

# Xuejie Zhang

## List of Publications by Year in descending order

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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	Cr <sup>3+</sup> -Sphere Effect on the Whitlockite-Type NIR Phosphor Sr <sub>9</sub> Sc(PO <sub>4</sub> ) <sub>7</sub> with High Heat Dissipation for Digital Medical Applications. <i>Inorganic Chemistry</i> , 2022, 61, 2530-2537.	4.0	17
2	Engineering the crystallization behavior of CsPbBr <sub>3</sub> quantum dots in borosilicate glass through modulating the glass network modifiers for wide-color-gamut displays. <i>Journal of the European Ceramic Society</i> , 2022, 42, 3586-3594.	5.7	11
3	Modulating the local structure of glass to promote <i>in situ</i> precipitation of perovskite CsPbBr <sub>3</sub> quantum dots by introducing a network modifier. <i>Journal of Materials Chemistry C</i> , 2022, 10, 8634-8641.	5.5	7
4	A rapid construction strategy of NaYF <sub>4</sub> :Yb,Er@CDs nanocomposites for dual-mode anti-counterfeiting. <i>Materials Advances</i> , 2022, 3, 4542-4547.	5.4	6
5	â†...âµCEçç³ç,¹çš,,æ—é“...é†â±žââCE—ç%©â•æ™¶ç”“âŽâ•ç»,,â†ç™¹/²â...%ââ° „,â¹/²“. <i>Science China Materials</i> , 2022, 65, 2802-2808.		
6	The role of fluorescent carbon dots in crops: Mechanism and applications. <i>SmartMat</i> , 2022, 3, 208-225.	10.7	21
7	Carbon Dots in Hydroxy Fluorides: Achieving Multicolor Long-Wavelength Room-Temperature Phosphorescence and Excellent Stability via Crystal Confinement. <i>Nano Letters</i> , 2022, 22, 5127-5136.	9.1	46
8	In Situ Growth of High-Quality CsPbBr <sub>3</sub> Quantum Dots with Unusual Morphology inside a Transparent Glass with a Heterogeneous Crystallization Environment for Wide Gamut Displays. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 30029-30038.	8.0	17
9	Ultra-Wide Vis-NIR Mg <sub>2</sub> Al <sub>4</sub> Si <sub>5</sub> O <sub>18</sub> :Eu <sup>2+</sup> ,Cr <sup>3+</sup> Phosphor Containing Unusual NIR Luminescence Induced by Cr <sup>3+</sup> Occupying Tetrahedral Coordination for Hyperspectral Imaging. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	24
10	Synthesis of Carbon Dots with Carbogenic ĩ€-Conjugated Domains for Full-Band UV Shielding. <i>ACS Applied Nano Materials</i> , 2022, 5, 9140-9149.	5.0	10
11	Carbon dots as light converter for plant photosynthesis: Augmenting light coverage and quantum yield effect. <i>Journal of Hazardous Materials</i> , 2021, 410, 124534.	12.4	69
12	Red, orange, yellow and green luminescence by carbon dots: hydrogen-bond-induced solvation effects. <i>Nanoscale</i> , 2021, 13, 6846-6855.	5.6	49
13	Multiemissive Room-Temperature Phosphorescent Carbon Dots@ZnAl <sub>2</sub> O <sub>4</sub> Composites by Inorganic Defect Triplet-State Energy Transfer. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 34705-34713.	8.0	34
14	Uptake, translocation and toxicity of fluorescent carbon dots in oyster mushroom (Pleurotus) Tj ETQq0 0 0 rgBT /Oyerlock 1Q Tf 50 222 3.1		
15	TiO <sub>2</sub> /Chlorophyll S-Scheme Composite Photocatalyst with Improved Photocatalytic Bactericidal Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 39446-39457.	8.0	36
16	Antibacterial Activity and Synergetic Mechanism of Carbon Dots against Gram-Positive and -Negative Bacteria. <i>ACS Applied Bio Materials</i> , 2021, 4, 6937-6945.	4.6	51
17	Near-Infrared-Excited Multicolor Afterglow in Carbon Dots-Based Room-Temperature Afterglow Materials. <i>Angewandte Chemie</i> , 2021, 133, 22427-22433.	2.0	8
18	Near-Infrared-Excited Multicolor Afterglow in Carbon Dots-Based Room-Temperature Afterglow Materials. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22253-22259.	13.8	73

