Xuejie Zhang

List of Publications by Year
in descending order

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Version: 2024-02-01

89 papers	5,909 citations	61984 43 h-index	74163 75 g-index
91 all docs	91 docs citations	91 times ranked	4215 citing authors

#	Article	IF	Citations
1	Hydrophobic carbon dots with blue dispersed emission and red aggregation-induced emission. Nature Communications, 2019, 10, 1789.	12.8	419
2	HF-Free Hydrothermal Route for Synthesis of Highly Efficient Narrow-Band Red Emitting Phosphor K₂Si_{1â€“x}F₆:xMn⁴⁺ for Warm White Light-Emitting Diodes. Chemistry of Materials, 2016, 28, 1495-1502.	6.7	365
3	A Universal Strategy for Activating the Multicolor Roomâ€Temperature Afterglow of Carbon Dots in a Boric Acid Matrix. Angewandte Chemie - International Edition, 2019, 58, 7278-7283.	13.8	266
4	All-Inorganic Light Convertor Based on Phosphor-in-Glass Engineering for Next-Generation Modular High-Brightness White LEDs/LDs. ACS Photonics, 2017, 4, 986-995.	6.6	223
5	Highly Thermally Stable Single-Component White-Emitting Silicate Glass for Organic-Resin-Free White-Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2014, 6, 2709-2717.	8.0	220
6	Tunable Luminescent Properties and Concentration-Dependent, Site-Preferable Distribution of Eu²⁺ Ions in Silicate Glass for White LEDs Applications. ACS Applied Materials & Interfaces, 2015, 7, 10044-10054.	8.0	197
7	Enhanced Biological Photosynthetic Efficiency Using Lightâ€Harvesting Engineering with Dualâ€Emissive Carbon Dots. Advanced Functional Materials, 2018, 28, 1804004.	14.9	189
8	Robust and Stable Narrow-Band Green Emitter: An Option for Advanced Wide-Color-Gamut Backlight Display. Chemistry of Materials, 2016, 28, 8493-8497.	6.7	164
9	A review on the effects of carbon dots in plant systems. Materials Chemistry Frontiers, 2020, 4, 437-448.	5.9	139
10	Carbon Dot-Silica Nanoparticle Composites for Ultralong Lifetime Phosphorescence Imaging in Tissue and Cells at Room Temperature. Chemistry of Materials, 2019, 31, 9887-9894.	6.7	137
11	Facile Atmospheric Pressure Synthesis of High Thermal Stability and Narrow-Band Red-Emitting SrLiAl₃N₄:Eu²⁺ Phosphor for High Color Rendering Index White Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2016, 8, 19612-19617.	8.0	120
12	Facile Preparation and Ultrastable Performance of Single-Component White-Light-Emitting Phosphor-in-Glass used for High-Power Warm White LEDs. ACS Applied Materials & Interfaces, 2015, 7, 28122-28127.	8.0	112
13	Construction of Carbon Dots with Colorâ€Tunable Aggregationâ€Induced Emission by Nitrogenâ€Induced Intramolecular Charge Transfer. Advanced Materials, 2021, 33, e2104872.	21.0	112
14	Facile synthesis, morphology and photoluminescence of a novel red fluoride nanophosphor K2NaAlF6:Mn4+. Journal of Materials Chemistry C, 2017, 5, 6420-6426.	5.5	104
15	Silica shell-assisted synthetic route for mono-disperse persistent nanophosphors with enhanced in vivo recharged near-infrared persistent luminescence. Nano Research, 2017, 10, 2070-2082.	10.4	103
16	Far-Red Carbon Dots as Efficient Light-Harvesting Agents for Enhanced Photosynthesis. ACS Applied Materials & Interfaces, 2020, 12, 21009-21019.	8.0	102
17	Ultrastable red-emitting phosphor-in-glass for superior high-power artificial plant growth LEDs. Journal of Materials Chemistry C, 2018, 6, 1738-1745.	5.5	95
