

Wei Zheng

List of Publications by Year in descending order

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86
papers

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76326

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times ranked

5194
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	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
4	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
5	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
6	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
7	Lanthanide-doped upconversion nanoparticles electrostatically coupled with photosensitizers for near-infrared-triggered photodynamic therapy. <i>Nanoscale</i> , 2014, 6, 8274.	5.6	133
8	One-Dimensional Luminous Nanorods Featuring Tunable Persistent Luminescence for Autofluorescence-Free Biosensing. <i>ACS Nano</i> , 2017, 11, 8185-8191.	14.6	132
9	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
10	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
11	Unraveling the Electronic Structures of Neodymium in LiLuF ₄ Nanocrystals for Ratiometric Temperature Sensing. <i>Advanced Science</i> , 2019, 6, 1802282.	11.2	111
12	Full-Spectrum Persistent Luminescence Tuning Using All-Inorganic Perovskite Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6943-6947.	13.8	106
13	Lanthanide-doped luminescent nano-bioprobes for the detection of tumor markers. <i>Nanoscale</i> , 2015, 7, 4274-4290.	5.6	101
14	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
15	Luminescent biodetection based on lanthanide-doped inorganic nanoprobes. <i>Coordination Chemistry Reviews</i> , 2014, 273-274, 13-29.	18.8	91
16	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
17	Time-resolved luminescent biosensing based on inorganic lanthanide-doped nanoprobes. <i>Chemical Communications</i> , 2015, 51, 4129-4143.	4.1	85
18	Large-scale synthesis of uniform lanthanide-doped NaREF ₄ upconversion/downshifting nanoprobes for bioapplications. <i>Nanoscale</i> , 2018, 10, 11477-11484.	5.6	84

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19	Controlled synthesis and optical spectroscopy of lanthanide-doped KLaF ₄ nanocrystals. <i>Nanoscale</i> , 2012, 4, 4485.	5.6	78
20	Lanthanide-doped NaScF ₄ nanoprobcs: crystal structure, optical spectroscopy and biodetection. <i>Nanoscale</i> , 2013, 5, 6430.	5.6	74
21	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
22	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
23	Sub-5 nm lanthanide-doped lutetium oxyfluoride nanoprobcs for ultrasensitive detection of prostate specific antigen. <i>Chemical Science</i> , 2016, 7, 2572-2578.	7.4	71
24	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
25	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
26	Unveiling the Excited-State Dynamics of Mn ²⁺ in OD Cs ₄ PbCl ₆ Perovskite Nanocrystals. <i>Advanced Science</i> , 2020, 7, 2002210.	11.2	66
27	Broadband NIR photostimulated luminescence nanoprobcs based on CaS:Eu ²⁺ , Sm ³⁺ nanocrystals. <i>Chemical Science</i> , 2019, 10, 5452-5460.	7.4	65
28	Luminescent lanthanide metal-organic framework nanoprobcs: from fundamentals to bioapplications. <i>Nanoscale</i> , 2020, 12, 15021-15035.	5.6	65
29	Cooperative and non-cooperative sensitization upconversion in lanthanide-doped LiYbF ₄ nanoparticles. <i>Nanoscale</i> , 2017, 9, 6521-6528.	5.6	64
30	Europium-activated luminescent nanoprobcs: From fundamentals to bioapplications. <i>Coordination Chemistry Reviews</i> , 2019, 378, 104-120.	18.8	64
31	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
32	Lanthanide-doped disordered crystals: Site symmetry and optical properties. <i>Journal of Luminescence</i> , 2018, 201, 255-264.	3.1	63
33	Ultrasensitive detection of cancer biomarker microRNA by amplification of fluorescence of lanthanide nanoprobcs. <i>Nano Research</i> , 2018, 11, 264-273.	10.4	62
34	A Novel Tumor Targeting Drug Carrier for Optical Imaging and Therapy. <i>Theranostics</i> , 2014, 4, 642-659.	10.0	61
35	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
36	Persistent luminescence from Eu ³⁺ in SnO ₂ nanoparticles. <i>Nanoscale</i> , 2015, 7, 11048-11054.	5.6	53

