Yayun Zhou

List of Publications by Year
in descending order

60 papers	3,200 citations	147801 31 h-index	155660 55 g-index
60 all docs	60 docs citations	60 times ranked	1396 citing authors

#	Article	IF	Citations
1	Emerging ultra-narrow-band cyan-emitting phosphor for white LEDs with enhanced color rendition. Light: Science and Applications, 2019, 8, 38.	16.6	369
2	Highly Efficient and Stable Narrow-Band Red Phosphor Cs₂SiF₆:Mn⁴⁺ for High-Power Warm White LED Applications. ACS Photonics, 2017, 4, 2556-2565.	6.6	177
3	Li substituent tuning of LED phosphors with enhanced efficiency, tunable photoluminescence, and improved thermal stability. Science Advances, 2019, 5, eaav0363.	10.3	153
4	A new red phosphor BaGeF₆:Mn⁴⁺: hydrothermal synthesis, photo-luminescence properties, and its application in warm white LED devices. Journal of Materials Chemistry C, 2015, 3, 3055-3059.	5.5	144
5	Polyhedron Transformation toward Stable Narrowâ€Band Green Phosphors for Wideâ€Colorâ€Gamut Liquid Crystal Display. Advanced Functional Materials, 2019, 29, 1901988.	14.9	140
6	A thermally stable narrow-band green-emitting phosphor MgAl₂O₄:Mn²⁺for wide color gamut backlight display application. Journal of Materials Chemistry C, 2019, 7, 8192-8198.	5.5	110
7	Discovery of New Narrowâ€Band Phosphors with the UCr₄C₄â€Related Type Structure by Alkali Cation Effect. Advanced Optical Materials, 2019, 7, 1801631.	7.3	109
8	Giant Redâ€Shifted Emission in (Sr,Ba)Y₂O₄:Eu²⁺ Phosphor Toward Broadband Nearâ€Infrared Luminescence. Advanced Functional Materials, 2022, 32, 2103927.	14.9	109
9	A General Ammonium Salt Assisted Synthesis Strategy for Cr³⁺â€Doped Hexafluorides with Highly Efficient Near Infrared Emissions. Advanced Functional Materials, 2021, 31, 2103743.	14.9	107
10	A new and efficient red phosphor for solid-state lighting: Cs₂TiF₆:Mn⁴⁺. Journal of Materials Chemistry C, 2015, 3, 9615-9619.	5.5	94
11	Synthesis and warm-white LED applications of an efficient narrow-band red emitting phosphor, Rb₂ZrF₆:Mn⁴⁺. Journal of Materials Chemistry C, 2017, 5, 7253-7261.	5.5	77
12	Red-emitting phosphors Na₂XF₆:Mn⁴⁺(X = Si, Ge, Ti) with high colour-purity for warm white-light-emitting diodes. RSC Advances, 2015, 5, 58136-58140.	3.6	76
13	Surface Passivation toward Highly Stable Mn⁴⁺â€Activated Redâ€Emitting Fluoride Phosphors and Enhanced Photostability for White LEDs. Advanced Materials Interfaces, 2019, 6, 1802006.	3.7	75
14	Tailoring photoluminescence stability in double perovskite red phosphors A₂BAlF₆:Mn⁴⁺(A = Rb, Cs; B = K, Rb)vianeighboring-cation modulation. Journal of Materials Chemistry C, 2017, 5, 12422-12429.	5.5	72
15	Stable narrowband red phosphor K₃GaF₆:Mn⁴⁺derived from hydrous K₂GaF₅(H₂O) and K₂MnF₆. Journal of Materials Chemistry C, 2017, 5, 9588-9596.	5.5	70
16	Mn2+-activated dual-wavelength emitting materials toward wearable optical fibre temperature sensor. Nature Communications, 2022, 13, 2166.	12.8	70
17	Lead-free Mn^{II}-based red-emitting hybrid halide (CH₆N₃)₂MnCl₄ toward high performance warm WLEDs. Journal of Materials Chemistry C, 2021, 9, 4895-4902.	5.5	63
18	Optical performance of Mn⁴⁺in a new hexa-coordinated fluorozirconate complex of Cs₂ZrF₆. Journal of Materials Chemistry C, 2016, 4, 7443-7448.	5.5	62

