Lu Liu

List of Publications by Year
in descending order

72 papers	2,506 citations	304368 22 h-index	205818 48 g-index
73 all docs	73 docs citations	73 times ranked	3066 citing authors

#	Article	IF	Citations
1	NIR-II nanoprobes in-vivo assembly to improve image-guided surgery for metastatic ovarian cancer. Nature Communications, 2018, 9, 2898.	5.8	343
2	Er³⁺ Sensitized 1530â€…nm to 1180â€…nm Second Nearâ€Infrared Window Upconversion Nanocrystals for Inâ€…Vivo Biosensing. Angewandte Chemie - International Edition, 2018, 57, 7518-7522.	7.2	271
3	<i>In Vivo</i> High-resolution Ratiometric Fluorescence Imaging of Inflammation Using NIR-II Nanoprobes with 1550 nm Emission. Nano Letters, 2019, 19, 2418-2427.	4.5	202
4	Solvent-Assisted Self-Assembly of a Metalâ€“Organic Framework Based Biocatalyst for Cascade Reaction Driven Photodynamic Therapy. Journal of the American Chemical Society, 2020, 142, 6822-6832.	6.6	201
5	Supramolecularly Engineered NIRâ€II and Upconversion Nanoparticles In Vivo Assembly and Disassembly to Improve Bioimaging. Advanced Materials, 2018, 30, e1804982.	11.1	146
6	Optical temperature sensor through infrared excited blue upconversion emission in Tm3+/Yb3+ codoped Y2O3. Optics Communications, 2012, 285, 1925-1928.	1.0	140
7	Near-infrared rechargeable â€œoptical batteryâ€•implant for irradiation-free photodynamic therapy. Biomaterials, 2018, 163, 154-162.	5.7	83
8	Size and charge dual-transformable mesoporous nanoassemblies for enhanced drug delivery and tumor penetration. Chemical Science, 2020, 11, 2819-2827.	3.7	66
9	Orthogonal Multiplexed Luminescence Encoding with Nearâ€Infrared Rechargeable Upconverting Persistent Luminescence Composites. Advanced Optical Materials, 2017, 5, 1700680.	3.6	52
10	Elemental Migration in Core/Shell Structured Lanthanide Doped Nanoparticles. Chemistry of Materials, 2019, 31, 5608-5615.	3.2	49
11	Optical thermometry through green and red upconversion emissions in Er3+/Yb3+/Li+:ZrO2 nanocrystals. Optics Communications, 2011, 284, 1876-1879.	1.0	48
12	Effect of Li+ ions on enhancement of near-infrared upconversion emission in Y2O3:Tm3+/Yb3+ nanocrystals. Journal of Applied Physics, 2012, 112, .	1.1	47
13	Er³⁺ Sensitized 1530â€…nm to 1180â€…nm Second Nearâ€Infrared Window Upconversion Nanocrystals for Inâ€…Vivo Biosensing. Angewandte Chemie, 2018, 130, 7640-7644.	1.6	41
14	Localized surface plasmon resonance sensing structure based on gold nanohole array on beveled fiber edge. Nanotechnology, 2017, 28, 435504.	1.3	33
15	Highly sensitive and accurate optical thermometer through Er doped tellurite glasses. Materials Research Bulletin, 2018, 105, 306-311.	2.7	31
16	Precisely Designed Mesoscopic Titania for High-Volumetric-Density Pseudocapacitance. Journal of the American Chemical Society, 2021, 143, 14097-14105.	6.6	30
17	The distribution of rare earth ions in a Î³-Ga₂O₃ nanocrystal-silicate glass composite and its influence on the photoluminescence properties. Journal of Materials Chemistry C, 2018, 6, 2944-2950.	2.7	29
18	Sub-10 nm NaNdF₄ Nanoparticles as Near-Infrared Photothermal Probes with Self-Temperature Feedback. ACS Applied Nano Materials, 2020, 3, 2517-2526.	2.4	29