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19	Magnesium-nitrogen co-doped carbon dots enhance plant growth through multifunctional regulation in photosynthesis. <i>Chemical Engineering Journal</i> , 2021, 422, 130114.	12.7	54
20	Oxidation-induced quenching mechanism of ultrabright red carbon dots and application in antioxidant RCDs/PVA film. <i>Chemical Engineering Journal</i> , 2021, 425, 131653.	12.7	36
21	Hemicellulose-triggered high-yield synthesis of carbon dots from biomass. <i>New Journal of Chemistry</i> , 2021, 45, 5484-5490.	2.8	13
22	Construction of Carbon Dots with Color-Tunable Aggregation-Induced Emission by Nitrogen-Induced Intramolecular Charge Transfer. <i>Advanced Materials</i> , 2021, 33, e2104872.	21.0	112
23	Facile synthesis of the desired red phosphor $\text{Li}_2\text{Ca}_2\text{Mg}_2\text{Si}_2\text{N}_6\text{:Eu}^{2+}$ for high CRI white LEDs and plant growth LED device. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1773-1781.	3.8	33
24	A review on the effects of carbon dots in plant systems. <i>Materials Chemistry Frontiers</i> , 2020, 4, 437-448.	5.9	139
25	Enhancement of Fluorescence Emission for Tricolor Quantum Dots Assembled in Polysiloxane toward Solar Spectrum-Simulated White Light-Emitting Devices. <i>Small</i> , 2020, 16, e1905266.	10.0	16
26	Surface functional carbon dots: chemical engineering applications beyond optical properties. <i>Journal of Materials Chemistry C</i> , 2020, 8, 16282-16294.	5.5	36
27	pH-Responsive carbon dots with red emission for real-time and visual detection of amines. <i>Journal of Materials Chemistry C</i> , 2020, 8, 11563-11571.	5.5	72
28	Regulating the morphology and luminescence properties of $\text{CsPbBr}_3$ perovskite quantum dots through the rigidity of glass network structure. <i>Journal of Materials Chemistry C</i> , 2020, 8, 17374-17382.	5.5	41
29	Self-formed C-dot-based 2D polysiloxane with high photoluminescence quantum yield and stability. <i>Nanoscale</i> , 2020, 12, 10771-10780.	5.6	6
30	Facile fabrication of a CD/PVA composite polymer to access light-responsive shape-memory effects. <i>Journal of Materials Chemistry C</i> , 2020, 8, 8935-8941.	5.5	22
31	Promoting the Growth of Mung Bean Plants through Uptake and Light Conversion of $\text{NaYF}_4\text{:Yb,Er@CDs}$ Nanocomposites. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9751-9762.	6.7	40
32	Enhanced luminescence performance of $\text{SrLu}_2\text{O}_4\text{:Ce}^{3+}$ glass ceramic for superior high-power artificial horticultural LEDs. <i>Ceramics International</i> , 2020, 46, 21560-21568.	4.8	19
33	Temperature-responsive conversion of thermally activated delayed fluorescence and room-temperature phosphorescence of carbon dots in silica. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5744-5751.	5.5	86
34	Carbon Dots as a Protective Agent Alleviating Abiotic Stress on Rice ( <i>Oryza sativa</i> L.) through Promoting Nutrition Assimilation and the Defense System. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 33575-33585.	8.0	56
35	Glass-ceramics with thermally stable blue-red emission for high-power horticultural LED applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 3996-4002.	5.5	19
36	PVA-Coated Fluorescent Carbon Dot Nanocapsules as an Optical Amplifier for Enhanced Photosynthesis of Lettuce. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 3938-3949.	6.7	41

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37	Far-Red Carbon Dots as Efficient Light-Harvesting Agents for Enhanced Photosynthesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 21009-21019.	8.0	102
38	Self-Quenching-Resistant Red Emissive Carbon Dots with High Stability for Warm White Light-Emitting Diodes with a High Color Rendering Index. <i>Advanced Optical Materials</i> , 2020, 8, 2000251.	7.3	56
39	Room temperature phosphorescence from Si-doped-CD-based composite materials with long lifetimes and high stability. <i>Optics Express</i> , 2020, 28, 19550.	3.4	9
40	Synthesis of dual-emissive carbon dots with a unique solvatochromism phenomenon. <i>Journal of Colloid and Interface Science</i> , 2019, 555, 607-614.	9.4	66
41	Precipitating CsPbBr <sub>3</sub> 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. <i>Journal of Materials Chemistry C</i> , 2019, 7, 13139-13148.	5.5	68
42	Precipitating tunable-emission CsPb(Cl/Br) <sub>3</sub> QDs in boro-germanate glass for wide-color-gamut liquid crystal displays. <i>Journal of Information Display</i> , 2019, 20, 193-200.	4.0	10
43	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. <i>Journal of Materials Chemistry C</i> , 2019, 7, 354-361.	5.5	70
44	Synthesis of Silicon Quantum Dots with Highly Efficient Full-Band UV Absorption and Their Applications in Antiyellowing and Resistance of Photodegradation. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 6634-6643.	8.0	45
45	Construction of NaYF <sub>4</sub> :Yb,Er(Tm)@CDs composites for enhancing red and NIR upconversion emission. <i>Journal of Materials Chemistry C</i> , 2019, 7, 6231-6235.	5.5	32
46	Hydrophobic carbon dots with blue dispersed emission and red aggregation-induced emission. <i>Nature Communications</i> , 2019, 10, 1789.	12.8	419
47	Solid-state silicon nanoparticles with color-tunable photoluminescence and multifunctional applications. <i>Journal of Materials Chemistry C</i> , 2019, 7, 5962-5969.	5.5	15
48	A Universal Strategy for Activating the Multicolor Room-Temperature Afterglow of Carbon Dots in a Boric Acid Matrix. <i>Angewandte Chemie</i> , 2019, 131, 7356-7361.	2.0	62
49	A Universal Strategy for Activating the Multicolor Room-Temperature Afterglow of Carbon Dots in a Boric Acid Matrix. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7278-7283.	13.8	266
50	Improving moisture stability of SrLiAl <sub>3</sub> N <sub>4</sub> :Eu <sup>2+</sup> through phosphor-in-glass approach to realize its application in plant growing LED device. <i>Journal of Colloid and Interface Science</i> , 2019, 545, 195-199.	9.4	24
51	Construction of NaYF <sub>4</sub> :Eu@carbon dots nanocomposites for multifunctional applications. <i>Journal of Colloid and Interface Science</i> , 2019, 543, 156-163.	9.4	12
52	Highly efficient and dual broad emitting light convertor: an option for next-generation plant growth LEDs. <i>Journal of Materials Chemistry C</i> , 2019, 7, 3617-3622.	5.5	35
53	Carbon Dot-Silica Nanoparticle Composites for Ultralong Lifetime Phosphorescence Imaging in Tissue and Cells at Room Temperature. <i>Chemistry of Materials</i> , 2019, 31, 9887-9894.	6.7	137
54	Assembly of shell/core CDs@CaF <sub>2</sub> nanocomposites to endow polymers with multifunctional properties. <i>Nanotechnology</i> , 2019, 30, 155601.	2.6	7

