Yao He

List of Publications by Year in descending order

103 papers	7,333 citations	53660 45 h-index	54797 84 g-index
111 all docs	111 docs citations	111 times ranked	8273 citing authors

#	Article	IF	Citations
1	Silicon Nanomaterials Platform for Bioimaging, Biosensing, and Cancer Therapy. Accounts of Chemical Research, 2014, 47, 612-623.	7.6	445
2	Large-Scale Aqueous Synthesis of Fluorescent and Biocompatible Silicon Nanoparticles and Their Use as Highly Photostable Biological Probes. Journal of the American Chemical Society, 2013, 135, 8350-8356.	6.6	386
3	The cytotoxicity of CdTe quantum dots and the relative contributions from released cadmium ions and nanoparticle properties. Biomaterials, 2010, 31, 4829-4834.	5.7	265
4	Microwave Synthesis of Waterâ€Dispersed CdTe/CdS/ZnS Coreâ€Shellâ€Shell Quantum Dots with Excellent Photostability and Biocompatibility. Advanced Materials, 2008, 20, 3416-3421.	11.1	261
5	Silicon nanowires-based highly-efficient SERS-active platform for ultrasensitive DNA detection. Nano Today, 2011, 6, 122-130.	6.2	257
6	Silicon nanostructures for bioapplications. Nano Today, 2010, 5, 282-295.	6.2	256
7	One-Pot Microwave Synthesis of Water-Dispersible, Ultraphoto- and pH-Stable, and Highly Fluorescent Silicon Quantum Dots. Journal of the American Chemical Society, 2011, 133, 14192-14195.	6.6	249
8	Ultrasensitive, Multiplexed Detection of Cancer Biomarkers Directly in Serum by Using a Quantum Dot-Based Microfluidic Protein Chip. ACS Nano, 2010, 4, 488-494.	7.3	242
9	Facile, Large-Quantity Synthesis of Stable, Tunable-Color Silicon Nanoparticles and Their Application for Long-Term Cellular Imaging. ACS Nano, 2015, 9, 5958-5967.	7.3	209
10	Simultaneous Capture, Detection, and Inactivation of Bacteria as Enabled by a Surfaceâ€Enhanced Raman Scattering Multifunctional Chip. Angewandte Chemie - International Edition, 2015, 54, 5132-5136.	7.2	203
11	Photo and pH Stable, Highly-Luminescent Silicon Nanospheres and Their Bioconjugates for Immunofluorescent Cell Imaging. Journal of the American Chemical Society, 2009, 131, 4434-4438.	6.6	193
12	Microwave-Assisted Synthesis of Water-Dispersed CdTe Nanocrystals with High Luminescent Efficiency and Narrow Size Distribution. Chemistry of Materials, 2007, 19, 359-365.	3.2	181
13	Surface-Modified Silicon Nanoparticles with Ultrabright Photoluminescence and Single-Exponential Decay for Nanoscale Fluorescence Lifetime Imaging of Temperature. Journal of the American Chemical Society, 2013, 135, 14924-14927.	6.6	174
14	Ultrastable, Highly Fluorescent, and Waterâ€Dispersed Siliconâ€Based Nanospheres as Cellular Probes. Angewandte Chemie - International Edition, 2009, 48, 128-132.	7.2	167
15	Gold Nanoparticles-Decorated Silicon Nanowires as Highly Efficient Near-Infrared Hyperthermia Agents for Cancer Cells Destruction. Nano Letters, 2012, 12, 1845-1850.	4.5	162
16	Microwaveâ€Assisted Synthesis of Biofunctional and Fluorescent Silicon Nanoparticles Using Proteins as Hydrophilic Ligands. Angewandte Chemie - International Edition, 2012, 51, 8485-8489.	7.2	123
17	Synthesis of CdTe Nanocrystals through Program Process of Microwave Irradiation. Journal of Physical Chemistry B, 2006, 110, 13352-13356.	1.2	118
18	Siliconâ€Nanowireâ€Based Nanocarriers with Ultrahigh Drugâ€Loading Capacity for Inâ€…Vitro and Inâ€…Vivo Cancer Therapy. Angewandte Chemie - International Edition, 2013, 52, 1457-1461.	7.2	115

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19	Biomimetic Preparation and Dual-Color Bioimaging of Fluorescent Silicon Nanoparticles. Journal of the American Chemical Society, 2015, 137, 14726-14732.	6.6	111
