

# Ru Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

71  
papers

22,500  
citations

29994

54  
h-index

106150

65  
g-index

73  
all docs

73  
docs citations

73  
times ranked

18771  
citing authors

#	ARTICLE	IF	CITATIONS
1	Near-infrared fluorophores for biomedical imaging. <i>Nature Biomedical Engineering</i> , 2017, 1, .	11.6	1,982
2	An ultrafast rechargeable aluminium-ion battery. <i>Nature</i> , 2015, 520, 324-328.	13.7	1,970
3	A small-molecule dye for NIR-II imaging. <i>Nature Materials</i> , 2016, 15, 235-242.	13.3	1,314
4	Nanotube Molecular Transporters: Internalization of Carbon Nanotube-Protein Conjugates into Mammalian Cells. <i>Journal of the American Chemical Society</i> , 2004, 126, 6850-6851.	6.6	1,284
5	Carbon Nanomaterials for Biological Imaging and Nanomedicinal Therapy. <i>Chemical Reviews</i> , 2015, 115, 10816-10906.	23.0	1,151
6	A route to brightly fluorescent carbon nanotubes for near-infrared imaging in mice. <i>Nature Nanotechnology</i> , 2009, 4, 773-780.	15.6	1,068
7	Multifunctional in vivo vascular imaging using near-infrared II fluorescence. <i>Nature Medicine</i> , 2012, 18, 1841-1846.	15.2	836
8	Through-skull fluorescence imaging of the brain in a new near-infrared window. <i>Nature Photonics</i> , 2014, 8, 723-730.	15.6	829
9	Deep-tissue anatomical imaging of mice using carbon nanotube fluorophores in the second near-infrared window. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 8943-8948.	3.3	817
10	Ag <sub>2</sub> S Quantum Dot: A Bright and Biocompatible Fluorescent Nanoprobe in the Second Near-Infrared Window. <i>ACS Nano</i> , 2012, 6, 3695-3702.	7.3	669
11	In Vivo Fluorescence Imaging with Ag <sub>2</sub> S Quantum Dots in the Second Near-Infrared Region. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9818-9821.	7.2	645
12	Near-Infrared-II Molecular Dyes for Cancer Imaging and Surgery. <i>Advanced Materials</i> , 2019, 31, e1900321.	11.1	631
13	Ultrafast fluorescence imaging in vivo with conjugated polymer fluorophores in the second near-infrared window. <i>Nature Communications</i> , 2014, 5, 4206.	5.8	470
14	A high quantum yield molecule-protein complex fluorophore for near-infrared II imaging. <i>Nature Communications</i> , 2017, 8, 15269.	5.8	458
15	Advanced rechargeable aluminium ion battery with a high-quality natural graphite cathode. <i>Nature Communications</i> , 2017, 8, 14283.	5.8	453
16	Boosting the down-shifting luminescence of rare-earth nanocrystals for biological imaging beyond 1500 nm. <i>Nature Communications</i> , 2017, 8, 737.	5.8	416
17	In vivo molecular imaging for immunotherapy using ultra-bright near-infrared-IIb rare-earth nanoparticles. <i>Nature Biotechnology</i> , 2019, 37, 1322-1331.	9.4	398
18	Donor Engineering for NIR-II Molecular Fluorophores with Enhanced Fluorescent Performance. <i>Journal of the American Chemical Society</i> , 2018, 140, 1715-1724.	6.6	379