18	Temperature-responsive conversion of thermally activated delayed fluorescence and room-temperature phosphorescence of carbon dots in silica. Journal of Materials Chemistry C, 2020, 8, 5744-5751.	5.5	86

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19	Enhance Color Rendering Index via Full Spectrum Employing the Important Key of Cyan Phosphor. ACS Applied Materials & Interfaces, 2016, 8, 30677-30682.	8.0	85
20	Phase-controlled synthesis of molybdenum oxide nanoparticles for surface enhanced Raman scattering and photothermal therapy. Nanoscale, 2018, 10, 5997-6004.	5.6	85
21	Construction and multifunctional applications of carbon dots/PVA nanofibers with phosphorescence and thermally activated delayed fluorescence. Chemical Engineering Journal, 2018, 347, 505-513.	12.7	84
22	High-power laser-driven phosphor-in-glass for excellently high conversion efficiency white light generation for special illumination or display backlighting. Journal of Materials Chemistry C, 2018, 6, 8212-8218.	5.5	81
23	Largeâ€Scale Oneâ€Step Synthesis of Carbon Dots from Yeast Extract Powder and Construction of Carbon Dots/PVA Fluorescent Shape Memory Material. Advanced Optical Materials, 2018, 6, 1701150.	7.3	76
24	Spectroscopy and Luminescence Dynamics of Ce³⁺ and Sm³⁺ in LiYSiO₄. Journal of Physical Chemistry C, 2016, 120, 4529-4537.	3.1	75
25	Bioimaging Application and Growth-Promoting Behavior of Carbon Dots from Pollen on Hydroponically Cultivated Rome Lettuce. ACS Omega, 2017, 2, 3958-3965.	3.5	73
26	Nearâ€Infraredâ€Excited Multicolor Afterglow in Carbon Dotsâ€Based Roomâ€Temperature Afterglow Materials. Angewandte Chemie - International Edition, 2021, 60, 22253-22259.	13.8	73
27	pH-Responsive carbon dots with red emission for real-time and visual detection of amines. Journal of Materials Chemistry C, 2020, 8, 11563-11571.	5.5	72
28	Improving the luminous efficacy and resistance to blue laser irradiation of phosphor-in-glass based solid state laser lighting through employing dual-functional sapphire plate. Journal of Materials Chemistry C, 2019, 7, 354-361.	5.5	70
29	Carbon dots as light converter for plant photosynthesis: Augmenting light coverage and quantum yield effect. Journal of Hazardous Materials, 2021, 410, 124534.	12.4	69
30	Precipitating CsPbBr₃ quantum dots in boro-germanate glass with a dense structure and inert environment toward highly stable and efficient narrow-band green emitters for wide-color-gamut liquid crystal displays. Journal of Materials Chemistry C, 2019, 7, 13139-13148.	5.5	68
31	Blue-emitting phosphor Ba₄OCl₆:Eu²⁺ with good thermal stability and a tiny chromaticity shift for white LEDs. Journal of Materials Chemistry C, 2016, 4, 2367-2373.	5.5	66
32	Synthesis of dual-emissive carbon dots with a unique solvatochromism phenomenon. Journal of Colloid and Interface Science, 2019, 555, 607-614.	9.4	66
33	Concentration-Driven Selectivity of Energy Transfer Channels and Color Tunability in Ba₃La(PO₄)₃:Tb³⁺, Sm³⁺ for Warm White LEDs. Inorganic Chemistry, 2017, 56, 7433-7442.	4.0	65
34	Near-Ultraviolet to Near-Infrared Fluorescent Nitrogen-Doped Carbon Dots with Two-Photon and Piezochromic Luminescence. ACS Applied Materials & Interfaces, 2018, 10, 27920-27927.	8.0	63
