Guotao Xiang

List of Publications by Year
in descending order

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55 papers	1,881 citations	236925 25 h-index	265206 42 g-index
55 all docs	55 docs citations	55 times ranked	1149 citing authors

#	Article	IF	Citations
1	Simultaneously tuning emission color and realizing optical thermometry via efficient Tb3+â†'Eu3+ energy transfer in whitlockite-type phosphate multifunctional phosphors. Journal of Alloys and Compounds, 2019, 780, 266-275.	5.5	210
2	Near-ultraviolet and blue light excited Sm3+ doped Lu2MoO6 phosphor for potential solid state lighting and temperature sensing. Journal of Alloys and Compounds, 2018, 738, 473-483.	5.5	94
3	NaBaLa2(PO4)3: A novel host lattice for Sm3+-doped phosphor materials emitting reddish-orange light. Journal of Alloys and Compounds, 2017, 701, 515-523.	5.5	87
4	Deep-Tissue Temperature Sensing Realized in BaY₂O₄:Yb³⁺/Er³⁺ with Ultrahigh Sensitivity and Extremely Intense Red Upconversion Luminescence. Inorganic Chemistry, 2020, 59, 11054-11060.	4.0	85
5	Multifunctional Luminescent Material Eu(III) and Tb(III) Complexes with Pyridine-3,5-Dicarboxylic Acid Linker: Crystal Structures, Tunable Emission, Energy Transfer, and Temperature Sensing. Inorganic Chemistry, 2019, 58, 3780-3788.	4.0	67
6	Upconversion nanoparticles modified by Cu₂S for photothermal therapy along with real-time optical thermometry. Nanoscale, 2021, 13, 7161-7168.	5.6	66
7	Dual-Mode Optical Thermometry Based on the Fluorescence Intensity Ratio Excited by a 915 nm Wavelength in LuVO₄:Yb³⁺/Er³⁺@SiO₂ Nanoparticles. Inorganic Chemistry, 2019, 58, 8245-8252.	4.0	65
8	Multifunctional optical thermometry based on the stark sublevels of Er³⁺ in CaOâ€Y₂O₃: Yb³⁺/Er³⁺. Journal of the American Ceramic Society, 2020, 103, 2540-2547.	3.8	62
9	Realizing emission color tuning, ratiometric optical thermometry and temperature-induced redshift investigation in novel Eu³⁺-doped Ba₃La(VO₄)₃ phosphors. Dalton Transactions, 2019, 48, 10824-10833.	3.3	58
10	Optical thermometry based on the thermally coupled energy levels of Er³⁺ in upconversion materials. Dalton Transactions, 2020, 49, 17115-17120.	3.3	57
11	Constructing ultra-sensitive dual-mode optical thermometers: Utilizing FIR of Mn⁴⁺/Eu³⁺ and lifetime of Mn⁴⁺ based on double perovskite tellurite phosphor. Optics Express, 2020, 28, 33747.	3.4	57
12	A novel dazzling Eu³⁺â€doped whitlockiteâ€type phosphate redâ€emitting phosphor for white lightâ€emitting diodes. Journal of the American Ceramic Society, 2018, 101, 4095-4107.	3.8	47
13	Luminescence and optical thermometry strategy based on emission and excitation spectra of Pr3+ doped SrMoO4 phosphors. Ceramics International, 2021, 47, 769-775.	4.8	45
14	Near-Infrared-to-Near-Infrared Optical Thermometer BaY₂O₄: Yb³⁺/Nd³⁺ Assembled with Photothermal Conversion Performance. Inorganic Chemistry, 2022, 61, 5425-5432.	4.0	45
15	A novel double-perovskite LiLaMgTeO6: Mn4+ far-red phosphor for indoor plant cultivation white LEDs: Crystal and electronic structure, and photoluminescence properties. Journal of Alloys and Compounds, 2020, 832, 154905.	5.5	42
16	Color tunable emission and low-temperature luminescent sensing of europium and terbium carboxylic acid complexes. Inorganica Chimica Acta, 2018, 469, 576-582.	2.4	41
17	Decrease in particle size and enhancement of upconversion emission through Y³⁺ions doping in hexagonal NaLuF₄:Yb³⁺/Er³⁺nanocrystals. CrystEngComm, 2015, 17, 3103-3109.	2.6	40
18	Upconversion properties and temperature sensing behaviors in visible and near-infrared region based on fluorescence intensity ratio in LuVO4: Yb3+/Er3+. Journal of Alloys and Compounds, 2018, 769, 325-331.	5.5	40

