Fingerprinting Predicts the Cellular Interaction of Gold and Silver Nanoparticles. ACS Nano, 2014, 8, 2439-2455.	7.3	693
82	Nanoparticle exposure in animals can be visualized in the skin and analysed via skin biopsy. Nature Communications, 2014, 5, 3796.	5.8	106
83	Investigating the Impact of Nanoparticle Size on Active and Passive Tumor Targeting Efficiency. ACS Nano, 2014, 8, 5696-5706.	7.3	528
84	Secreted Biomolecules Alter the Biological Identity and Cellular Interactions of Nanoparticles. ACS Nano, 2014, 8, 5515-5526.	7.3	225
85	DNA assembly of nanoparticle superstructures for controlled biological delivery and elimination. Nature Nanotechnology, 2014, 9, 148-155.	15.6	385
86	Realâ€time monitoring and control of soluble signaling factors enables enhanced progenitor cell outputs from human cord blood stem cell cultures. Biotechnology and Bioengineering, 2014, 111, 1258-1264.	1.7	13
87	Quantum Dots for Traceable Therapeutic Delivery. , 2014, , 393-417.		2
88	A Call for Clinical Studies. ACS Nano, 2014, 8, 4055-4057.	7.3	5
89	Polyethylene Glycol Backfilling Mitigates the Negative Impact of the Protein Corona on Nanoparticle Cell Targeting. Angewandte Chemie - International Edition, 2014, 53, 5093-5096.	7.2	276
90	The Role of Ligand Density and Size in Mediating Quantum Dot Nuclear Transport. Small, 2014, 10, 4182-4192.	5.2	35

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91	Illuminating the deep. Nature Materials, 2013, 12, 285-287.	13.3	37
92	Automating Quantum Dot Barcode Assays Using Microfluidics and Magnetism for the Development of a Point-of-Care Device. ACS Applied Materials & Interfaces, 2013, 5, 2853-2860.	4.0	45
93	Tumour-on-a-chip provides an optical window into nanoparticle tissue transport. Nature Communications, 2013, 4, 2718.	5.8	264
94	Complexities abound. Nature Nanotechnology, 2013, 8, 72-73.	15.6	4
95	Are Quantum Dots Toxic? Exploring the Discrepancy Between Cell Culture and Animal Studies. Accounts of Chemical Research, 2013, 46, 662-671.	7.6	378
96	A Plasmonic DNAzyme Strategy for Pointâ€ofâ€Care Genetic Detection of Infectious Pathogens. Angewandte Chemie - International Edition, 2013, 52, 3168-3171.	7.2	125
97	Fabrication of metal nanoshell quantum-dot barcodes for biomolecular detection. Nano Today, 2013, 8, 228-234.	6.2	25
98	Simultaneous Quantification of Cells and Nanomaterials by Inductive-Coupled Plasma Techniques. Journal of the Association for Laboratory Automation, 2013, 18, 99-104.	2.8	18
99	Nanoparticle Size and Surface Chemistry Determine Serum Protein Adsorption and Macrophage Uptake. Journal of the American Chemical Society, 2012, 134, 2139-2147.	6.6	1,601
100	The development of direct multicolour fluorescence cross-correlation spectroscopy: Towards a new tool for tracking complex biomolecular events in real-time. Physical Chemistry Chemical Physics, 2012, 14, 3290.	1.3	11
101	Fluorescenceâ€Tagged Gold Nanoparticles for Rapidly Characterizing the Sizeâ€Dependent Biodistribution in Tumor Models. Advanced Healthcare Materials, 2012, 1, 714-721.	3.9	92
102	Understanding and controlling the interaction of nanomaterials with proteins in a physiological environment. Chemical Society Reviews, 2012, 41, 2780-2799.	18.7	1,385
103	No signs of illness. Nature Nanotechnology, 2012, 7, 416-417.	15.6	36
104	The Effect of Nanoparticle Size, Shape, and Surface Chemistry on Biological Systems. Annual Review of Biomedical Engineering, 2012, 14, 1-16.	5.7	3,078
