

Wei Zheng

List of Publications by Year in descending order

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102
papers

6,169
citations

57758

44
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71685

76
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106
all docs

106
docs citations

106
times ranked

6125
citing authors

#	ARTICLE	IF	CITATIONS
1	Lanthanide-doped upconversion nano-bioprobes: electronic structures, optical properties, and biodetection. <i>Chemical Society Reviews</i> , 2015, 44, 1379-1415.	38.1	748
2	Lanthanide-Doped LiLuF ₄ Upconversion Nanoprobes for the Detection of Disease Biomarkers. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1252-1257.	13.8	397
3	Carbon-Nanotube-Based Glucose/O ₂ Biofuel Cells. <i>Advanced Materials</i> , 2006, 18, 2639-2643.	21.0	244
4	Near-infrared-triggered photon upconversion tuning in all-inorganic cesium lead halide perovskite quantum dots. <i>Nature Communications</i> , 2018, 9, 3462.	12.8	222
5	Sub-10-nm Lanthanide-Doped CaF ₂ Nanoprobes for Time-Resolved Luminescent Biodetection. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 6671-6676.	13.8	185
6	Plasmonic enhancement and polarization dependence of nonlinear upconversion emissions from single gold nanorod@SiO ₂ @CaF ₂ :Yb ³⁺ ,Er ³⁺ hybrid core-shell satellite nanostructures. <i>Light: Science and Applications</i> , 2017, 6, e16217-e16217.	16.6	155
7	Autofluorescence-Free Targeted Tumor Imaging Based on Luminous Nanoparticles with Composition-Dependent Size and Persistent Luminescence. <i>ACS Nano</i> , 2017, 11, 8010-8017.	14.6	153
8	Lanthanide-doped upconversion nanoparticles electrostatically coupled with photosensitizers for near-infrared-triggered photodynamic therapy. <i>Nanoscale</i> , 2014, 6, 8274.	5.6	133
9	One-Dimensional Luminous Nanorods Featuring Tunable Persistent Luminescence for Autofluorescence-Free Biosensing. <i>ACS Nano</i> , 2017, 11, 8185-8191.	14.6	132
10	Rechargeable and LED-activated ZnGa ₂ O ₄ :Cr ³⁺ near-infrared persistent luminescence nanoprobes for background-free biodetection. <i>Nanoscale</i> , 2017, 9, 6846-6853.	5.6	128
11	General Mild Reaction Creates Highly Luminescent Organic-Ligand-Lacking Halide Perovskite Nanocrystals for Efficient Light-Emitting Diodes. <i>Journal of the American Chemical Society</i> , 2019, 141, 15423-15432.	13.7	121
12	Direct Electrochemistry of Multi-Copper Oxidases at Carbon Nanotubes Noncovalently Functionalized with Cellulose Derivatives. <i>Electroanalysis</i> , 2006, 18, 587-594.	2.9	117
13	Unraveling the Electronic Structures of Neodymium in LiLuF ₄ Nanocrystals for Ratiometric Temperature Sensing. <i>Advanced Science</i> , 2019, 6, 1802282.	11.2	111
14	Full-Spectrum Persistent Luminescence Tuning Using All-Inorganic Perovskite Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6943-6947.	13.8	106
15	Lanthanide-doped luminescent nano-bioprobes for the detection of tumor markers. <i>Nanoscale</i> , 2015, 7, 4274-4290.	5.6	101
16	Graphene-Oxide-Modified Lanthanide Nanoprobes for Tumor-Targeted Visible/NIR Luminescence Imaging. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18981-18986.	13.8	92
17	Luminescent biodetection based on lanthanide-doped inorganic nanoprobes. <i>Coordination Chemistry Reviews</i> , 2014, 273-274, 13-29.	18.8	91
18	A New Class of Blue-LED-Excitable NIR Luminescent Nanoprobes Based on Lanthanide-Doped CaS Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9556-9560.	13.8	88