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19	Three Birds with One Stone: K₂SiF₆:Mn⁴⁺ Single Crystal Phosphors for Highâ€Power and Laserâ€Driven Lighting. Advanced Optical Materials, 2020, 8, 2000976.	7.3	59
20	Unveiling Mn4+ substitution in oxyfluoride phosphor Rb2MoO2F4:Mn4+ applied to wide-gamut fast-response backlight displays. Chemical Engineering Journal, 2021, 415, 128974.	12.7	56
21	Highly efficient red phosphor Cs₂GeF₆:Mn⁴⁺ for warm white light-emitting diodes. RSC Advances, 2015, 5, 82409-82414.	3.6	55
22	Luminescence behaviour of Mn⁴⁺ions in seven coordination environments of K₃ZrF₇. Dalton Transactions, 2016, 45, 9654-9660.	3.3	55
23	Competitive Site Occupation toward Improved Quantum Efficiency of SrLaScO₄:Eu Red Phosphors for Warm White LEDs. Advanced Optical Materials, 2022, 10, .	7.3	55
24	Synthesis of K2XF6:Mn4+ (X=Ti, Si and Ge) red phosphors for white LED applications with low-concentration of HF. Optical Materials, 2015, 49, 235-240.	3.6	51
25	Non-equivalent Mn⁴⁺ doping into A₂NaScF₆ (A = K, Rb, Cs) hosts toward short fluorescence lifetime for backlight display application. Journal of Materials Chemistry C, 2019, 7, 9203-9210.	5.5	51
26	Stable narrowband red emission in fluorotellurate KTeF₅:Mn⁴⁺viaMn⁴⁺noncentral-site occupation. Journal of Materials Chemistry C, 2018, 6, 4418-4426.	5.5	47
27	Rapid Synthesis of Redâ€Emitting Sr₂Sc_{0.5}Ga_{1.5}O₅:Eu²⁺ Phosphors and the Tunable Photoluminescence Via Sr/Ba Substitution. Advanced Optical Materials, 2021, 9, 2100131.	7.3	47
28	Singleâ€Crystal Red Phosphors and Their Coreâ€“Shell Structure for Improved Waterâ€Resistance for Laser Diodes Applications. Angewandte Chemie - International Edition, 2021, 60, 3940-3945.	13.8	46
29	Hydrothermal synthesis and luminescent properties of BaTiF 6 :Mn 4+ red phosphor for LED backlighting. Materials Research Bulletin, 2016, 73, 14-20.	5.2	40
30	An efficient and stable narrow band Mn⁴⁺-activated fluorotitanate red phosphor Rb₂TiF₆:Mn⁴⁺ for warm white LED applications. Journal of Materials Chemistry C, 2018, 6, 8670-8678.	5.5	40
31	Fabrication and application of non-rare earth red phosphors for warm white-light-emitting diodes. RSC Advances, 2015, 5, 84821-84826.	3.6	34
32	Interstitial Li⁺ Occupancy Enabling Radiative/Nonradiative Transition Control toward Highly Efficient Cr³⁺-Based Near-Infrared Luminescence. ACS Applied Materials & Interfaces, 2022, 14, 31035-31043.	8.0	32
33	Narrow Bandwidth Luminescence in Sr₂Li(Al,Ga)O₄:Eu²⁺ by Selective Site Occupancy Engineering for High Definition Displays. Laser and Photonics Reviews, 2021, 15, 2100392.	8.7	31
34	Mn 4+ -activated BaSiF 6 red phosphor: Hydrothermal synthesis and dependence of its luminescent properties on reaction conditions. Materials Chemistry and Physics, 2016, 170, 32-37.	4.0	29
35	Implementation of high color quality, high luminous warm WLED using efficient and thermally stable Rb3AlF6:Mn4+ as red color converter. Journal of Alloys and Compounds, 2019, 795, 453-461.	5.5	28
36	Site-Selective Occupancy of Mn²⁺ Enabling Adjustable Red/Near-Infrared Multimode Luminescence in Olivine for Dynamic Anticounterfeiting and Encryption. ACS Applied Electronic Materials, 2022, 4, 831-841.	4.3	28