105	Significantly Improved Analytical Sensitivity of Lateral Flow Immunoassays by Using Thermal Contrast. Angewandte Chemie - International Edition, 2012, 51, 4358-4361.	7.2	155
106	Nonblinking Plasmonic Quantum Dot Assemblies for Multiplex Biological Detection. Angewandte Chemie - International Edition, 2012, 51, 8773-8777.	7.2	41
107	Engineering multifunctional magnetic-quantum dot barcodes by flow focusing. Chemical Communications, 2011, 47, 4195.	2.2	28
108	Principles of conjugating quantum dots to proteins via carbodiimide chemistry. Nanotechnology, 2011, 22, 494006.	1.3	44

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109	Strategies for the intracellular delivery of nanoparticles. Chemical Society Reviews, 2011, 40, 233-245.	18.7	684
110	Design and potential application of PEGylated gold nanoparticles with size-dependent permeation through brain microvasculature. Nanomedicine: Nanotechnology, Biology, and Medicine, 2011, 7, 992-1000.	1.7	106
111	Rapid Screening of Genetic Biomarkers of Infectious Agents Using Quantum Dot Barcodes. ACS Nano, 2011, 5, 1580-1587.	7.3	107
112	Effect of Gold Nanoparticle Aggregation on Cell Uptake and Toxicity. ACS Nano, 2011, 5, 5478-5489.	7.3	716
113	Quantumâ€Dotâ€Encoded Microbeads for Multiplexed Genetic Detection of Nonâ€amplified DNA Samples. Small, 2011, 7, 137-146.	5.2	50
114	A strategy to assemble nanoparticles with polymers for mitigating cytotoxicity and enabling size tuning. Nanomedicine, 2011, 6, 767-775.	1.7	12
115	Nanotechnology diagnostics for infectious diseases prevalent in developing countries. Advanced Drug Delivery Reviews, 2010, 62, 438-448.	6.6	147
116	Exploring Primary Liver Macrophages for Studying Quantum Dot Interactions with Biological Systems. Advanced Materials, 2010, 22, 2520-2524.	11.1	73
117	Quantum dots: Small 1/2010. Small, 2010, 6, NA-NA.	5.2	0
118	In vivo Quantumâ€Dot Toxicity Assessment. Small, 2010, 6, 138-144.	5.2	388
119	Nanomedicine. New England Journal of Medicine, 2010, 363, 2434-2443.	13.9	987
120	In vivo assembly of nanoparticle components to improve targeted cancer imaging. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11194-11199.	3.3	161
121	Rough around the Edges: The Inflammatory Response of Microglial Cells to Spiky Nanoparticles. ACS Nano, 2010, 4, 2490-2493.	7.3	49
122	Application of semiconductor and metal nanostructures in biology and medicine. Hematology American Society of Hematology Education Program, 2009, 2009, 701-707.	0.9	30
123	A Systematic Nomenclature for Codifying Engineered Nanostructures. Small, 2009, 5, 426-431.	5.2	36
124	Quantification of quantum dots using phage display screening and assay. Journal of Materials Chemistry, 2009, 19, 6321.	6.7	4
125	Synthesis and Surface Modification of Highly Monodispersed, Spherical Gold Nanoparticles of 50â^'200 nm. Journal of the American Chemical Society, 2009, 131, 17042-17043.	6.6	589
126	Visualizing Quantum Dots in Biological Samples Using Silver Staining. Analytical Chemistry, 2009, 81, 4560-4565.	3.2	29

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127	Mediating Tumor Targeting Efficiency of Nanoparticles Through Design. Nano Letters, 2009, 9, 1909-1915.	4.5	1,344
128	Probing the Interactions of Nanoparticles with Biological Systems. FASEB Journal, 2009, 23, 69.1.	0.2	0
129	Assessing the Effect of Surface Chemistry on Gold Nanorod Uptake, Toxicity, and Gene Expression in Mammalian Cells. Small, 2008, 4, 153-159.	5.2	634
130	Facile and Rapid Oneâ€Step Mass Preparation of Quantumâ€Dot Barcodes. Angewandte Chemie - International Edition, 2008, 47, 5577-5581.	7.2	129