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37	Inorganic lanthanide nanoprobcs for background-free luminescent bioassays. <i>Science China Materials</i> , 2015, 58, 156-177.	6.3	50
38	Dissolution-Enhanced Luminescent Bioassay Based on Inorganic Lanthanide Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12498-12502.	13.8	48
39	Lanthanide Metal-Organic Framework Nanoprobcs for the In Vitro Detection of Cardiac Disease Markers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 43989-43995.	8.0	46
40	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
41	Enhancing upconversion luminescence by annealing processes and the high-temperature sensing of ZnO:Yb/Tm nanoparticles. <i>New Journal of Chemistry</i> , 2017, 41, 7116-7122.	2.8	40
42	Ultrasensitive Luminescent In Vitro Detection for Tumor Markers Based on Inorganic Lanthanide Nano-Bioprobcs. <i>Advanced Science</i> , 2016, 3, 1600197.	11.2	38
43	Lanthanide-doped Sr ₂ YF ₇ nanoparticles: controlled synthesis, optical spectroscopy and biodetection. <i>Nanoscale</i> , 2014, 6, 11098-11105.	5.6	35
44	Low Power High Purity Red Upconversion Emission and Multiple Temperature Sensing Behaviors in Yb ³⁺ ,Er ³⁺ Codoped Gd ₂ O ₃ Porous Nanorods. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9578-9588.	6.7	35
45	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
46	<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
47	Silica-Coated Ga(III)-Doped ZnO: Yb ³⁺ , Tm ³⁺ Upconversion Nanoparticles for High-Resolution in Vivo Bioimaging using Near-Infrared to Near-Infrared Upconversion Emission. <i>Inorganic Chemistry</i> , 2019, 58, 8230-8236.	4.0	24
48	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
49	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
50	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
51	Energy transfer designing in lanthanide-doped upconversion nanoparticles. <i>Chemical Communications</i> , 2020, 56, 15118-15132.	4.1	23
52	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
53	Revisiting the Luminescence Decay Kinetics of Energy Transfer Upconversion. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3672-3680.	4.6	23
54	Mn ²⁺ -activated calcium fluoride nanoprobcs for time-resolved photoluminescence biosensing. <i>Science China Materials</i> , 2019, 62, 130-137.	6.3	20

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55	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
56	Lanthanide-doped LaOBr nanocrystals: controlled synthesis, optical spectroscopy and bioimaging. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4827-4834.	5.8	19
57	Accurate detection of β -hCG in women's serum and cervical secretions for predicting early pregnancy viability based on time-resolved luminescent lanthanide nanoprobes. <i>Nanoscale</i> , 2020, 12, 6729-6735.	5.6	17
58	Ga ³⁺ Doping Induced Simultaneous Size/Shape Control, Enhanced Red Upconversion Luminescence, and Improved X-ray Imaging of ZnO:Yb/Tm for Multifunctional Nanoprobes. <i>Inorganic Chemistry</i> , 2018, 57, 12166-12173.	4.0	16
59	Upconversion luminescence, and temperature sensing properties of $12\text{CaO}\cdot 7\text{Al}_2\text{O}_3$ single crystal sensitized with lanthanide ions Er(III) and Yb(III). <i>Talanta</i> , 2020, 207, 120292.	5.5	16
60	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
61	A novel strategy for markedly enhancing the green upconversion emission in $\text{Er}^{3+}/\text{Yb}^{3+}$ co-doped VO_2 . <i>Journal of Alloys and Compounds</i> , 2019, 791, 593-600.	5.5	14
62	Gd_2O_3 : Er^{3+} , Yb^{3+} Upconversion Nanoparticle-Based Thermometry for Temperature Monitoring. <i>ACS Applied Nano Materials</i> , 2021, 4, 3922-3931.	5.0	14
63	Efficient Near-Infrared Luminescence in Lanthanide-Doped Vacancy-Ordered Double Perovskite Cs_2ZrCl_6 Phosphors via Te^{4+} Sensitization. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	14
64	Effect of silica surface coating on the luminescence lifetime and upconversion temperature sensing properties of semiconductor zinc oxide doped with gallium(III) and sensitized with rare earth ions Yb(III) and Tm(III). <i>Mikrochimica Acta</i> , 2018, 185, 197.	5.0	13
65	Full-Spectrum Persistent Luminescence Tuning Using All-Inorganic Perovskite Quantum Dots. <i>Angewandte Chemie</i> , 2019, 131, 7017-7021.	2.0	13
66	Near-Infrared Laser-Triggered Full-Color Tuning Photon Upconversion and Intense White Emission in Single Gd_2O_3 Microparticle. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 2557-2567.	6.7	13
67	Lower power dependent upconversion multicolor tunable properties in TiO_2 : $\text{Yb}^{3+}/\text{Er}^{3+}$ (Tm^{3+}). <i>Ceramics International</i> , 2019, 45, 432-438.	4.8	10
68	Self-assembled three-dimensional architectures of VO_2 : Yb^{3+} , Er^{3+} controlled synthesis and dual-power dependent luminescence properties. <i>New Journal of Chemistry</i> , 2018, 42, 15436-15443.	2.8	9
69	A general strategy <i>via</i> 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
70	Tailoring Porous Transition Metal Oxide for High-Performance Lithium Storage. <i>Journal of Physical Chemistry C</i> , 2021, 125, 22435-22445.	3.1	7
71	Dual-Band-Tunable White-Light Emission from $\text{Bi}^{3+}/\text{Te}^{4+}$ Emitters in Perovskite-Derivative Cs_2SnCl_6 Microcrystals. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	7
72	A New Class of Blue-LED-Excitable NIR-Emittent Luminescent Nanoprobes Based on Lanthanide-Doped CaS Nanoparticles. <i>Angewandte Chemie</i> , 2019, 131, 9656-9660.	2.0	6