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19	Power dependence of upconversion luminescence of Er3+ doped Yttria nanocrystals and their bulk counterpart. Journal of Luminescence, 2013, 143, 423-431.	1.5	26
20	Upconversion mechanisms of Er3+:NaYF4 and thermal effects induced by incident photon on the green luminescence. Journal of Luminescence, 2016, 175, 35-43.	1.5	25
21	Temperature-Independent Lifetime and Thermometer Operated in a Biological Window of Upconverting NaErF4 Nanocrystals. Nanomaterials, 2020, 10, 24.	1.9	25
22	Intermacromolecular complexation due to specific interactions. 7. Miscibility and complexation between poly(styrene-co-4-vinyl benzoic acid) and poly[n-butyl methacrylate-co-(4-vinylpyridine)]. Journal of Macromolecular Science - Physics, 1998, 37, 827-839.	0.4	23
23	Concentration effects on the FIR technique for temperature sensing. Optical Materials, 2015, 43, 18-24.	1.7	23
24	Intermacromolecular complexation due to specific interactions. 6. Miscibility and complexation between Poly{Styrene-<i>co</i>-[<i>p</i>-(2-Hydroxypropan-2-yl)Styrene]}and poly[<i>n</i>-butyl Methacrylate-<i>co</i>-(4-vinylpyridine)]. Journal of Macromolecular Science - Physics, 1998, 37, 805-826.	0.4	22
25	Novel optical thermometer through upconversion emission of Ho3+ sensitized by Nd3+. Journal of Luminescence, 2019, 213, 40-45.	1.5	22
26	Effects of alkali metal ions on upconversion photoluminescence intensity of Er3+-doped Y2O3 nanocrystals. Applied Physics B: Lasers and Optics, 2013, 110, 111-115.	1.1	21
27	Highly stable CsPbBr₃ perovskite quantum dot-doped tellurite glass nanocomposite scintillator. Optics Letters, 2021, 46, 3448.	1.7	21
28	Optical fiber sensor based on upconversion nanoparticles for internal temperature monitoring of Li-ion batteries. Journal of Materials Chemistry C, 2021, 9, 14757-14765.	2.7	20
29	Improved optical thermometry in Er3+:Y2O3 nanocrystals by re-calcination. Optics Communications, 2013, 309, 90-94.	1.0	19
30	Topological Engineering of Photoluminescence Properties of Bismuthâ€•or Erbiumâ€Doped Phosphosilicate Glass of Arbitrary P₂O₅ to SiO₂ Ratio. Advanced Optical Materials, 2018, 6, 1800024.	3.6	19
31	Highly efficient upconversion luminescence of Er heavily doped nanocrystals through 1530â€‰â€‰nm excitation. Optics Letters, 2019, 44, 711.	1.7	19
32	Efficient two-color luminescence of Er3+/Yb3+/Li+:ZrO2 nanocrystals. Optical Materials, 2011, 33, 1234-1238.	1.7	18
33	Concentration dependent optical transition probabilities in ultra-small upconversion nanocrystals. Optics Express, 2018, 26, 23471.	1.7	18
34	Facile preparation of upconversion microfibers for efficient luminescence and distributed temperature measurement. Journal of Materials Chemistry C, 2019, 7, 7984-7992.	2.7	18
35	Efficient green upconversion luminescence in highly crystallized ultratransparent nano-glass ceramics containing isotropic KY₃F₁₀ nanocrystals. Optics Letters, 2019, 44, 4674.	1.7	18
36	Modified FIR thermometry for surface temperature sensing by using high power laser. Optics Express, 2017, 25, 848.	1.7	16

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37	Effects of melting temperature and composition on spectroscopic properties of Er^3+-doped bismuth glasses. Optical Materials Express, 2016, 6, 279.	1.6	15
38	Efficient nanoheater operated in a biological window for photo-hyperthermia therapy. Biomedical Optics Express, 2019, 10, 1935.	1.5	15
39	Optimized tellurite glasses containing CsPbBr3-quantum dots for white-light emitting diodes. Journal of Non-Crystalline Solids, 2022, 581, 121429.	1.5	14
40	Upconversion mechanisms and thermal effects of Er3+ in Er3+ doped yttria nanocrystals. Journal of Luminescence, 2012, 132, 1483-1488.	1.5	13
41	Upconversion thermometer through novel PMMA fiber containing nanocrystals. Optical Materials Express, 2018, 8, 2321.	1.6	13
42	Atomic Mechanism of Interfacial-Controlled Quantum Efficiency and Charge Migration in InAs/GaSb Superlattice. ACS Applied Materials & Interfaces, 2017, 9, 26642-26647.	4.0	12
43	Intense and color-tunable upconversion through 980 and 1530Ânm excitations. Journal of Luminescence, 2020, 224, 117306.	1.5	12
44	Ultrabright single-band red upconversion luminescence in highly transparent fluorosilicate glass ceramics containing KMnF₃ perovskite nanocrystals. Optics Letters, 2019, 44, 2959.	1.7	12
45	Enhanced red upconversion emission of Er3+-doped ZnO by post-annealing. Journal of Luminescence, 2017, 192, 668-674.	1.5	11
46	Self-monitored biological nanoheaters operating in the first biological window based on single-band red upconversion nanoparticles fabricated through architectural design. Journal of Alloys and Compounds, 2020, 842, 155602.	2.8	11
47	Effects of Li+ on structure and spectroscopic properties of Er3+/Li+ codoped Sb2O3â€"Na2Oâ€"SiO2 glasses. Journal of Applied Physics, 2010, 107, 093103.	1.1	10
48	Phase transformation of ZrO2 nanocrystals induced by Li+. Materials Letters, 2012, 79, 75-77.	1.3	10
49	Single band upconversion mechanisms of Er3+/Yb3+:ZrO2 nanocrystals. Optics Communications, 2012, 285, 1528-1532.	1.0	10
50	Synthesis of monodisperse hydroxyl-containing polystyrene via chemical modification. Macromolecular Rapid Communications, 1996, 17, 37-42.	2.0	9
51	Dispersing upconversion nanocrystals in PMMA microfiber: a novel methodology for temperature sensing. RSC Advances, 2018, 8, 19362-19368.	1.7	9
52	Functionalised liquid crystal microfibers for hydrogen peroxide and catalase detection using whispering gallery mode. Liquid Crystals, 2020, 47, 1708-1717.	0.9	9
53	800 nm laser induced white light upconversion of Nd/Yb/Pr triply doped NaYF4 through a dual-sensitization strategy. Materials Research Bulletin, 2021, 133, 111027.	2.7	9
54	A new role of Yb³⁺â€"an energy reservoir for lanthanide upconversion luminescence. Nanoscale, 2021, 13, 9978-9988.	2.8	9