131	Enhancing the Toxicity of Cancer Chemotherapeutics with Gold Nanorod Hyperthermia. Advanced Materials, 2008, 20, 3832-3838.	11.1	371
132	Nanoparticle-mediated cellular response is size-dependent. Nature Nanotechnology, 2008, 3, 145-150.	15.6	2,452
133	Biodegradable Quantum Dot Nanocomposites Enable Live Cell Labeling and Imaging of Cytoplasmic Targets. Nano Letters, 2008, 8, 3887-3892.	4.5	116
134	Systematic Investigation of Preparing Biocompatible, Single, and Small ZnS-Capped CdSe Quantum Dots with Amphiphilic Polymers. ACS Nano, 2008, 2, 1341-1352.	7.3	127
135	Gold nanoshells in cancer imaging and therapy: towards clinical application. Nanomedicine, 2007, 2, 735-738.	1.7	52
136	Advances and challenges of nanotechnology-based drug delivery systems. Expert Opinion on Drug Delivery, 2007, 4, 621-633.	2.4	108
137	Elucidating the Mechanism of Cellular Uptake and Removal of Protein-Coated Gold Nanoparticles of Different Sizes and Shapes. Nano Letters, 2007, 7, 1542-1550.	4.5	2,001
138	Convergence of Quantum Dot Barcodes with Microfluidics and Signal Processing for Multiplexed High-Throughput Infectious Disease Diagnostics. Nano Letters, 2007, 7, 2812-2818.	4.5	198
139	Nanotoxicity: the growing need for in vivo study. Current Opinion in Biotechnology, 2007, 18, 565-571.	3.3	625
140	Design and Characterization of Lysine Cross-Linked Mercapto-Acid Biocompatible Quantum Dots. Chemistry of Materials, 2006, 18, 872-878.	3.2	144
141	Optimizing the Synthesis of Red- to Near-IR-Emitting CdS-Capped CdTexSe1-xAlloyed Quantum Dots for Biomedical Imaging. Chemistry of Materials, 2006, 18, 4845-4854.	3.2	143
142	Bionanotechnology Progress and Advances. Biology of Blood and Marrow Transplantation, 2006, 12, 87-91.	2.0	73
143	Determining the Size and Shape Dependence of Gold Nanoparticle Uptake into Mammalian Cells. Nano Letters, 2006, 6, 662-668.	4.5	4,242
144	Engineering Biocompatible Quantum Dots for Ultrasensitive, Real-Time Biological Imaging and Detection. , 2006, , 137-156.		4

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145	Interfacing peptides identified using phage-display screening with quantum dots for the design of nanoprobes. , 2005, , .		0
146	Preliminary results: exploring the interactions of quantum dots with whole blood components. , 2005, 5969, 54.		0
147	Surface-Plasmon-Coupled Emission of Quantum Dots. Journal of Physical Chemistry B, 2005, 109, 1088-1093.	1.2	98
148	Biomedical Applications of Semiconductor Quantum Dots. , 2004, , 37-50.		1
149	Bioinspired Approaches to Building Nanoscale Devices. , 2004, , 149-160.		1
150	Semiconductor quantum dots as contrast agents for whole animal imaging. Trends in Biotechnology, 2004, 22, 607-609.	4.9	97
151	Probing the Cytotoxicity of Semiconductor Quantum Dots. Nano Letters, 2004, 4, 11-18.	4.5	3,159
152	Trilayer hybrid polymer-quantum dot light-emitting diodes. Applied Physics Letters, 2004, 84, 2925-2927.	1.5	113
153	Quantum-dot nanocrystals for ultrasensitive biological labeling and multicolor optical encoding. Journal of Biomedical Optics, 2002, 7, 532.	1.4	412
154	Luminescent quantum dots for multiplexed biological detection and imaging. Current Opinion in Biotechnology, 2002, 13, 40-46.	3.3	1,975
155	Nanocrystal targeting in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12617-12621.	3.3	1,398
156	Semiconductor Quantum Dots as Multicolor and Ultrasensitive Biological Labels. , 0, , 494-506.		0