20	Portable and Reliable Surface-Enhanced Raman Scattering Silicon Chip for Signal-On Detection of Trace Trinitrotoluene Explosive in Real Systems. Analytical Chemistry, 2017, 89, 5072-5078.	3.2	108
21	Fluorescent and magnetic anti-counterfeiting realized by biocompatible multifunctional silicon nanoshuttle-based security ink. Nanoscale, 2018, 10, 1617-1621.	2.8	107
22	Highly Fluorescent, Photostable, and Ultrasmall Silicon Drug Nanocarriers for Longâ€Term Tumor Cell Tracking and Inâ€Vivo Cancer Therapy. Advanced Materials, 2015, 27, 1029-1034.	11.1	105
23	Ultrasensitive, Specific, Recyclable, and Reproducible Detection of Lead Ions in Real Systems through a Polyadenine-Assisted, Surface-Enhanced Raman Scattering Silicon Chip. Analytical Chemistry, 2016, 88, 3723-3729.	3.2	99
24	A Grapheneâ€“Silver Nanoparticleâ€“Silicon Sandwich SERS Chip for Quantitative Detection of Molecules and Capture, Discrimination, and Inactivation of Bacteria. Analytical Chemistry, 2018, 90, 5646-5653.	3.2	98
25	Multifunctional nanoagents for ultrasensitive imaging and photoactive killing of Gram-negative and Gram-positive bacteria. Nature Communications, 2019, 10, 4057.	5.8	94
26	Surface-Enhancement Raman Scattering Sensing Strategy for Discriminating Trace Mercuric Ion (II) from Real Water Samples in Sensitive, Specific, Recyclable, and Reproducible Manners. Analytical Chemistry, 2015, 87, 1250-1256.	3.2	88
27	One-Dimensional Fluorescent Silicon Nanorods Featuring Ultrahigh Photostability, Favorable Biocompatibility, and Excitation Wavelength-Dependent Emission Spectra. Journal of the American Chemical Society, 2016, 138, 4824-4831.	6.6	88
28	A Molecular Beaconâ€Based Signalâ€Off Surfaceâ€Enhanced Raman Scattering Strategy for Highly Sensitive, Reproducible, and Multiplexed DNA Detection. Small, 2013, 9, 2493-2499.	5.2	87
29	Surface-Enhanced Raman Scattering-Based Sensing In Vitro: Facile and Label-Free Detection of Apoptotic Cells at the Single-Cell Level. Analytical Chemistry, 2013, 85, 2809-2816.	3.2	85
30	Waterâ€Dispersible Fluorescent Silicon Nanoparticles and their Optical Applications. Advanced Materials, 2016, 28, 10567-10574.	11.1	81
31	Silicon Nanomaterials for Biosensing and Bioimaging Analysis. Frontiers in Chemistry, 2018, 6, 38.	1.8	80
32	Inside Cover: Ultrastable, Highly Fluorescent, and Water-Dispersed Silicon-Based Nanospheres as Cellular Probes (Angew. Chem. Int. Ed. 1/2009). Angewandte Chemie - International Edition, 2009, 48, 2-2.	7.2	77
33	Fluorescent and Photostable Silicon Nanoparticles Sensors for Real-Time and Long-Term Intracellular pH Measurement in Live Cells. Analytical Chemistry, 2016, 88, 9235-9242.	3.2	72
34	Silicon nanohybrid-based SERS chips armed with an internal standard for broad-range, sensitive and reproducible simultaneous quantification of lead(<scp>ii</scp>) and mercury(<scp>ii</scp>) in real systems. Nanoscale, 2018, 10, 4010-4018.	2.8	72
35	Peptide-Conjugated Fluorescent Silicon Nanoparticles Enabling Simultaneous Tracking and Specific Destruction of Cancer Cells. Analytical Chemistry, 2015, 87, 6718-6723.	3.2	71
36	Plant-derived fluorescent silicon nanoparticles featuring excitation wavelength-dependent fluorescence spectra for anti-counterfeiting applications. Chemical Communications, 2016, 52, 7047-7050.	2.2	65

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37	Silicon Nanohybridâ€based Surfaceâ€enhanced Raman Scattering Sensors. Small, 2014, 10, 4455-4468.	5.2	64
38	Doxorubicin-loaded silicon nanowires for the treatment of drug-resistant cancer cells. Biomaterials, 2014, 35, 5188-5195.	5.7	64
39	Highly Luminescent Waterâ€Dispersible Silicon Nanowires for Longâ€Term Immunofluorescent Cellular Imaging. Angewandte Chemie - International Edition, 2011, 50, 3080-3083.	7.2	60