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19	Time-resolved luminescent biosensing based on inorganic lanthanide-doped nanoprobe. <i>Chemical Communications</i> , 2015, 51, 4129-4143.	4.1	85
20	Large-scale synthesis of uniform lanthanide-doped NaREF ₄ upconversion/downshifting nanoprobe for bioapplications. <i>Nanoscale</i> , 2018, 10, 11477-11484.	5.6	84
21	Controlled synthesis and optical spectroscopy of lanthanide-doped KLaF ₄ nanocrystals. <i>Nanoscale</i> , 2012, 4, 4485.	5.6	78
22	Lanthanide-doped NaScF ₄ nanoprobe: crystal structure, optical spectroscopy and biodetection. <i>Nanoscale</i> , 2013, 5, 6430.	5.6	74
23	Dual-Band-Tunable White-Light Emission from Bi ³⁺ /Te ⁴⁺ Emitters in Perovskite-Derivative Cs ₂ SnCl ₆ Microcrystals. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	74
24	Visible-to-infrared quantum cutting by phonon-assisted energy transfer in YPO ₄ :Tm ³⁺ , Yb ³⁺ phosphors. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 6974.	2.8	73
25	Sub-5 nm lanthanide-doped lutetium oxyfluoride nanoprobe for ultrasensitive detection of prostate specific antigen. <i>Chemical Science</i> , 2016, 7, 2572-2578.	7.4	71
26	Multi-Targeted Anticancer Agents. <i>Current Topics in Medicinal Chemistry</i> , 2017, 17, 3084-3098.	2.1	71
27	A strategy for accurate detection of glucose in human serum and whole blood based on an upconversion nanoparticles-polydopamine nanosystem. <i>Nano Research</i> , 2018, 11, 3164-3174.	10.4	68
28	Chameleon-like optical behavior of lanthanide-doped fluoride nanoplates for multilevel anti-counterfeiting applications. <i>Nano Research</i> , 2019, 12, 1417-1422.	10.4	67
29	Unveiling the Excited-State Dynamics of Mn ²⁺ in 0D Cs ₄ PbCl ₆ Perovskite Nanocrystals. <i>Advanced Science</i> , 2020, 7, 2002210.	11.2	66
30	Broadband NIR photostimulated luminescence nanoprobe based on CaS:Eu ²⁺ , Sm ³⁺ nanocrystals. <i>Chemical Science</i> , 2019, 10, 5452-5460.	7.4	65
31	Luminescent lanthanide metal-organic framework nanoprobe: from fundamentals to bioapplications. <i>Nanoscale</i> , 2020, 12, 15021-15035.	5.6	65
32	Cooperative and non-cooperative sensitization upconversion in lanthanide-doped LiYbF ₄ nanoparticles. <i>Nanoscale</i> , 2017, 9, 6521-6528.	5.6	64
33	Europium-activated luminescent nanoprobe: From fundamentals to bioapplications. <i>Coordination Chemistry Reviews</i> , 2019, 378, 104-120.	18.8	64
34	Boosting the Self-Trapped Exciton Emission in Alloyed Cs ₂ (Ag/Na)InCl ₆ Double Perovskite via Cu ⁺ Doping. <i>Advanced Science</i> , 2022, 9, e2103724.	11.2	64
35	Lanthanide-doped disordered crystals: Site symmetry and optical properties. <i>Journal of Luminescence</i> , 2018, 201, 255-264.	3.1	63
36	Ultrasensitive detection of cancer biomarker microRNA by amplification of fluorescence of lanthanide nanoprobe. <i>Nano Research</i> , 2018, 11, 264-273.	10.4	62

