

# Datao Tu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8613425/publications.pdf>

Version: 2024-02-01

92  
papers

8,136  
citations

43973

48  
h-index

46693

89  
g-index

99  
all docs

99  
docs citations

99  
times ranked

6933  
citing authors

#	ARTICLE	IF	CITATIONS
1	Boosting the Energy Migration Upconversion through Inter-Shell Energy Transfer in Tb <sup>3+</sup> -Doped Sandwich Structured Nanocrystals. <i>CCS Chemistry</i> , 2022, 4, 2031-2042.	4.6	8
2	Polarized upconversion luminescence from a single LiLuF <sub>4</sub> :Yb <sup>3+</sup> /Er <sup>3+</sup> microcrystal for orientation tracking. <i>Science China Materials</i> , 2022, 65, 220-228.	3.5	16
3	Enhancing Dye-Triplet-Sensitized Upconversion Emission Through the Heavy-Atom Effect in CsLu <sub>2</sub> F <sub>7</sub> :Yb/Er Nanoprobes. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	24
4	Enhancing Dye-Triplet-Sensitized Upconversion Emission Through the Heavy-Atom Effect in CsLu <sub>2</sub> F <sub>7</sub> :Yb/Er Nanoprobes. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
5	Boosting the Self-Trapped Exciton Emission in Alloyed Cs <sub>2</sub> (Ag/Na)InCl <sub>6</sub> Double Perovskite via Cu <sup>+</sup> Doping. <i>Advanced Science</i> , 2022, 9, e2103724.	5.6	64
6	Tumor-Microenvironment-Responsive Biodegradable Nanoagents Based on Lanthanide Nucleotide Self-Assemblies toward Precise Cancer Therapy. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	1
7	Highly efficient NIR-II luminescent III-VI semiconductor nanoprobes based on AgInTe <sub>2</sub> :Zn/ZnS nanocrystals. <i>Chemical Communications</i> , 2022, 58, 2204-2207.	2.2	10
8	Tumor-Microenvironment-Responsive Biodegradable Nanoagents Based on Lanthanide Nucleotide Self-Assemblies toward Precise Cancer Therapy. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	14
9	Thermally boosted upconversion and downshifting luminescence in Sc <sub>2</sub> (MoO <sub>4</sub> ) <sub>3</sub> :Yb/Er with two-dimensional negative thermal expansion. <i>Nature Communications</i> , 2022, 13, 2090.	5.8	99
10	Boosting Near-Infrared Luminescence of Lanthanide in Cs <sub>2</sub> AgBiCl <sub>6</sub> Double Perovskites via Breakdown of the Local Site Symmetry. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	53
11	Boosting Near-Infrared Luminescence of Lanthanide in Cs <sub>2</sub> AgBiCl <sub>6</sub> Double Perovskites via Breakdown of the Local Site Symmetry. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	6
12	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.	5.6	20
13	The effect of surface-capping oleic acid on the optical properties of lanthanide-doped nanocrystals. <i>Nanoscale</i> , 2021, 13, 12494-12504.	2.8	8
14	Enhancing multiphoton upconversion emissions through confined energy migration in lanthanide-doped Cs <sub>2</sub> NaYF <sub>6</sub> nanoplatelets. <i>Nanoscale</i> , 2021, 13, 9766-9772.	2.8	10
15	Recent advances in design of lanthanide-containing NIR-II luminescent nanoprobes. <i>IScience</i> , 2021, 24, 102062.	1.9	48
16	Colloidal Alloyed Quantum Dots with Enhanced Photoluminescence Quantum Yield in the NIR-II Window. <i>Journal of the American Chemical Society</i> , 2021, 143, 2601-2607.	6.6	118
17	One-Step Transformation from Rofecoxib to a COX-2 NIR Probe for Human Cancer Tissue/Organoid Targeted Bioimaging. <i>ACS Applied Bio Materials</i> , 2021, 4, 2723-2731.	2.3	11
18	Engineering the Bandgap and Surface Structure of CsPbCl <sub>3</sub> Nanocrystals to Achieve Efficient Ultraviolet Luminescence. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9693-9698.	7.2	32