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19	In Vivo Fluorescence Imaging in the Second Near-Infrared Window with Long Circulating Carbon Nanotubes Capable of Ultrahigh Tumor Uptake. <i>Journal of the American Chemical Society</i> , 2012, 134, 10664-10669.	6.6	373
20	Rational Design of Molecular Fluorophores for Biological Imaging in the NIR-II Window. <i>Advanced Materials</i> , 2017, 29, 1605497.	11.1	356
21	A bright organic NIR-II nanofluorophore for three-dimensional imaging into biological tissues. <i>Nature Communications</i> , 2018, 9, 1171.	5.8	353
22	Traumatic Brain Injury Imaging in the Second Near-Infrared Window with a Molecular Fluorophore. <i>Advanced Materials</i> , 2016, 28, 6872-6879.	11.1	311
23	Fluorescence Imaging In Vivo at Wavelengths beyond 1500 nm. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14758-14762.	7.2	310
24	Bright quantum dots emitting at $\lambda_{em}$ 1,600 nm in the NIR-IIb window for deep tissue fluorescence imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6590-6595.	3.3	310
25	High Coulombic efficiency aluminum-ion battery using an AlCl <sub>3</sub> -urea ionic liquid analog electrolyte. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 834-839.	3.3	306
26	3D Graphitic Foams Derived from Chloroaluminate Anion Intercalation for Ultrafast Aluminum-Ion Battery. <i>Advanced Materials</i> , 2016, 28, 9218-9222.	11.1	302
27	Ultra-Low Doses of Chirality Sorted (6,5) Carbon Nanotubes for Simultaneous Tumor Imaging and Photothermal Therapy. <i>ACS Nano</i> , 2013, 7, 3644-3652.	7.3	279
28	Biological Imaging Using Nanoparticles of Small Organic Molecules with Fluorescence Emission at Wavelengths Longer than 1000 nm. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13002-13006.	7.2	261
29	Molecular imaging of biological systems with a clickable dye in the broad 800- to 1,700-nm near-infrared window. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 962-967.	3.3	230
30	Biodistribution, pharmacokinetics and toxicology of Ag <sub>2</sub> S near-infrared quantum dots in mice. <i>Biomaterials</i> , 2013, 34, 3639-3646.	5.7	228
31	Plasmonic substrates for multiplexed protein microarrays with femtomolar sensitivity and broad dynamic range. <i>Nature Communications</i> , 2011, 2, 466.	5.8	221
32	Plasmonic silver nanoshells for drug and metabolite detection. <i>Nature Communications</i> , 2017, 8, 220.	5.8	166
33	Light-sheet microscopy in the near-infrared II window. <i>Nature Methods</i> , 2019, 16, 545-552.	9.0	151
34	3D NIR-II Molecular Imaging Distinguishes Targeted Organs with High-Performance NIR-II Bioconjugates. <i>Advanced Materials</i> , 2018, 30, e1705799.	11.1	150
35	A plasmonic chip for biomarker discovery and diagnosis of type 1 diabetes. <i>Nature Medicine</i> , 2014, 20, 948-953.	15.2	142
36	Diagnosis of Zika virus infection on a nanotechnology platform. <i>Nature Medicine</i> , 2017, 23, 548-550.	15.2	130

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37	Molecular Imaging in the Second Near-Infrared Window. <i>Advanced Functional Materials</i> , 2019, 29, 1900566.	7.8	125
38	Molecular Cancer Imaging in the Second Near-Infrared Window Using a Renal-Excreted NIR-Fluorophore-Peptide Probe. <i>Advanced Materials</i> , 2018, 30, e1800106.	11.1	115
39	Near-Infrared IIb Fluorescence Imaging of Vascular Regeneration with Dynamic Tissue Perfusion Measurement and High Spatial Resolution. <i>Advanced Functional Materials</i> , 2018, 28, 1803417.	7.8	107
40	Metabolic Fingerprinting on a Plasmonic Gold Chip for Mass Spectrometry Based <i>in Vitro</i> Diagnostics. <i>ACS Central Science</i> , 2018, 4, 223-229.	5.3	106
41	A mini-review on rare-earth down-conversion nanoparticles for NIR-II imaging of biological systems. <i>Nano Research</i> , 2020, 13, 1281-1294.	5.8	105
42	Rechargeable Na/Cl <sub>2</sub> and Li/Cl <sub>2</sub> batteries. <i>Nature</i> , 2021, 596, 525-530.	13.7	103
43	Live imaging of follicle stimulating hormone receptors in gonads and bones using near infrared II fluorophore. <i>Chemical Science</i> , 2017, 8, 3703-3711.	3.7	96
44	A theranostic agent for cancer therapy and imaging in the second near-infrared window. <i>Nano Research</i> , 2019, 12, 273-279.	5.8	86
45	Developing a Bright NIR-Fluorophore with Fast Renal Excretion and Its Application in Molecular Imaging of Immune Checkpoint PD-1. <i>Advanced Functional Materials</i> , 2018, 28, 1804956.	7.8	85
46	High Performance, Multiplexed Lung Cancer Biomarker Detection on a Plasmonic Gold Chip. <i>Advanced Functional Materials</i> , 2016, 26, 7994-8002.	7.8	84
47	Rational Design of High Brightness NIR-II Organic Dyes with S-D-A-D-S Structure. <i>Accounts of Materials Research</i> , 2021, 2, 170-183.	5.9	84
48	Diagnosis and prognosis of myocardial infarction on a plasmonic chip. <i>Nature Communications</i> , 2020, 11, 1654.	5.8	83
49	Label-Free Electrochemical Sensor for CD44 by Ligand-Protein Interaction. <i>Analytical Chemistry</i> , 2019, 91, 7078-7085.	3.2	77
50	Ionic Liquid Analogs of AlCl <sub>3</sub> with Urea Derivatives as Electrolytes for Aluminum Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1901928.	7.8	74
51	Rechargeable aluminum batteries: effects of cations in ionic liquid electrolytes. <i>RSC Advances</i> , 2019, 9, 11322-11330.	1.7	66
52	Extraction, detection, and profiling of serum biomarkers using designed Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> @HA core-shell particles. <i>Nano Research</i> , 2018, 11, 68-79.	5.8	65
53	Detection and Inhibition of Bacteria on a Dual-Functional Silver Platform. <i>Small</i> , 2019, 15, e1803051.	5.2	54
54	Deep learning for in vivo near-infrared imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	53