40	Hematopoiesis toxicity induced by CdTe quantum dots determined inÂan invertebrate model organism. Biomaterials, 2014, 35, 2942-2951.	5.7	56
41	Setting Up a Surface-Enhanced Raman Scattering Database for Artificial-Intelligence-Based Label-Free Discrimination of Tumor Suppressor Genes. Analytical Chemistry, 2018, 90, 14216-14221.	3.2	55
42	Fluorescent silicon nanomaterials: from synthesis to functionalization and application. Nano Today, 2019, 26, 149-163.	6.2	53
43	Targeted Noninvasive Treatment of Choroidal Neovascularization by Hybrid Cell-Membrane-Cloaked Biomimetic Nanoparticles. ACS Nano, 2021, 15, 9808-9819.	7.3	53
44	Fluorescent Silicon Nanorods-Based Ratiometric Sensors for Long-Term and Real-Time Measurements of Intracellular pH in Live Cells. Analytical Chemistry, 2017, 89, 12152-12159.	3.2	51
45	Reusable Silicon-Based Surface-Enhanced Raman Scattering Ratiometric Aptasensor with High Sensitivity, Specificity, and Reproducibility. Analytical Chemistry, 2017, 89, 10279-10285.	3.2	49
46	Autophagyâ€Sensitized Cytotoxicity of Quantum Dots in PC12 Cells. Advanced Healthcare Materials, 2014, 3, 354-359.	3.9	48
47	A Poly Adenine-Mediated Assembly Strategy for Designing Surface-Enhanced Resonance Raman Scattering Substrates in Controllable Manners. Analytical Chemistry, 2015, 87, 6631-6638.	3.2	47
48	In vitro cellular behaviors and toxicity assays of small-sized fluorescent silicon nanoparticles. Nanoscale, 2017, 9, 7602-7611.	2.8	41
49	Dual-Amplification Strategy-Based SERS Chip for Sensitive and Reproducible Detection of DNA Methyltransferase Activity in Human Serum. Analytical Chemistry, 2019, 91, 3597-3603.	3.2	41
50	Photostable and Biocompatible Fluorescent Silicon Nanoparticles-Based Theranostic Probes for Simultaneous Imaging and Treatment of Ocular Neovascularization. Analytical Chemistry, 2018, 90, 8188-8195.	3.2	37
51	Multi-modal anti-counterfeiting and encryption enabled through silicon-based materials featuring pH-responsive fluorescence and room-temperature phosphorescence. Nano Research, 2020, 13, 1614-1619.	5.8	37
52	Photostable and Biocompatible Fluorescent Silicon Nanoparticles for Imaging-Guided Co-Delivery of siRNA and Doxorubicin to Drug-Resistant Cancer Cells. Nano-Micro Letters, 2019, 11, 27.	14.4	36
53	Hairpin DNA-Assisted Silicon/Silver-Based Surface-Enhanced Raman Scattering Sensing Platform for Ultrahighly Sensitive and Specific Discrimination of Deafness Mutations in a Real System. Analytical Chemistry, 2014, 86, 7368-7376.	3.2	35
54	Excitation-wavelength-dependent photoluminescence of silicon nanoparticles enabled by adjustment of surface ligands. Chemical Communications, 2018, 54, 4947-4950.	2.2	35

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55	The in vivo targeted molecular imaging of fluorescent silicon nanoparticles in Caenorhabditis elegans. Nano Research, 2018, 11, 2336-2346.	5.8	33
56	Bacteria eat nanoprobes for aggregation-enhanced imaging and killing diverse microorganisms. Nature Communications, 2022, 13, 1255.	5.8	33
57	Reactive ion etching-assisted surface-enhanced Raman scattering measurements on the single nanoparticle level. Applied Physics Letters, 2014, 104, .	1.5	30
58	A real-time documentation and mechanistic investigation of quantum dots-induced autophagy in live Caenorhabditis elegans. Biomaterials, 2015, 72, 38-48.	5.7	30
59	Highly sensitive and reproducible silicon-based surface-enhanced Raman scattering sensors for real applications. Analyst, The, 2016, 141, 5010-5019.	1.7	30
60	Reproductive toxicity and gender differences induced by cadmium telluride quantum dots in an invertebrate model organism. Scientific Reports, 2016, 6, 34182.	1.6	29