#	ARTICLE	IF	CITATIONS
19	Engineering the Bandgap and Surface Structure of CsPbCl <sub>3</sub> Nanocrystals to Achieve Efficient Ultraviolet Luminescence. <i>Angewandte Chemie</i> , 2021, 133, 9779-9784.	1.6	2
20	Tailoring the Broadband Emission in All-Inorganic Lead-Free OD In-Based Halides through Sb <sup>3+</sup> Doping. <i>Advanced Optical Materials</i> , 2021, 9, 2100434.	3.6	56
21	Luminescent nano-bioprobes based on NIR dye/lanthanide nanoparticle composites. <i>Aggregate</i> , 2021, 2, e59.	5.2	24
22	Unusual Temperature Dependence of Bandgap in 2D Inorganic Lead-Halide Perovskite Nanoplatelets. <i>Advanced Science</i> , 2021, 8, e2100084.	5.6	23
23	Combined <i>In Situ</i> Spectroscopies Reveal the Ligand Ordering-Modulated Photoluminescence of Upconverting Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23086-23093.	1.5	6
24	Broadband excitable NIR-II luminescent nano-bioprobes based on CuInSe <sub>2</sub> quantum dots for the detection of circulating tumor cells. <i>Nano Today</i> , 2020, 35, 100943.	6.2	57
25	Energy transfer designing in lanthanide-doped upconversion nanoparticles. <i>Chemical Communications</i> , 2020, 56, 15118-15132.	2.2	23
26	<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.	2.8	28
27	A Dual-Excitation Decoding Strategy Based on NIR Hybrid Nanocomposites for High-Accuracy Thermal Sensing. <i>Advanced Science</i> , 2020, 7, 2001589.	5.6	23
28	Luminescent lanthanide metal-organic framework nanoprobe: from fundamentals to bioapplications. <i>Nanoscale</i> , 2020, 12, 15021-15035.	2.8	65
29	Accurate detection of 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.	2.8	17
30	Revisiting the Luminescence Decay Kinetics of Energy Transfer Upconversion. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3672-3680.	2.1	23
31	Multiplexed intracellular detection based on dual-excitation/dual-emission upconversion nanoprobe. <i>Nano Research</i> , 2020, 13, 1955-1961.	5.8	24
32	Graphene-Oxide-Modified Lanthanide Nanoprobe for Tumor-Targeted Visible/NIR Luminescence Imaging. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18981-18986.	7.2	92
33	Lanthanide Metal-Organic Framework Nanoprobe for the In Vitro Detection of Cardiac Disease Markers. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 43989-43995.	4.0	46
34	Graphene-Oxide-Modified Lanthanide Nanoprobe for Tumor-Targeted Visible/NIR Luminescence Imaging. <i>Angewandte Chemie</i> , 2019, 131, 19157-19162.	1.6	12
35	Highly efficient luminescent III-VI semiconductor nanoprobe based on template-synthesized CuInS <sub>2</sub> nanocrystals. <i>Nano Research</i> , 2019, 12, 1804-1809.	5.8	19
36	Lanthanide-doped near-infrared II luminescent nanoprobe for bioapplications. <i>Science China Materials</i> , 2019, 62, 1071-1086.	3.5	70

#	ARTICLE	IF	CITATIONS
37	Fullâ€Spectrum Persistent Luminescence Tuning Using Allâ€Inorganic Perovskite Quantum Dots. <i>Angewandte Chemie</i> , 2019, 131, 7017-7021.	1.6	13
38	Fullâ€Spectrum Persistent Luminescence Tuning Using Allâ€Inorganic Perovskite Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6943-6947.	7.2	106
39	â€Chameleon-likeâ€optical behavior of lanthanide-doped fluoride nanoplates for multilevel anti-counterfeiting applications. <i>Nano Research</i> , 2019, 12, 1417-1422.	5.8	67
40	Unraveling the Electronic Structures of Neodymium in LiLuF <sub>4</sub> Nanocrystals for Ratiometric Temperature Sensing. <i>Advanced Science</i> , 2019, 6, 1802282.	5.6	111
41	Europium-activated luminescent nanoprobcs: From fundamentals to bioapplications. <i>Coordination Chemistry Reviews</i> , 2019, 378, 104-120.	9.5	64
42	Lanthanide-doped disordered crystals: Site symmetry and optical properties. <i>Journal of Luminescence</i> , 2018, 201, 255-264.	1.5	63
43	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.	1.7	1
44	Ultrasensitive detection of cancer biomarker microRNA by amplification of fluorescence of lanthanide nanoprobcs. <i>Nano Research</i> , 2018, 11, 264-273.	5.8	62
45	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.	5.8	68
46	Enhancing Antitumor Efficacy by Simultaneous ATPâ€Responsive Chemodrug Release and Cancer Cell Sensitization Based on a Smart Nanoagent. <i>Advanced Science</i> , 2018, 5, 1801201.	5.6	35
47	Large-scale synthesis of uniform lanthanide-doped NaREF <sub>4</sub> upconversion/downshifting nanoprobcs for bioapplications. <i>Nanoscale</i> , 2018, 10, 11477-11484.	2.8	84
48	Interfacial Defects Dictated In Situ Fabrication of Yolkâ€Shell Upconversion Nanoparticles by Electronâ€Beam Irradiation. <i>Advanced Science</i> , 2018, 5, 1800766.	5.6	23
49	Intense near-infrared-II luminescence from NaCeF <sub>4</sub> :Er/Yb nanoprobcs for <i>in vitro</i> bioassay and <i>in vivo</i> bioimaging. <i>Chemical Science</i> , 2018, 9, 4682-4688.	3.7	145
50	Near-infrared-triggered photon upconversion tuning in all-inorganic cesium lead halide perovskite quantum dots. <i>Nature Communications</i> , 2018, 9, 3462.	5.8	222
51	Cooperative and non-cooperative sensitization upconversion in lanthanide-doped LiYbF <sub>4</sub> nanoprobcs. <i>Nanoscale</i> , 2017, 9, 6521-6528.	2.8	64
52	Lanthanide-doped LaOBr nanocrystals: controlled synthesis, optical spectroscopy and bioimaging. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4827-4834.	2.9	19
53	Enhanced reddish-orange emission in NaBa <sub>4</sub> (BO <sub>3</sub> ) <sub>3</sub> : Sm <sup>3+</sup> /Ce <sup>3+</sup> phosphors for near-ultraviolet and blue LEDs. <i>Journal of Materials Science</i> , 2017, 52, 9764-9772.	1.7	9
54	Photon upconversion in Yb <sup>3+</sup> â€Tb <sup>3+</sup> and Yb <sup>3+</sup> â€Eu <sup>3+</sup> activated core/shell nanoparticles with dual-band excitation. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4186-4192.	2.7	52

