Liangliang Zhang

List of Publications by Year
in descending order

55 papers	2,157 citations	257450 24 h-index	233421 45 g-index
57 all docs	57 docs citations	57 times ranked	1190 citing authors

#	Article	IF	Citations
1	Cr³⁺â€Doped Broadband NIR Garnet Phosphor with Enhanced Luminescence and its Application in NIR Spectroscopy. Advanced Optical Materials, 2019, 7, 1900185.	7.3	257
2	A high efficiency broad-band near-infrared Ca₂LuZr₂Al₃O₁₂:Cr³⁺ garnet phosphor for blue LED chips. Journal of Materials Chemistry C, 2018, 6, 4967-4976.	5.5	244
3	Efficient Super Broadband NIR Ca₂LuZr₂Al₃O₁₂:Cr³⁺,Yb³⁺ Garnet Phosphor for pcâ€LED Light Source toward NIR Spectroscopy Applications. Advanced Optical Materials, 2020, 8, 1901684.	7.3	175
4	Efficient and Broadband LiGaP₂O₇:Cr³⁺ Phosphors for Smart Nearâ€Infrared Lightâ€Emitting Diodes. Laser and Photonics Reviews, 2021, 15, 2100227.	8.7	117
5	Er³⁺/Yb³⁺ codoped phosphor Ba₃Y₄O₉ with intense red upconversion emission and optical temperature sensing behavior. Journal of Materials Chemistry C, 2018, 6, 3459-3467.	5.5	99
6	Highly Efficient Green-Emitting Phosphors Ba₂Y₅B₅O₁₇ with Low Thermal Quenching Due to Fast Energy Transfer from Ce³⁺ to Tb³⁺. Inorganic Chemistry, 2017, 56, 4538-4544.	4.0	93
7	Cr³⁺ Activated Garnet Phosphor with Efficient Blue to Farâ€Red Conversion for pcâ€LED. Advanced Optical Materials, 2021, 9, 2101134.	7.3	91
8	New Yellow-Emitting Nitride Phosphor SrAlSi₄N₇:Ce³⁺ and Important Role of Excessive AlN in Material Synthesis. ACS Applied Materials & Interfaces, 2013, 5, 12839-12846.	8.0	87
9	A highly efficient and thermally stable green phosphor (Lu₂SrAl₄SiO₁₂:Ce³⁺) for full-spectrum white LEDs. Journal of Materials Chemistry C, 2018, 6, 12159-12163.	5.5	73
10	Simultaneously tuning the emission color and improving thermal stability <i>via</i> energy transfer in apatite-type phosphors. Journal of Materials Chemistry C, 2017, 5, 11910-11919.	5.5	55
11	Phosphor-SiO2 composite films suitable for white laser lighting with excellent color rendering. Journal of the European Ceramic Society, 2020, 40, 2439-2444.	5.7	51
12	Phonon Energy Dependent Energy Transfer Upconversion for the Red Emission in the Er³⁺/Yb³⁺ System. Journal of Physical Chemistry C, 2018, 122, 9611-9618.	3.1	42
13	Luminescence properties and its red shift of blue-emitting phosphor Na₃YSi₃O₉:Ce³⁺for UV LED. RSC Advances, 2017, 7, 27422-27430.	3.6	40
14	An efficient green phosphor of Ce³⁺ and Tb³⁺-codoped Ba₂Lu₅B₅O₁₇ and a model for elucidating the high thermal stability of the green emission. Journal of Materials Chemistry C, 2018, 6, 5984-5991.	5.5	39
15	Efficient Broadband Near-Infrared CaMgGe₂O₆:Cr³⁺ Phosphor for pc-LED. Inorganic Chemistry, 2022, 61, 8815-8822.	4.0	38
16	Yellow-Emitting Sr9Sc(PO4)7:Eu2+, Mn2+Phosphor with Energy Transfer for Potential Application in White Light-Emitting Diodes. European Journal of Inorganic Chemistry, 2014, 2014, 870-874.	2.0	36
17	Red emission generation through highly efficient energy transfer from Ce³⁺ to Mn²⁺ in CaO for warm white LEDs. Dalton Transactions, 2016, 45, 1539-1545.	3.3	33
18	Yolkâ€“shell structured Bi₂SiO₅:Yb³⁺,Ln³⁺ (Ln = Er, Ho,) Tj ETQq0 0 0 rgBT /Overlo 2020, 22, 4438-4448.	2.6	31