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19	High-sensitivity and wide-temperature-range dual-mode optical thermometry under dual-wavelength excitation in a novel double perovskite tellurate oxide. Dalton Transactions, 2021, 50, 11412-11421.	3.3	40
20	Novel double-perovskite SrLaLiTeO6:Mn4+ far-red phosphor with superior thermal stability for indoor plant growth LED. Journal of Luminescence, 2021, 238, 118286.	3.1	38
21	Eu 3+ activated LiSrVO 4 phosphors: Emission color tuning and potential application in temperature sensing. Dyes and Pigments, 2018, 151, 219-226.	3.7	35
22	Importance of Suppression of Yb³⁺ De-Excitation to Upconversion Enhancement in Î²-NaYF₄: Yb³⁺/Er³⁺@Î²-NaYF₄ Sandwiched Structure Nanocrystals. Inorganic Chemistry, 2015, 54, 3921-3928.	4.0	29
23	Tunable emission color of Li₂SrSiO₄:Tb³⁺ due to crossâ€relaxation process and optical thermometry investigation. Journal of the American Ceramic Society, 2018, 101, 3076-3085.	3.8	29
24	Design of a bi-functional NaScF4: Yb3+/Er3+ nanoparticles for deep-tissue bioimaging and optical thermometry through Mn2+ doping. Talanta, 2021, 224, 121832.	5.5	28
25	Transition to cubic phase and enhancement of green upconversion emission by adding La3+ ions in hexagonal NaLuF4:Yb3+/Er3+ nanocrystals. CrystEngComm, 2014, 16, 2499.	2.6	26
26	Molybdenum substitution simultaneously induced band structure modulation and luminescence enhancement in LiLaMg(W, Mo)O6: Eu3+ red-emitting phosphor for near ultraviolet excited white light diodes. Journal of Alloys and Compounds, 2018, 763, 278-288.	5.5	25
27	Multi-parametric thermal sensing based on NIR emission of Ho(III) doped CaWO 4 phosphors. Optical Materials, 2017, 66, 12-16.	3.6	24
28	Tunable luminescence and energy transfer properties of MgY4Si3O13: Ce3+, Tb3+, Eu3+ phosphors. Ceramics International, 2017, 43, 16323-16330.	4.8	24
29	High-sensitivity luminescent thermometer based on Mn4+/Sm3+ dual-emission centers in double-perovskite tellurate. Ceramics International, 2022, 48, 27664-27671.	4.8	24
30	Sr₃Lu (VO₄)₃: Eu³⁺ redâ€emitting phosphors for warm white LEDs. Journal of the American Ceramic Society, 2021, 104, 2721-2729.	3.8	23
31	Investigation of the Energy-Transfer Mechanism in Ho³⁺- and Yb³⁺-Codoped Lu₂O₃ Phosphor with Efficient Near-Infrared Downconversion. Inorganic Chemistry, 2017, 56, 1498-1503.	4.0	22
32	An optical thermometry based on abnormal negative thermal quenching of the charge transfer band edge. Journal of Luminescence, 2019, 215, 116636.	3.1	22
33	Insight into energy transfer, color tuning, and white emission in Tm3+ and Dy3+ codoped Ca8ZnLa(PO4)7 phosphors. Optical Materials, 2020, 102, 109808.	3.6	22
34	Solvothermal synthesis and upconversion properties of about 10 nm orthorhombic LuF3: Yb3+, Er3+ rectangular nanocrystals. Journal of Colloid and Interface Science, 2015, 459, 224-229.	9.4	21
35	The energy transfer mechanism in Pr3+and Yb3+codoped Î²-NaLuF4nanocrystals. Physical Chemistry Chemical Physics, 2014, 16, 9289-9293.	2.8	20
36	Strategy for optical thermometry based on temperature-dependent charge transfer to the Eu³⁺ 4f-4f excitation intensity ratio in Sr₃Lu(VO₄)₃:Eu³⁺ and CaWO₄:Nd³⁺. Optics Letters, 2020, 45, 3637.	3.3	20