#	ARTICLE	IF	CITATIONS
55	Near-Infrared Light-Mediated Photodynamic Therapy Nanoplatform by the Electrostatic Assembly of Upconversion Nanoparticles with Graphitic Carbon Nitride Quantum Dots. <i>Inorganic Chemistry</i> , 2016, 55, 10267-10277.	1.9	69
56	Lanthanide-Doped Upconversion Nanoprobes. , 2016, , 237-287.		0
57	Sub-5 nm lanthanide-doped lutetium oxyfluoride nanoprobes for ultrasensitive detection of prostate specific antigen. <i>Chemical Science</i> , 2016, 7, 2572-2578.	3.7	71
58	A facile "ship-in-a-bottle" approach to construct nanorattles based on upconverting lanthanide-doped fluorides. <i>Nano Research</i> , 2016, 9, 187-197.	5.8	37
59	A New Cubic Phase for a $\text{NaYF}_4$ Host Matrix Offering High Upconversion Luminescence Efficiency. <i>Advanced Materials</i> , 2015, 27, 5528-5533.	11.1	94
60	Multifunctional Nano-Bioprobes Based on Rattle-Structured Upconverting Luminescent Nanoparticles. <i>Angewandte Chemie</i> , 2015, 127, 8026-8030.	1.6	14
61	Multifunctional Nano-Bioprobes Based on Rattle-Structured Upconverting Luminescent Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7915-7919.	7.2	145
62	Single-composition white-emitting $\text{NaSrBO}_3:\text{Ce}^{3+}, \text{Sm}^{3+}, \text{Tb}^{3+}$ phosphors for NUV light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7286-7293.	2.7	93
63	Time-resolved luminescent biosensing based on inorganic lanthanide-doped nanoprobes. <i>Chemical Communications</i> , 2015, 51, 4129-4143.	2.2	85
64	Inorganic lanthanide nanoprobes for background-free luminescent bioassays. <i>Science China Materials</i> , 2015, 58, 156-177.	3.5	50
65	Plasmon-induced hyperthermia: hybrid upconversion $\text{NaYF}_4:\text{Yb/Er}$ and gold nanomaterials for oral cancer photothermal therapy. <i>Journal of Materials Chemistry B</i> , 2015, 3, 8293-8302.	2.9	65
66	Lanthanide-doped luminescent nano-bioprobes for the detection of tumor markers. <i>Nanoscale</i> , 2015, 7, 4274-4290.	2.8	101
67	Reply to Comment on "Breakdown of Crystallographic Site Symmetry in Lanthanide-Doped $\text{NaYF}_4$ Crystals". <i>Angewandte Chemie - International Edition</i> , 2015, 54, 1077-1078.	7.2	2
68	Lanthanide-doped upconversion nano-bioprobes: electronic structures, optical properties, and biodetection. <i>Chemical Society Reviews</i> , 2015, 44, 1379-1415.	18.7	748
69	Surface Modification Chemistry of Lanthanide-Doped Nanoparticles. <i>Nanomedicine and Nanotoxicology</i> , 2014, , 59-74.	0.1	2
70	Optical Spectroscopy of Lanthanide-Doped Nanoparticles. <i>Nanomedicine and Nanotoxicology</i> , 2014, , 75-123.	0.1	2
71	Luminescent biodetection based on lanthanide-doped inorganic nanoprobes. <i>Coordination Chemistry Reviews</i> , 2014, 273-274, 13-29.	9.5	91
72	Lanthanide-doped $\text{Sr}_2\text{YF}_7$ nanoparticles: controlled synthesis, optical spectroscopy and biodetection. <i>Nanoscale</i> , 2014, 6, 11098-11105.	2.8	35