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55	Unipolar nonvolatile memory devices based on the composites of poly(9-vinylcarbazole) and zinc oxide nanoparticles. Journal of Materials Science: Materials in Electronics, 2017, 28, 11749-11754.	1.1	8
56	Upconversion enhancement through a facile, ultrafast, and low-threshold laser annealing strategy. Nanotechnology, 2019, 30, 435703.	1.3	8
57	Macromolecular aggregation: Complexation due to hydrogen bonding and hydrophobic association. Macromolecular Symposia, 1997, 124, 135-146.	0.4	7
58	Mechanisms of Upconversion Luminescence of Er3+-Doped NaYF4 via 980 and 1530 nm Excitation. Nanomaterials, 2021, 11, 2767.	1.9	7
59	Nanoheater-tuned whispering gallery mode lasing in liquid-filled hollow microcavities. Optics Letters, 2020, 45, 815.	1.7	7
60	Significant Fluorescence Enhancement through Rapid Laser Annealing and Nonthermal Coupling Optical Temperature Sensing of Er-Doped Yttria Nanocrystals. Journal of Physical Chemistry C, 2022, 126, 3830-3838.	1.5	7
61	Preparation and upconversion properties of rare earth doped core-shell Y(OH)3 and Î²-NaYF4 hybrid nanorods. Materials Research Bulletin, 2018, 101, 61-66.	2.7	6
62	Enlarged memory margins for resistive switching devices based on polyurethane film due to embedded Ag nanoparticles. Solid-State Electronics, 2018, 147, 6-12.	0.8	6
63	Photothermal control of whispering gallery mode lasing in polymer-coated silica microcavity using high-efficiency nanoheater. Journal of Materials Science, 2021, 56, 570-580.	1.7	6
64	Suppression of energy transfer from Er3+ to OHâˆ' in Er3+ highly doped zirconia. Optics Communications, 2013, 287, 228-233.	1.0	5
65	Compact all-fiber thermo-optic modulator based on a Michelson interferometer coated with NaNdF₄ nanoparticles. Optics Express, 2021, 29, 6854.	1.7	5
66	Color tuning in a compact core-shell nanocrystal based on intense and high-purity green and red photon upconversion. Optics Letters, 2021, 46, 900.	1.7	5
67	Correlation between ultrabroadband nearâ€infrared emission and Yb³⁺/Ni²⁺ dopants distribution in highly transparent germanate glassâ€ceramics containing zinc gallogermanate nanospinels. Journal of the American Ceramic Society, 2019, 102, 1619-1627.	1.9	4
68	Phase transformation and controllable size of Î³-Al₂O₃ nanocrystals through Li doping using solâ€"gel method. Phase Transitions, 2018, 91, 1129-1134.	0.6	3
69	Tm³⁺ heavily doped NIR-III bioprobe with 1 Âµm Stokes shift towards deep-tissue applications. Optics Express, 2021, 29, 42674.	1.7	3
70	Effects of inert shell on the upconversion intensity and color of Na(Er/Yb)F4 nanocrystals. AIP Advances, 2021, 11, 105312.	0.6	1
71	Dual-excitation regulated Tm3+ upconverting luminescence towards novel encrypted information transmission. Optical Materials, 2022, 127, 112258.	1.7	1
72	Suppression of inner energy dissipation in Yb-doped NaErF4 upconversion nanocrystals through an energy cycling strategy. Journal of Rare Earths, 2022, , .	2.5	0