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37	Highly efficient Sb ³⁺ emitters in 0D cesium indium chloride nanocrystals with switchable photoluminescence through water-triggered structural transformation. <i>Nano Today</i> , 2022, 44, 101460.	11.9	58
38	Solution-Grown Chloride Perovskite Crystal of Red Afterglow. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 24450-24455.	13.8	57
39	Tailoring the Broadband Emission in All-Inorganic Lead-Free 0D In-Based Halides through Sb ³⁺ Doping. <i>Advanced Optical Materials</i> , 2021, 9, 2100434.	7.3	56
40	Efficient Near-Infrared Luminescence in Lanthanide-Doped Vacancy-Ordered Double Perovskite Cs ₂ ZrCl ₆ Phosphors via Te ⁴⁺ Sensitization. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	54
41	Persistent luminescence from Eu ³⁺ in SnO ₂ nanoparticles. <i>Nanoscale</i> , 2015, 7, 11048-11054.	5.6	53
42	Inorganic lanthanide nanoprobe for background-free luminescent bioassays. <i>Science China Materials</i> , 2015, 58, 156-177.	6.3	50
43	Dissolution-Enhanced Luminescent Bioassay Based on Inorganic Lanthanide Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12498-12502.	13.8	48
44	Rare earth ion and transition metal ion-doped inorganic luminescent nanocrystals: from fundamentals to biodetection. <i>Materials Today Nano</i> , 2019, 5, 100031.	4.6	48
45	Lanthanide Metal-Organic Framework Nanoprobes for the In Vitro Detection of Cardiac Disease Markers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 43989-43995.	8.0	46
46	Synthesis, Characterization, and in Vitro Antitumor Activity of Ruthenium(II) Polypyridyl Complexes Tethering EGFR-Inhibiting 4-Anilinoquinazolines. <i>Inorganic Chemistry</i> , 2016, 55, 4595-4605.	4.0	44
47	Ytterbium-Doped CsPbCl ₃ Quantum Cutters for Near-Infrared Light-Emitting Diodes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 34561-34571.	8.0	43
48	A Bis(methylpiperazinylstyryl)phenanthroline as a Fluorescent Ligand for G-Quadruplexes. <i>Chemistry - A European Journal</i> , 2016, 22, 6037-6047.	3.3	40
49	Ultrasensitive Luminescent In Vitro Detection for Tumor Markers Based on Inorganic Lanthanide Nano-Bioprobes. <i>Advanced Science</i> , 2016, 3, 1600197.	11.2	38
50	Discovery of a dual-targeting organometallic ruthenium complex with high activity inducing early stage apoptosis of cancer cells. <i>Metallomics</i> , 2015, 7, 1573-1583.	2.4	36
51	Lanthanide-doped Sr ₂ YF ₇ nanoparticles: controlled synthesis, optical spectroscopy and biodetection. <i>Nanoscale</i> , 2014, 6, 11098-11105.	5.6	35
52	Platinum(II) Terpyridine Anticancer Complexes Possessing Multiple Mode of DNA Interaction and EGFR Inhibiting Activity. <i>Frontiers in Chemistry</i> , 2020, 8, 210.	3.6	33
53	Development of magnetic sensor technologies for point-of-care testing: Fundamentals, methodologies and applications. <i>Sensors and Actuators A: Physical</i> , 2020, 312, 112130.	4.1	32
54	Engineering the Bandgap and Surface Structure of CsPbCl ₃ Nanocrystals to Achieve Efficient Ultraviolet Luminescence. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9693-9698.	13.8	32