#	ARTICLE	IF	CITATIONS
73	Lanthanide-doped upconversion nanoparticles electrostatically coupled with photosensitizers for near-infrared-triggered photodynamic therapy. <i>Nanoscale</i> , 2014, 6, 8274.	2.8	133
74	Lanthanide-Doped LiLuF <sub>4</sub> Upconversion Nanoprobes for the Detection of Disease Biomarkers. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1252-1257.	7.2	397
75	Lanthanide-Doped Luminescent Nanomaterials. <i>Nanomedicine and Nanotoxicology</i> , 2014, , .	0.1	52
76	Dissolution-Enhanced Luminescent Bioassay Based on Inorganic Lanthanide Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12498-12502.	7.2	48
77	Lanthanide-doped luminescent materials: Electronic structures, optical properties, and bioapplications. <i>Scientia Sinica Chimica</i> , 2014, 44, 168-179.	0.2	2
78	Lanthanide-doped luminescent nano-bioprobes: from fundamentals to biodetection. <i>Nanoscale</i> , 2013, 5, 1369-1384.	2.8	165
79	Breakdown of Crystallographic Site Symmetry in Lanthanide-Doped NaYF <sub>4</sub> Crystals. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 1128-1133.	7.2	220
80	Optical/Magnetic Multimodal Bioprobes Based on Lanthanide-Doped Inorganic Nanocrystals. <i>Chemistry - A European Journal</i> , 2013, 19, 5516-5527.	1.7	45
81	Lanthanide-doped luminescent nanoprobes: controlled synthesis, optical spectroscopy, and bioapplications. <i>Chemical Society Reviews</i> , 2013, 42, 6924.	18.7	768
82	Near-Infrared-to-Near-Infrared Downshifting and Near-Infrared-to-Visible Upconverting Luminescence of Er <sup>3+</sup> -Doped In <sub>2</sub> O <sub>3</sub> Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10834-10841.	1.5	48
83	Lanthanide-doped NaScF <sub>4</sub> nanoprobes: crystal structure, optical spectroscopy and biodetection. <i>Nanoscale</i> , 2013, 5, 6430.	2.8	74
84	Sub-10-nm Lanthanide-Doped CaF <sub>2</sub> Nanoprobes for Time-Resolved Luminescent Biodetection. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 6671-6676.	7.2	185
85	Lanthanide-Doped Inorganic Nanocrystals as Luminescent Biolabels. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2012, 15, 580-594.	0.6	25
86	Amine-Functionalized Lanthanide-Doped Zirconia Nanoparticles: Optical Spectroscopy, Time-Resolved Fluorescence Resonance Energy Transfer Biodetection, and Targeted Imaging. <i>Journal of the American Chemical Society</i> , 2012, 134, 15083-15090.	6.6	221
87	Amine-Functionalized Lanthanide-Doped KGdF <sub>4</sub> Nanocrystals as Potential Optical/Magnetic Multimodal Bioprobes. <i>Journal of the American Chemical Society</i> , 2012, 134, 1323-1330.	6.6	372
88	Visible-to-infrared quantum cutting by phonon-assisted energy transfer in YPO <sub>4</sub> :Tm <sup>3+</sup> , Yb <sup>3+</sup> phosphors. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 6974.	1.3	73
89	Controlled synthesis and optical spectroscopy of lanthanide-doped KLaF <sub>4</sub> nanocrystals. <i>Nanoscale</i> , 2012, 4, 4485.	2.8	78
90	Time-Resolved FRET Biosensor Based on Amine-Functionalized Lanthanide-Doped NaYF <sub>4</sub> Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 6306-6310.	7.2	308

#	ARTICLE	IF	CITATIONS
91	Lanthanide-Doped Multicolor Gd <sub>3</sub> Nanocrystals for Time-Resolved Photoluminescent Biodetection. Chemistry - A European Journal, 2011, 17, 8549-8554.	1.7	106
92	A Strategy to Achieve Efficient Dual-Mode Luminescence of Eu <sup>3+</sup> in Lanthanides Doped Multifunctional NaGd <sub>4</sub> Nanocrystals. Advanced Materials, 2010, 22, 3266-3271.	11.1	566