35	A Universal Strategy for Activating the Multicolor Roomâ€Temperature Afterglow of Carbon Dots in a Boric Acid Matrix. Angewandte Chemie, 2019, 131, 7356-7361.	2.0	62
36	Co-precipitation synthesis and photoluminescence properties of BaTiF₆:Mn⁴⁺: an efficient red phosphor for warm white LEDs. Journal of Materials Chemistry C, 2018, 6, 127-133.	5.5	60

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37	Controlling of Structural Ordering and Rigidity of Î²-SiAlON:Eu through Chemical Cosubstitution to Approach Narrow-Band-Emission for Light-Emitting Diodes Application. Chemistry of Materials, 2017, 29, 6781-6792.	6.7	57
38	Carbon Dots as a Protective Agent Alleviating Abiotic Stress on Rice (Oryza sativa L.) through Promoting Nutrition Assimilation and the Defense System. ACS Applied Materials & Interfaces, 2020, 12, 33575-33585.	8.0	56
39	Selfâ€Quenchingâ€Resistant Red Emissive Carbon Dots with High Stability for Warm White Lightâ€Emitting Diodes with a High Color Rendering Index. Advanced Optical Materials, 2020, 8, 2000251.	7.3	56
40	Magnesium-nitrogen co-doped carbon dots enhance plant growth through multifunctional regulation in photosynthesis. Chemical Engineering Journal, 2021, 422, 130114.	12.7	54
41	Synthesis and photoluminescence properties of a cyan-emitting phosphor Ca3(PO4)2:Eu2+ for white light-emitting diodes. Optical Materials, 2015, 39, 173-177.	3.6	51
42	Antibacterial Activity and Synergetic Mechanism of Carbon Dots against Gram-Positive and -Negative Bacteria. ACS Applied Bio Materials, 2021, 4, 6937-6945.	4.6	51
43	Red, orange, yellow and green luminescence by carbon dots: hydrogen-bond-induced solvation effects. Nanoscale, 2021, 13, 6846-6855.	5.6	49
44	Cr3+ doped ZnGa2O4 far-red emission phosphor-in-glass: Toward high-power and color-stable plant growth LEDs with responds to all of phytochrome. Materials Research Bulletin, 2018, 108, 226-233.	5.2	47
45	Carbon Dots in Hydroxy Fluorides: Achieving Multicolor Long-Wavelength Room-Temperature Phosphorescence and Excellent Stability via Crystal Confinement. Nano Letters, 2022, 22, 5127-5136.	9.1	46
46	Synthesis of Silicon Quantum Dots with Highly Efficient Full-Band UV Absorption and Their Applications in Antiyellowing and Resistance of Photodegradation. ACS Applied Materials & Interfaces, 2019, 11, 6634-6643.	8.0	45
47	Thermally Stable White Emitting Eu³⁺ Complex@Nanozeolite@Luminescent Glass Composite with High CRI for Organic-Resin-Free Warm White LEDs. ACS Applied Materials & Interfaces, 2017, 9, 7272-7281.	8.0	42
48	Regulating the morphology and luminescence properties of CsPbBr₃ perovskite quantum dots through the rigidity of glass network structure. Journal of Materials Chemistry C, 2020, 8, 17374-17382.	5.5	41
49	PVA-Coated Fluorescent Carbon Dot Nanocapsules as an Optical Amplifier for Enhanced Photosynthesis of Lettuce. ACS Sustainable Chemistry and Engineering, 2020, 8, 3938-3949.	6.7	41
50	Promoting the Growth of Mung Bean Plants through Uptake and Light Conversion of NaYF₄:Yb,Er@CDs Nanocomposites. ACS Sustainable Chemistry and Engineering, 2020, 8, 9751-9762.	6.7	40
51	Pollen derived blue fluorescent carbon dots for bioimaging and monitoring of nitrogen, phosphorus and potassium uptake in Brassica parachinensisÂL.. RSC Advances, 2017, 7, 33459-33465.	3.6	39