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73	Sub-10Ånm lanthanide-doped SrFCl nanoprobcs: Controlled synthesis, optical properties and bioimaging. <i>Journal of Rare Earths</i> , 2019, 37, 691-698.	4.8	6
74	Single-Atom Tailored Hierarchical Transition Metal Oxide Nanocages for Efficient Lithium Storage. <i>Small</i> , 2022, 18, e2200367.	10.0	6
75	First-Principles Calculation of Phase/Size Characteristic in Yb ³⁺ /Tm ³⁺ /ZnO Upconversion Nanoparticles through Metal Ga ³⁺ Doping. <i>ChemistrySelect</i> , 2017, 2, 4433-4438.	1.5	4
76	Warm white broadband emission and tunable long lifetimes in Yb ³⁺ doped Gd ₂ O ₃ nanoparticles. <i>Ceramics International</i> , 2020, 46, 22900-22906.	4.8	4
77	Reply to Comment on "Breakdown of Crystallographic Site Symmetry in Lanthanide-Doped NaYF ₄ Crystals". <i>Angewandte Chemie - International Edition</i> , 2015, 54, 1077-1078.	13.8	2
78	High Conductivity and Excitation-Power Sensitivity of Upconversion Emission in Silica Decoration of Regular Hexagonal Yb and Er Codoped ZnO Core-Shell Particles. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13543-13550.	6.7	2
79	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
80	Lanthanide-doped luminescent materials: Electronic structures, optical properties, and bioapplications. <i>Scientia Sinica Chimica</i> , 2014, 44, 168-179.	0.4	2
81	Enhancement of the Up-conversion Luminescence of 12CaO·7Al ₂ O ₃ :Tm ³⁺ /Yb ³⁺ Doped with Alkaline Earth Metal Ions. <i>Analytical Letters</i> , 2018, 51, 2085-2098.	1.8	1
82	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
83	Plasmon-Modulated Polarized Upconversion Emissions from Single Gold Nanorod-Nanophosphors Hybrid Nanostructures. , 2015, , .		0
84	Lanthanide-Doped Upconversion Nanoprobcs. , 2016, , 237-287.		0
85	Color tuning of up-conversion emission in ytterbium, erbium, aluminum tri-doped zinc oxide crystal by adjusting aluminum concentration. <i>Spectroscopy Letters</i> , 2018, 51, 31-36.	1.0	0
86	Upconversion and Phase Transition Characteristics in Erbium(III)- and Ytterbium(III)-Codoped Vanadium(IV) Oxide. <i>Analytical Letters</i> , 2018, 51, 1219-1231.	1.8	0