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37	Synthesis of color-tunable Sr8MgLa(PO4)7:Eu3+/Tb3+ phosphors for designing dual-model thermometers. Journal of Luminescence, 2021, 239, 118383.	3.1	19
38	Improvement of Green Upconversion Monochromaticity by Doping Eu³⁺ in Lu₂O₃:Yb³⁺/Ho³⁺ Powders with Detailed Investigation of the Energy Transfer Mechanism. Inorganic Chemistry, 2017, 56, 9194-9199.	4.0	15
39	Investigation on the optical sensing behaviors in single Eu3+-activated Sr2InSbO6 phosphors under green light excitation. Journal of Alloys and Compounds, 2022, 906, 164322.	5.5	15
40	Luminescent properties of Eu3+-doped NaLaCaWO6 red phosphors and temperature sensing derived from the excited state of charge transfer band. Journal of Luminescence, 2022, 248, 118964.	3.1	15
41	Photoluminescence properties and efficient energy transfer of Ce3+/Eu2+ activated K2Ba7Si16O40 phosphors. Materials Research Bulletin, 2018, 101, 232-239.	5.2	13
42	Sr4Y6(AlO4)x(SiO4)6-xOÎ´:Eu2+: A novel apatite structure blue-green emitting phosphor. Ceramics International, 2018, 44, 19900-19906.	4.8	13
43	Investigation of energy transfer in Pr3+, Yb3+ co-doped phosphate phosphor: The role of 3P0 and 1D2. Journal of Luminescence, 2019, 209, 45-51.	3.1	13
44	Nd3+ and Nd3+/Yb3+-incorporated complexes as optical thermometer working in the second biological window. Sensing and Bio-Sensing Research, 2020, 29, 100345.	4.2	12
45	Luminescent properties and ratiometric optical thermometry of Ln-BDC-F4 compounds. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 224, 117418.	3.9	10
46	Synthsis and characterization of Tb3+/Eu3+ complexes based on 2,4,6-tris-(4-carboxyphenyl)-1,3,5-triazine ligand for ratiometric luminescence temperature sensing. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 244, 118781.	3.9	10
47	Multipath optical thermometry realized in CaSc₂O₄: Yb³⁺/Er³⁺ with high sensitivity and superior resolution. Journal of the American Ceramic Society, 2021, 104, 2711-2720.	3.8	10
48	Ultrasensitive optical thermometer based on abnormal thermal quenching Stark transitions operating beyond 1500Ânm. Journal of the American Ceramic Society, 2021, 104, 5784-5793.	3.8	10
49	Enhancement of Eu³⁺ Red Upconversion in Lu₂O₃: Yb³⁺/Eu³⁺ Powders under the Assistance of Bridging Function Originated from Ho³⁺ Tridoping. Inorganic Chemistry, 2017, 56, 13955-13961.	4.0	9
50	Realizing dual-mode luminescent thermometry with excellent sensing sensitivity in single-phase samarium (III)-doped antimonite phosphors. Journal of Alloys and Compounds, 2022, 917, 165435.	5.5	8
51	Warm white light emission of apatite-type compound Ca 4 Y 6 O(SiO 4) 6 doped with Dy 3+. Materials Research Bulletin, 2018, 106, 428-432.	5.2	7
52	Near-infrared quantum cutting and energy transfer mechanism in Lu2O3: Tm3+/Yb3+ phosphor for high-efficiency photovoltaics. Journal of Materials Science: Materials in Electronics, 2017, 28, 8017-8022.	2.2	6
53	Enhanced upconverted luminescence and the optical thermometry behavior of Er 3+ -doped BaYbF 5 transparent glass ceramics. Ceramics International, 2018, 44, 10106-10110.	4.8	6
54	Thermally enhanced near-infrared luminescence in CaSc2O4: Yb3+/Nd3+ nanorods for temperature sensing and photothermal conversion. Ceramics International, 2022, 48, 23436-23443.	4.8	6

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55	Preparation, structure and down-shifting luminescence of Yb3+ doped KLa5O5(VO4)2. Materials Research Bulletin, 2018, 108, 5-9.	5.2	4