61	Highly fluorescent, photostable, and biocompatible silicon theranostic nanoprobes against Staphylococcus aureus infections. Nano Research, 2018, 11, 6417-6427.	5.8	29
62	Fluorescent Silicon Nanorods-Based Nanotheranostic Agents for Multimodal Imaging-Guided Photothermal Therapy. Nano-Micro Letters, 2019, 11, 73.	14.4	29
63	Doxorubicin-loaded silicon nanoparticles impregnated into red blood cells featuring bright fluorescence, strong photostability, and lengthened blood residency. Nano Research, 2018, 11, 2285-2294.	5.8	27
64	In Situ Live-Cell Nucleus Fluorescence Labeling with Bioinspired Fluorescent Probes. Analytical Chemistry, 2017, 89, 7861-7868.	3.2	26
65	Fluorescent silicon nanoparticles-based nanotheranostic agents for rapid diagnosis and treatment of bacteria-induced keratitis. Nano Research, 2021, 14, 52-58.	5.8	26
66	Fluorescent silicon nanoparticles utilized as stable color converters for white light-emitting diodes. Applied Physics Letters, 2015, 106, .	1.5	25
67	Silicon nanostructures for cancer diagnosis and therapy. Nanomedicine, 2015, 10, 2109-2123.	1.7	25
68	Multifunctional Siliconâ€“Carbon Nanohybrids Simultaneously Featuring Bright Fluorescence, High Antibacterial and Wound Healing Activity. Small, 2019, 15, e1803200.	5.2	25
69	Hydrothermal Synthesis of Zincâ€Doped Silica Nanospheres Simultaneously Featuring Stable Fluorescence and Longâ€Lived Roomâ€Temperature Phosphorescence. Angewandte Chemie - International Edition, 2021, 60, 15490-15496.	7.2	22
70	Impact of fluorescent silicon nanoparticles on circulating hemolymph and hematopoiesis in an invertebrate model organism. Chemosphere, 2016, 159, 628-637.	4.2	21
71	Silk Nanofibers as Robust and Versatile Emulsifiers. ACS Applied Materials & Interfaces, 2017, 9, 35693-35700.	4.0	20
72	Fluorescent silicon nanoparticle-based gene carriers featuring strong photostability and feeble cytotoxicity. Nano Research, 2016, 9, 3027-3037.	5.8	19

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73	Fluorescein sodium ligand-modified silicon nanoparticles produce ultrahigh fluorescence with robust pH- and photo-stability. Chemical Communications, 2019, 55, 365-368.	2.2	19
74	Ex vivo and in vivo fluorescence detection and imaging of adenosine triphosphate. Journal of Nanobiotechnology, 2021, 19, 187.	4.2	19
75	Rapid and Accurate Detection of Lymph Node Metastases Enabled through Fluorescent Silicon Nanoparticles-Based Exosome Probes. Analytical Chemistry, 2021, 93, 10122-10131.	3.2	19
76	Different toxicity of cadmium telluride, silicon, and carbon nanomaterials against hemocytes in silkworm, Bombyx mori. RSC Advances, 2017, 7, 50317-50327.	1.7	16
77	Traditional Chinese medicine molecule-assisted chemical synthesis of fluorescent anti-cancer silicon nanoparticles. Nano Research, 2018, 11, 5629-5641.	5.8	16
78	Biocompatible protamine sulfate@silicon nanoparticle-based gene nanocarriers featuring strong and stable fluorescence. Nanoscale, 2018, 10, 14455-14463.	2.8	16
79	Millisecondâ€Range Timeâ€Resolved Bioimaging Enabled through Ultralong Aqueous Phosphorescence Probes. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
80	In situ rapid growth of fluorescent silicon nanoparticles at room temperature and under atmospheric pressure. Chemical Communications, 2016, 52, 13444-13447.	2.2	14
81	In Situ Monitoring of Dynamic Photocatalysis of Metalâ€“Organic Frameworks by Three-Dimensional Shell-Isolated Nanoparticle-Enhanced Raman Spectroscopy. Analytical Chemistry, 2022, 94, 5699-5706.	3.2	11
82	Multi-Functional Hydrogels Simultaneously Featuring Strong Fluorescence, Ultralong Phosphorescence, and Excellent Self-Healing Properties and Their Use for Advanced Anti-counterfeiting. Analytical Chemistry, 2022, 94, 7264-7271.	3.2	10