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19	Low-Concentration Eu²⁺-Doped SrAlSi₄N₇: Ce³⁺ Yellow Phosphor for wLEDs with Improved Color-Rendering Index. Inorganic Chemistry, 2016, 55, 9736-9741.	4.0	30
20	An efficient blue phosphor Ba 2 Lu 5 B 5 O 17 :Ce 3+ stabilized by La 2 O 3 : Photoluminescence properties and potential use in white LEDs. Dyes and Pigments, 2018, 154, 121-127.	3.7	30
21	On the luminescence of Ti⁴⁺ and Eu³⁺ in monoclinic ZrO₂: high performance optical thermometry derived from energy transfer. Journal of Materials Chemistry C, 2020, 8, 4518-4533.	5.5	29
22	Tunable luminescence of Na3YSi3O9:Ce3+, Mn2+ via efficient energy transfer for white LEDs. Journal of Luminescence, 2019, 206, 227-233.	3.1	28
23	Ultra-broadband near-infrared Gd3MgScGa2SiO12: Cr, Yb phosphors: Photoluminescence properties and LED applications. Journal of Alloys and Compounds, 2022, 920, 165912.	5.5	28
24	Efficient Blue-emitting Phosphor SrLu2O4:Ce3+ with High Thermal Stability for Near Ultraviolet (~400â€‰nm) LED-Chip based White LEDs. Scientific Reports, 2018, 8, 10463.	3.3	27
25	Dye-embedded YAG:Ce³⁺@SiO₂composite phosphors toward warm wLEDs through radiative energy transfer: preparation, characterization and luminescence properties. Nanoscale, 2018, 10, 22237-22251.	5.6	25
26	Luminescence properties and high thermal stability of tunable blueâ€“green-emitting phosphor Gd 4.67 Si 3 O 13 :Ce 3+ , Tb 3+. Ceramics International, 2016, 42, 3309-3316.	4.8	24
27	Observation of a red Ce3+ center in SrLu2O4:Ce3+ phosphor and its potential application in temperature sensing. Dalton Transactions, 2019, 48, 5263-5270.	3.3	22
28	The Inductive Effect of Neighboring Cations in Tuning Luminescence Properties of the Solid Solution Phosphors. Inorganic Chemistry, 2017, 56, 9938-9945.	4.0	20
29	Highly efficient upconversion emission of Er³⁺ in Î´-Sc₄Zr₃O₁₂ and broad-range temperature sensing. Physical Chemistry Chemical Physics, 2018, 20, 14461-14468.	2.8	20
30	First-principles study on OH-functionalized 2D electrides: Ca2NOH and Y2C(OH)2, promising two-dimensional monolayers for metal-ion batteries. Applied Surface Science, 2019, 478, 459-464.	6.1	20
31	Highly efficient and thermally stable luminescence of Ca₃Gd₂Si₆O₁₈:Ce³⁺,Tb³⁺ phosphors based on efficient energy transfer. Journal of Materials Chemistry C, 2020, 8, 17176-17184.	5.5	20
32	Highly efficient and thermally stable far-red-emitting phosphors for plant-growth lighting. Journal of Luminescence, 2022, 244, 118750.	3.1	18
33	2D Nitrogenâ€Containing Carbon Material C₅N as Potential Host Material for Lithium Polysulfides: A Firstâ€Principles Study. Advanced Theory and Simulations, 2019, 2, 1800165.	2.8	16
34	Highly efficient and thermally robust cyan-green phosphor-in-glass films for high-brightness laser lighting. Journal of Materials Chemistry C, 2021, 9, 12342-12352.	5.5	16
35	Cooperative Upconversion Luminescence Properties of Yb³⁺ and Tb³⁺ Heavily Codoped Silicate Garnet Obtained by Multiple Chemical Unit Cosubstitution. Journal of Physical Chemistry C, 2017, 121, 2998-3006.	3.1	15
36	Laserâ€quality Tm:(Lu_{0.8}Sc_{0.2})₂O₃ mixed sesquioxide ceramics shaped by gelcasting of wellâ€dispersed nanopowders. Journal of the American Ceramic Society, 2019, 102, 4919-4928.	3.8	15