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37	A Guanidinium-Based Mn⁴⁺-Doped Red-Emitting Hybrid Phosphor with High Stability. ACS Applied Electronic Materials, 2020, 2, 4134-4145.	4.3	24
38	Shining Mn⁴⁺ in 0D Organometallic Fluoride Hosts towards Highly Efficient Photoluminescence. Advanced Optical Materials, 2022, 10, .	7.3	24
39	Long-lived Photon Upconversion Phosphorescence in RbCaF3:Mn2+,Yb3+ and the Dynamic Color Separation Effect. IScience, 2019, 19, 597-606.	4.1	23
40	Facile in situ synthesis of zeolite-encapsulating Cs₂SiF₆:Mn⁴⁺ for application in WLEDs. Journal of Materials Chemistry C, 2019, 7, 1345-1352.	5.5	23
41	Mn4+ doped narrowband red phosphors with short fluorescence lifetime and high color stability for fast-response backlight display application. Journal of Alloys and Compounds, 2021, 855, 157347.	5.5	21
42	Local structure and luminescent properties of Cs2KGaF6:Mn4+ phosphor for backlight white LEDs. Journal of Alloys and Compounds, 2021, 881, 160624.	5.5	20
43	Luminescence Enhancement of Mn⁴⁺-Activated Fluorides via a Heterovalent Co-Doping Strategy for Monochromatic Multiplexing. ACS Applied Materials & Interfaces, 2021, 13, 51255-51265.	8.0	18
44	Mn⁴⁺ non-equivalent doped fluoride phosphors with a short fluorescence decay time for backlighting. Dalton Transactions, 2022, 51, 2512-2516.	3.3	17
45	The Photoluminescent Properties of New Cationic Iridium(III) Complexes Using Different Anions and Their Applications in White Light-Emitting Diodes. Materials, 2015, 8, 6105-6116.	2.9	16
46	Unraveling the Ultrafast Self-assembly and Photoluminescence in Zero-Dimensional Mn²⁺-Based Halides with Narrow-Band Green Emissions. ACS Applied Electronic Materials, 2021, 3, 4144-4150.	4.3	16
47	Novel red phosphors LaBSiO5 co-doped with Eu3+, Al3+ for near-UV light-emitting diodes. Optical Materials, 2014, 37, 277-280.	3.6	15
48	Color-tunable upconversion luminescence and prolonged Eu3+ fluorescence lifetime in fluoride KCdF3:Yb3+,Mn2+,Eu3+via controllable and efficient energy transfer. Journal of Materials Chemistry C, 2020, 8, 9836-9844.	5.5	15
49	Highly efficient and thermally stable broadband near-infrared emitting fluoride Cs₂KGaF₆:Cr³⁺ for multiple LED applications. Journal of Materials Chemistry C, 2022, 10, 10292-10301.	5.5	15
50	Singleâ€Crystal Red Phosphors and Their Coreâ€“Shell Structure for Improved Waterâ€Resistance for Laser Diodes Applications. Angewandte Chemie, 2021, 133, 3986-3991.	2.0	14
51	Photon upconversion afterglow materials toward visualized information coding/decoding. Journal of Materials Chemistry C, 2020, 8, 3678-3687.	5.5	14
52	Ammonium salt conversion towards Mn4+ doped (NH4)2NaScF6 narrow-band red-emitting phosphor. Journal of Alloys and Compounds, 2019, 811, 151945.	5.5	12
53	Ultraintense Zero-Phonon Line from a Mn⁴⁺ Red-Emitting Phosphor for High-Quality Backlight Display Applications. Inorganic Chemistry, 2021, 60, 19197-19205.	4.0	12
54	The use of a single ammonium acidic salt towards simple green co-precipitation synthesis for Mn4+-activated fluorides. Dalton Transactions, 2020, 49, 5823-5831.	3.3	11

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55	Ultrafast green ion-exchange and short lifetime of efficient (NH4)3SiF7:Mn4+ millimeter-sized single crystal for backlight displays. Journal of Alloys and Compounds, 2020, 847, 156550.	5.5	9
56	Defect-related luminescence behavior of a Mn⁴⁺ non-equivalently doped fluoroantimonate red phosphor. Dalton Transactions, 2022, 51, 608-617.	3.3	9
57	Structure and luminescence behaviour of a novel red-emitting fluoroperovskite for display backlight application. Dalton Transactions, 2021, 50, 11221-11227.	3.3	5
58	A red-emitting phosphor K5In3F14:Mn4+ and its potential application in the backlighting. Optical Materials, 2022, 126, 112223.	3.6	3
59	Luminescent properties and energy transfer in the green phosphors LaBSiO₅:Tb³⁺,Ce³⁺. Luminescence, 2015, 30, 719-722.	2.9	2
60	Revealing Mn⁴⁺ Local Symmetry in Narrowband Red-Emitting Phosphor Rb₂NaGaF₆:Mn⁴⁺ for Wide-Color-Gamut Backlighting. ECS Journal of Solid State Science and Technology, 2021, 10, 096011.	1.8	1