52	Tunable emission from green to red in the GdSr₂AlO₅:Tb³⁺,Eu³⁺phosphorviaefficient energy transfer. RSC Advances, 2018, 8, 3530-3535.	3.6	38
53	Surface functional carbon dots: chemical engineering applications beyond optical properties. Journal of Materials Chemistry C, 2020, 8, 16282-16294.	5.5	36
54	TiO₂/Chlorophyll S-Scheme Composite Photocatalyst with Improved Photocatalytic Bactericidal Performance. ACS Applied Materials & Interfaces, 2021, 13, 39446-39457.	8.0	36

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55	Oxidation-induced quenching mechanism of ultrabright red carbon dots and application in antioxidant RCDs/PVA film. Chemical Engineering Journal, 2021, 425, 131653.	12.7	36
56	Highly efficient and dual broad emitting light convertor: an option for next-generation plant growth LEDs. Journal of Materials Chemistry C, 2019, 7, 3617-3622.	5.5	35
57	Multiemissive Room-Temperature Phosphorescent Carbon Dots@ZnAl₂O₄ Composites by Inorganic Defect Triplet-State Energy Transfer. ACS Applied Materials & Interfaces, 2021, 13, 34705-34713.	8.0	34
58	Facile synthesis of the desired red phosphor Li₂Ca₂Mg₂Si₂N₆:Eu²⁺ for high CRI white LEDs and plant growth LED device. Journal of the American Ceramic Society, 2020, 103, 1773-1781.	3.8	33
59	Double substitution induced tunable luminescent properties of Ca3â^'xYxSc2â^'xMgxSi3O12:Ce3+phosphors for white LEDs. Journal of Materials Chemistry C, 2016, 4, 5671-5678.	5.5	32
60	Construction of NaYF₄:Yb,Er(Tm)@CDs composites for enhancing red and NIR upconversion emission. Journal of Materials Chemistry C, 2019, 7, 6231-6235.	5.5	32
61	Energy transfer and tunable emission of Ca14Al10Zn6O35:Bi3+,Sm3+ phosphor. Materials Research Bulletin, 2018, 100, 56-61.	5.2	28
62	Synthesis of modified carbon dots with performance of ultraviolet absorption used in sunscreen. Optics Express, 2019, 27, 7629.	3.4	27
63	Preparation and properties of dual-mode luminescent NaYF₄:Yb,Tm@SiO₂/carbon dot nanocomposites. Journal of Materials Chemistry C, 2018, 6, 10360-10366.	5.5	26
64	Enhanced luminescence performance of CaO:Ce³⁺,Li⁺,F^{â^'} phosphor and its phosphor-in-glass based high-power warm LED properties. Journal of Materials Chemistry C, 2018, 6, 4077-4086.	5.5	24
65	Improving moisture stability of SrLiAl3N4:Eu2+ through phosphor-in-glass approach to realize its application in plant growing LED device. Journal of Colloid and Interface Science, 2019, 545, 195-199.	9.4	24
66	Ultraâ€Wide Visâ€“NIR Mg₂Al₄Si₅O₁₈:Eu²⁺,Cr³⁺ Phosphor Containing Unusual NIR Luminescence Induced by Cr³⁺ Occupying Tetrahedral Coordination for Hyperspectral Imaging. Advanced Optical Materials, 2022, 10, .	7.3	24
67	Facile fabrication of a CD/PVA composite polymer to access light-responsive shape-memory effects. Journal of Materials Chemistry C, 2020, 8, 8935-8941.	5.5	22
68	The role of fluorescent carbon dots in crops: Mechanism and applications. SmartMat, 2022, 3, 208-225.	10.7	21
69	F enhanced luminescence performance of SrLu2O4:Ce3+ glass ceramic for superior high-power artificial horticultural LEDs. Ceramics International, 2020, 46, 21560-21568.	4.8	19
70	Glass-ceramics with thermally stable blue-red emission for high-power horticultural LED applications. Journal of Materials Chemistry C, 2020, 8, 3996-4002.	5.5	19