83	Triboelectric current stimulation alleviates in vitro cell migration and in vivo tumor metastasis. Nano Energy, 2022, 100, 107471.	8.2	10
84	One-dimensional silicon nanoshuttles simultaneously featuring fluorescent and magnetic properties. Chemical Communications, 2017, 53, 6957-6960.	2.2	9
85	Distinct autophagy-inducing abilities of similar-sized nanoparticles in cell culture and liveC. elegans. Nanoscale, 2018, 10, 23059-23069.	2.8	9
86	Silicon nanowire-based multifunctional platform for chemo-photothermal synergistic cancer therapy. Journal of Materials Chemistry B, 2018, 6, 3876-3883.	2.9	8
87	Biomimetic preparation of coreâ€shell structured surfaceâ€enhanced Raman scattering substrate with antifouling ability, good stability, and reliable quantitative capability. Electrophoresis, 2019, 40, 2172-2179.	1.3	8
88	Dual-emission fluorescent silicon nanoparticle-based nanothermometer for ratiometric detection of intracellular temperature in living cells. Faraday Discussions, 2020, 222, 122-134.	1.6	8
89	Silicon-based nanoprobes cross the bloodâ€”brain barrier for photothermal therapy of glioblastoma. Nano Research, 2022, 15, 7392-7401.	5.8	8
90	Long-term fundus fluorescence angiography and real-time diagnosis of retinal diseases in non-human primate-animal models. Nano Research, 2021, 14, 3840.	5.8	7

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91	Multifunctional Flavonoidâ€Silica Nanohydrogel Enables Simultaneous Inhibition of Tumor Recurrence and Bacterial Infection in Postâ€Surgical Treatment. Small, 2022, 18, e2104578.	5.2	7
92	Silicon nanowire-based therapeutic agents for in vivo tumor near-infrared photothermal ablation. Journal of Materials Chemistry B, 2014, 2, 2892.	2.9	5
93	Microfluidic synthesis of high-valence programmable atom-like nanoparticles for reliable sensing. Chemical Science, 2021, 12, 896-904.	3.7	5
94	Synergistic effects between silicon nanowires and doxorubicin at non-toxic doses lead to high-efficacy destruction of cancer cells. Journal of Materials Chemistry B, 2018, 6, 7378-7382.	2.9	4
95	Aqueous synthesis of three-dimensional fluorescent silicon-based nanoscale networks featuring unusual anti-photobleaching properties. Chemical Communications, 2019, 55, 652-655.	2.2	4
96	Hydrothermal Synthesis of Zincâ€Doped Silica Nanospheres Simultaneously Featuring Stable Fluorescence and Longâ€Lived Roomâ€Temperature Phosphorescence. Angewandte Chemie, 2021, 133, 15618-15624.	1.6	4
97	Controllable synthesis of siliconâ€based nanohybrids for reliable surfaceâ€enhanced Raman scattering sensing. Chinese Journal of Chemistry, 0, , .	2.6	4
98	Controllable silicon nanostructures featuring stable fluorescence and intrinsic in vitro and in vivo anti-cancer activity. Journal of Materials Chemistry B, 2019, 7, 6247-6256.	2.9	3
99	Fluorescent Silicon-based Nanomaterials Imaging Technology in Diseases. Chemical Research in Chinese Universities, 2021, 37, 880-888.	1.3	3
100	Millisecondâ€Range Timeâ€Resolved Bioimaging Enabled through Ultralong Aqueous Phosphorescence Probes. Angewandte Chemie, 2022, 134, .	1.6	3
101	Nanoparticles as a Hedgehog signaling inhibitor for the suppression of cancer growth and metastasis. Nanoscale, 2021, 13, 11077-11085.	2.8	2
102	Innentitelbild: Ultrastable, Highly Fluorescent, and Water-Dispersed Silicon-Based Nanospheres as Cellular Probes (Angew. Chem. 1/2009). Angewandte Chemie, 2009, 121, 2-2.	1.6	0
103	Back Cover: Highly Luminescent Waterâ€Dispersible Silicon Nanowires for Longâ€Term Immunofluorescent Cellular Imaging (Angew. Chem. Int. Ed. 13/2011). Angewandte Chemie - International Edition, 2011, 50, 3090-3090.	7.2	0