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37	Site distortion in Li2SrSiO4: Influence on Pr3+ emission and application in wLED. Journal of Luminescence, 2016, 180, 158-162.	3.1	14
38	Cr3+ and Nd3+ co-activated garnet phosphor for NIR super broadband pc-LED application. Materials Research Bulletin, 2022, 151, 111797.	5.2	12
39	Two Ce3+ centers induced broadband emission in Y3Si6N11:Ce3+ yellow phosphor. Dalton Transactions, 2018, 47, 16723-16728.	3.3	11
40	11 W continuous-wave laser operation at 209 Î¼m in Tm:Lu16Sc04O3mixed sesquioxide ceramics pumped by a 796 nm laser diode. Optical Materials Express, 2018, 8, 3615.	3.0	11
41	Formation condition of red Ce^3+ in Ca_3Sc_2Si_3O_12:Ce^3+, N^3â^' as a full-color-emitting light-emitting diode phosphor. Optics Letters, 2013, 38, 884.	3.3	10
42	Green upconversion luminescence of Er3+ and Yb3+ codoped Gd2Mo4O15 for optical temperature sensing. Journal of Alloys and Compounds, 2022, 895, 162516.	5.5	10
43	Observation and photoluminescence properties of two Er3+ centers in CaSc2O4:Er3+, Yb3+ upconverting phosphor. Journal of Alloys and Compounds, 2017, 708, 827-833.	5.5	9
44	Enhanced emission of Tm3+:3F4Ââ†'Â3H6 transition by backward energy transfer from Yb3+ in Y2O3 for mid-infrared applications. Journal of Alloys and Compounds, 2017, 722, 48-53.	5.5	8
45	The dominant role of excitation diffusion in energy transfer upconversion of Lu2O3: Tm3+, Yb3+. Journal of Alloys and Compounds, 2017, 704, 206-211.	5.5	7
46	Enhanced 3H4-3F4 nonradiative relaxation of Tm3+ through energy transfer to Yb3+ and efficient back transfer in lowly Tm3+ doped Lu1.6Sc0.4O3:Tm3+, Yb3+. Journal of Alloys and Compounds, 2017, 696, 627-631.	5.5	7
47	Enhancing IR to NIR upconversion emission in Er3+-sensitized phosphors by adding Yb3+ as a highly efficient NIR-emitting center for photovoltaic applications. CrystEngComm, 2020, 22, 229-236.	2.6	7
48	Multi-peaked broad-band red phosphor Y3Si6N11:Pr3+ for white LEDs and temperature sensing. Dalton Transactions, 2020, 49, 17779-17785.	3.3	7
49	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
50	Synthesis and photoluminescence properties of Eu 2+ activated CaO ceramic powders for near-ultraviolet chip based white light emitting diodes. Optical Materials, 2017, 71, 1-4.	3.6	6
51	Câ€“O bond activation and splitting behaviours of CO₂ on a 4H-SiC surface: a DFT study. Physical Chemistry Chemical Physics, 2018, 20, 26846-26852.	2.8	6
52	Enhanced upconversion luminescence and optical thermometry in Er³⁺/Yb³⁺ heavily doped ZrO₂ by stabilizing in the monoclinic phase. Materials Chemistry Frontiers, 2021, 5, 5142-5149.	5.9	6
53	Conceptual Ultravioletâ€C Light Source Based on Upâ€Conversion Luminescence. Advanced Photonics Research, 2022, 3, .	3.6	5
54	Inhomogeneous-Broadening-Induced Intense Upconversion Luminescence in Tm3+ and Yb3+ Codoped Lu2O3â€"ZrO2 Disordered Crystals. Inorganic Chemistry, 2017, 56, 12291-12296.	4.0	4

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55	Enhanced âˆ¼2 Î¼m Emission of Tm³⁺ in Lu₂O₃ by Addition of a Trace Amount of Er³⁺. Inorganic Chemistry, 2017, 56, 13062-13069.	4.0	3