71	Cr³⁺-Sphere Effect on the Whitlockite-Type NIR Phosphor Sr₉Sc(PO₄)₇ with High Heat Dissipation for Digital Medical Applications. Inorganic Chemistry, 2022, 61, 2530-2537.	4.0	17
72	In Situ Growth of High-Quality CsPbBr₃ Quantum Dots with Unusual Morphology inside a Transparent Glass with a Heterogeneous Crystallization Environment for Wide Gamut Displays. ACS Applied Materials & Interfaces, 2022, 14, 30029-30038.	8.0	17

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73	Enhancement of Fluorescence Emission for Tricolor Quantum Dots Assembled in Polysiloxane toward Solar Spectrumâ€Simulated White Lightâ€Emitting Devices. Small, 2020, 16, e1905266.	10.0	16
74	Solid-state silicon nanoparticles with color-tunable photoluminescence and multifunctional applications. Journal of Materials Chemistry C, 2019, 7, 5962-5969.	5.5	15
75	Hemicellulose-triggered high-yield synthesis of carbon dots from biomass. New Journal of Chemistry, 2021, 45, 5484-5490.	2.8	13
76	Construction of NaYF4:Eu@carbon dots nanocomposites for multifunctional applications. Journal of Colloid and Interface Science, 2019, 543, 156-163.	9.4	12
77	Engineering the crystallization behavior of CsPbBr3 quantum dots in borosilicate glass through modulating the glass network modifiers for wide-color-gamut displays. Journal of the European Ceramic Society, 2022, 42, 3586-3594.	5.7	11
78	å†…åµŒç¢³ç‚¹çš„æ—é“…é‡'å±žåŒ–ç‰©åæ™¶ç”¨äºŽå•ç»„åˆ†ç™½å…‰å‘å°„äº". Science China Materials, 2022, 65, 2802-2808.	6.3	11
79	Precipitating tunable-emission CsPb(Cl/Br)₃ QDs in boro-germanate glass for wide-color-gamut liquid crystal displays. Journal of Information Display, 2019, 20, 193-200.	4.0	10
80	Synthesis of Carbon Dots with Carbogenic Ï€-Conjugated Domains for Full-Band UV Shielding. ACS Applied Nano Materials, 2022, 5, 9140-9149.	5.0	10
81	Uptake, translocation and toxicity of fluorescent carbon dots in oyster mushroom (Pleurotus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	3.1	9
82	Room temperature phosphorescence from Si-doped-CD-based composite materials with long lifetimes and high stability. Optics Express, 2020, 28, 19550.	3.4	9
83	A Stable and Efficient Redâ€Emitting Color Converter Based on K 2 SiF 6 :Mn 4+ Phosphorâ€inâ€Glass Film for Nextâ€Generation Laserâ€Excited Lighting and Display. Advanced Photonics Research, 0, , 2100146.	3.6	9
84	Nearâ€Infraredâ€Excited Multicolor Afterglow in Carbon Dotsâ€Based Roomâ€Temperature Afterglow Materials. Angewandte Chemie, 2021, 133, 22427-22433.	2.0	8
85	Assembly of shell/core CDs@CaF₂ nanocomposites to endow polymers with multifunctional properties. Nanotechnology, 2019, 30, 155601.	2.6	7
86	Modulating the local structure of glass to promote <i>in situ</i> precipitation of perovskite CsPbBr₃ quantum dots by introducing a network modifier. Journal of Materials Chemistry C, 2022, 10, 8634-8641.	5.5	7
87	Enhanced persistent properties of Mn²⁺ activated CaZnOS. RSC Advances, 2017, 7, 38498-38505.	3.6	6
88	Self-formed C-dot-based 2D polysiloxane with high photoluminescence quantum yield and stability. Nanoscale, 2020, 12, 10771-10780.	5.6	6
89	A rapid construction strategy of NaYF₄:Yb,Er@CDs nanocomposites for dual-mode anti-counterfeiting. Materials Advances, 2022, 3, 4542-4547.	5.4	6