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55	Unraveling the triplet excited-state dynamics of Bi ³⁺ in vacancy-ordered double perovskite Cs ₂ SnCl ₆ nanocrystals. <i>Nano Research</i> , 2022, 15, 6422-6429.	10.4	31
56	Efficient Luminescence from CsPbBr ₃ Nanoparticles Embedded in Cs ₄ PbBr ₆ . <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7637-7642.	4.6	29
57	Triplex-quadruplex structural scaffold: a new binding structure of aptamer. <i>Scientific Reports</i> , 2017, 7, 15467.	3.3	28
58	<i>In situ</i> confined growth of ultrasmall perovskite quantum dots in metal-organic frameworks and their quantum confinement effect. <i>Nanoscale</i> , 2020, 12, 17113-17120.	5.6	28
59	A Photoactive Platinum(IV) Anticancer Complex Inhibits Thioredoxin-Thioredoxin Reductase System Activity by Induced Oxidization of the Protein. <i>Inorganic Chemistry</i> , 2018, 57, 5575-5584.	4.0	24
60	Interfacial Defects Dictated In Situ Fabrication of Yolk-Shell Upconversion Nanoparticles by Electron-Beam Irradiation. <i>Advanced Science</i> , 2018, 5, 1800766.	11.2	23
61	Controlling disorder in host lattice by hetero-valence ion doping to manipulate luminescence in spinel solid solution phosphors. <i>Science China Chemistry</i> , 2018, 61, 1624-1629.	8.2	23
62	Multicolor tunable luminescence and laser-sensitization induced upconversion enhancement in Ln-doped Gd ₂ O ₃ crystals for anti-counterfeiting. <i>Materials Chemistry Frontiers</i> , 2019, 3, 2403-2413.	5.9	23
63	Energy transfer designing in lanthanide-doped upconversion nanoparticles. <i>Chemical Communications</i> , 2020, 56, 15118-15132.	4.1	23
64	A Dual-Excitation Decoding Strategy Based on NIR Hybrid Nanocomposites for High-Accuracy Thermal Sensing. <i>Advanced Science</i> , 2020, 7, 2001589.	11.2	23
65	Revisiting the Luminescence Decay Kinetics of Energy Transfer Upconversion. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3672-3680.	4.6	23
66	Unusual Temperature Dependence of Bandgap in 2D Inorganic Lead-Halide Perovskite Nanoplatelets. <i>Advanced Science</i> , 2021, 8, e2100084.	11.2	23
67	Direct photoinduced synthesis of lead halide perovskite nanocrystals and nanocomposites. <i>Nano Today</i> , 2021, 39, 101179.	11.9	22
68	Novel ruthenium complexes ligated with 4-anilinoquinazoline derivatives: Synthesis, characterisation and preliminary evaluation of biological activity. <i>European Journal of Medicinal Chemistry</i> , 2014, 77, 110-120.	5.5	21
69	Correlated mass spectrometry and confocal microscopy imaging verifies the dual-targeting action of an organoruthenium anticancer complex. <i>Chemical Communications</i> , 2017, 53, 4136-4139.	4.1	21
70	Mn ²⁺ -activated calcium fluoride nanoprobes for time-resolved photoluminescence biosensing. <i>Science China Materials</i> , 2019, 62, 130-137.	6.3	20
71	Discovery of Cisplatin Binding to Thymine and Cytosine on a Single-Stranded Oligodeoxynucleotide by High Resolution FT-ICR Mass Spectrometry. <i>Molecules</i> , 2019, 24, 1852.	3.8	20
72	Ultrasensitive Point-of-Care Test for Tumor Marker in Human Saliva Based on Luminescence-Amplification Strategy of Lanthanide Nanoprobes. <i>Advanced Science</i> , 2021, 8, 2002657.	11.2	20

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73	Lanthanide-doped LaOBr nanocrystals: controlled synthesis, optical spectroscopy and bioimaging. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4827-4834.	5.8	19
74	A new class of luminescent nanoprobe based on main-group Sb ³⁺ emitters. <i>Nano Research</i> , 2022, 15, 179-185.	10.4	19
75	Accurate detection of β -hCG in women's serum and cervical secretions for predicting early pregnancy viability based on time-resolved luminescent lanthanide nanoprobe. <i>Nanoscale</i> , 2020, 12, 6729-6735.	5.6	17
76	Ga ³⁺ Doping Induced Simultaneous Size/Shape Control, Enhanced Red Upconversion Luminescence, and Improved X-ray Imaging of ZnO:Yb/Tm for Multifunctional Nanoprobe. <i>Inorganic Chemistry</i> , 2018, 57, 12166-12173.	4.0	16
77	Polarized upconversion luminescence from a single LiLuF ₄ :Yb ³⁺ /Er ³⁺ microcrystal for orientation tracking. <i>Science China Materials</i> , 2022, 65, 220-228.	6.3	16
78	Solution-grown Chloride Perovskite Crystal of Red Afterglow. <i>Angewandte Chemie</i> , 2021, 133, 24655-24660.	2.0	16
79	Influence of Silica Surface Coating on Operated Photodynamic Therapy Property of Yb ³⁺ -Tm ³⁺ : Ga(III)-Doped ZnO Upconversion Nanoparticles. <i>Inorganic Chemistry</i> , 2018, 57, 8012-8018.	4.0	15
80	Blue-LED-excitable NIR-II luminescent lanthanide-doped SrS nanoprobe for ratiometric thermal sensing. <i>Science China Materials</i> , 2022, 65, 1094-1102.	6.3	15
81	Rational design of multi-targeting ruthenium- and platinum-based anticancer complexes. <i>Science China Chemistry</i> , 2016, 59, 1240-1249.	8.2	14
82	Single cell imaging reveals cisplatin regulating interactions between transcription (co)factors and DNA. <i>Chemical Science</i> , 2021, 12, 5419-5429.	7.4	14
83	Efficient Near-Infrared Luminescence in Lanthanide-Doped Vacancy-Ordered Double Perovskite Cs ₂ ZrCl ₆ Phosphors via Te ⁴⁺ Sensitization. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	14
84	Full-Spectrum Persistent Luminescence Tuning Using All-Inorganic Perovskite Quantum Dots. <i>Angewandte Chemie</i> , 2019, 131, 7017-7021.	2.0	13
85	Graphene-Oxide-Modified Lanthanide Nanoprobe for Tumor-Targeted Visible/NIR Luminescence Imaging. <i>Angewandte Chemie</i> , 2019, 131, 19157-19162.	2.0	12
86	Quantification of bindings of organometallic ruthenium complexes to GST by mass spectrometry. <i>Journal of Inorganic Biochemistry</i> , 2015, 146, 44-51.	3.5	9
87	A general strategy via charge transfer sensitization to achieve efficient NIR luminescence in lanthanide-doped NaGdS ₂ nanocrystals. <i>Journal of Materials Chemistry C</i> , 2021, 9, 5148-5153.	5.5	8
88	Boosting the Energy Migration Upconversion through Inter-Shell Energy Transfer in Tb ³⁺ -Doped Sandwich Structured Nanocrystals. <i>CCS Chemistry</i> , 2022, 4, 2031-2042.	7.8	8
89	Dual-Band-Tunable White-Light Emission from Bi ³⁺ /Te ⁴⁺ Emitters in Perovskite-Derivative Cs ₂ SnCl ₆ Microcrystals. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	7
90	Direct chiral separation of caderofloxacin enantiomers by HPLC using a glycoprotein column. <i>Journal of Analytical Chemistry</i> , 2006, 61, 1090-1092.	0.9	6