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55	Magnetic "Squashing" of Circulating Tumor Cells on Plasmonic Substrates for Ultrasensitive NIR Fluorescence Detection. <i>Small Methods</i> , 2019, 3, 1800474.	4.6	52
56	In vivo NIR-II structured-illumination light-sheet microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	39
57	Defective Fe Metal-Organic Frameworks Enhance Metabolic Profiling for High Accuracy Diagnosis of Human Cancers. <i>Advanced Materials</i> , 2022, 34, e2201422.	11.1	39
58	Proteoliposome-based full-length ZnT8 self-antigen for type 1 diabetes diagnosis on a plasmonic platform. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10196-10201.	3.3	31
59	Autoantibody profiling on a plasmonic nano-gold chip for the early detection of hypertensive heart disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7089-7094.	3.3	30
60	High-precision tumor resection down to few-cell level guided by NIR-IIb molecular fluorescence imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2123111119.	3.3	26
61	Combined immunomagnetic capture coupled with ultrasensitive plasmonic detection of circulating tumor cells in blood. <i>Biomedical Microdevices</i> , 2018, 20, 99.	1.4	10
62	Circulating Tumor Cells: Magnetic "Squashing" of Circulating Tumor Cells on Plasmonic Substrates for Ultrasensitive NIR Fluorescence Detection ( <i>Small Methods</i> 2/2019). <i>Small Methods</i> , 2019, 3, 1970004.	4.6	5
63	Bacteria Inhibition: Detection and Inhibition of Bacteria on a Dual-Functional Silver Platform (Small) $T_j ETQq1 1 0.784314 rgBT / Overlo$	5.2	5
64	Recent Advances in Development of NIR-II Fluorescent Agents. , 2020, , 83-101.		4
65	A Label-Free Electrochemical Biosensor Based on Ligand-Receptor Interaction. , 2018, , .		1
66	Novel surface engineered micro-needles towards bio-analytical applications. , 2016, , .		0
67	Lipidomics study using novel plasmonic nanoshells. , 2017, , .		0
68	Polymer-metal composites for sensitive detection of metabolites by mass spectrometry. , 2017, , .		0
69	Hybrid Core-shell Particles for Metabolite Detection by Laser Desorption/ionization Mass Spectrometry. , 2018, , .		0
70	Size-selected Core-shell Nanoalloys for Laser Desorption/ionization Detection of Small Metabolites. , 2018, , .		0
71	Nanoparticles as Co-matrix for Sensitive Detection of Nucleic Acids by Mass Spectrometry. , 2018, , .		0