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91	A New Class of Blue-LED-Excitable NIR-Visible Luminescent Nanoprobes Based on Lanthanide-Doped CaS Nanoparticles. <i>Angewandte Chemie</i> , 2019, 131, 9656-9660.	2.0	6
92	Sub-10-nm lanthanide-doped SrFCl nanoprobes: Controlled synthesis, optical properties and bioimaging. <i>Journal of Rare Earths</i> , 2019, 37, 691-698.	4.8	6
93	Controlled synthesis and near-infrared upconversion properties of 3D self-assembled NdVO ₄ microcrystals. <i>Ceramics International</i> , 2019, 45, 15406-15411.	4.8	3
94	Mass spectrometric quantification of the binding ratio of metal-based anticancer complexes with protein thiols. <i>Rapid Communications in Mass Spectrometry</i> , 2019, 33, 951-958.	1.5	3
95	First-Principles Calculation of Photoelectric Property in Upconversion Materials through In ³⁺ Doping. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 881-890.	5.4	2
96	Engineering the Bandgap and Surface Structure of CsPbCl ₃ Nanocrystals to Achieve Efficient Ultraviolet Luminescence. <i>Angewandte Chemie</i> , 2021, 133, 9779-9784.	2.0	2
97	Lanthanide-doped luminescent materials: Electronic structures, optical properties, and bioapplications. <i>Scientia Sinica Chimica</i> , 2014, 44, 168-179.	0.4	2
98	Deciphering molecular interaction of binaphthyl compounds with <i>Penicillium expansum</i> lipase: enantioselectivity and reactivity prediction for lipase. <i>Molecular Systems Design and Engineering</i> , 2018, 3, 658-667.	3.4	1
99	Plasmon-Modulated Polarized Upconversion Emissions from Single Gold Nanorod-Nanophosphors Hybrid Nanostructures. , 2015, , .		0
100	Tumor Marker Detection: Ultrasensitive Luminescent In Vitro Detection for Tumor Markers Based on Inorganic Lanthanide Nano-Bioprobes (<i>Adv. Sci.</i> 11/2016). <i>Advanced Science</i> , 2016, 3, .	11.2	0
101	Lanthanide-Doped Upconversion Nanoprobes. , 2016, , 237-287.		0
102	Polarized Upconversion Luminescence from a Single NaYF ₄ :Yb ³⁺ /Er ³⁺ Microrod for Orientation Tracking. <i>Acta Chimica Sinica</i> , 2022, 80, 244.	1.4	0