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55	Synthesis of modified carbon dots with performance of ultraviolet absorption used in sunscreen. <i>Optics Express</i> , 2019, 27, 7629.	3.4	27
56	Phase-controlled synthesis of molybdenum oxide nanoparticles for surface enhanced Raman scattering and photothermal therapy. <i>Nanoscale</i> , 2018, 10, 5997-6004.	5.6	85
57	Enhanced luminescence performance of CaO:Ce <sup>3+</sup> ,Li <sup>+</sup> ,F <sup>+</sup> phosphor and its phosphor-in-glass based high-power warm LED properties. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4077-4086.	5.5	24
58	Construction and multifunctional applications of carbon dots/PVA nanofibers with phosphorescence and thermally activated delayed fluorescence. <i>Chemical Engineering Journal</i> , 2018, 347, 505-513.	12.7	84
59	Large-scale One-step Synthesis of Carbon Dots from Yeast Extract Powder and Construction of Carbon Dots/PVA Fluorescent Shape Memory Material. <i>Advanced Optical Materials</i> , 2018, 6, 1701150.	7.3	76
60	Ultrastable red-emitting phosphor-in-glass for superior high-power artificial plant growth LEDs. <i>Journal of Materials Chemistry C</i> , 2018, 6, 1738-1745.	5.5	95
61	Tunable emission from green to red in the GdSr <sub>2</sub> AlO <sub>5</sub> :Tb <sup>3+</sup> ,Eu <sup>3+</sup> phosphor via efficient energy transfer. <i>RSC Advances</i> , 2018, 8, 3530-3535.	3.6	38
62	Energy transfer and tunable emission of Ca <sub>14</sub> Al <sub>10</sub> Zn <sub>6</sub> O <sub>35</sub> :Bi <sup>3+</sup> ,Sm <sup>3+</sup> phosphor. <i>Materials Research Bulletin</i> , 2018, 100, 56-61.	5.2	28
63	Co-precipitation synthesis and photoluminescence properties of BaTiF <sub>6</sub> :Mn <sup>4+</sup> : an efficient red phosphor for warm white LEDs. <i>Journal of Materials Chemistry C</i> , 2018, 6, 127-133.	5.5	60
64	Enhanced Biological Photosynthetic Efficiency Using Light-Harvesting Engineering with Dual-Emissive Carbon Dots. <i>Advanced Functional Materials</i> , 2018, 28, 1804004.	14.9	189
65	Cr <sup>3+</sup> doped ZnGa <sub>2</sub> O <sub>4</sub> far-red emission phosphor-in-glass: Toward high-power and color-stable plant growth LEDs with responds to all of phytochrome. <i>Materials Research Bulletin</i> , 2018, 108, 226-233.	5.2	47
66	Preparation and properties of dual-mode luminescent NaYF <sub>4</sub> :Yb,Tm@SiO <sub>2</sub> /carbon dot nanocomposites. <i>Journal of Materials Chemistry C</i> , 2018, 6, 10360-10366.	5.5	26
67	Near-Ultraviolet to Near-Infrared Fluorescent Nitrogen-Doped Carbon Dots with Two-Photon and Piezochromic Luminescence. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 27920-27927.	8.0	63
68	High-power laser-driven phosphor-in-glass for excellently high conversion efficiency white light generation for special illumination or display backlighting. <i>Journal of Materials Chemistry C</i> , 2018, 6, 8212-8218.	5.5	81
69	Silica shell-assisted synthetic route for mono-disperse persistent nanophosphors with enhanced in vivo recharged near-infrared persistent luminescence. <i>Nano Research</i> , 2017, 10, 2070-2082.	10.4	103
70	Thermally Stable White Emitting Eu <sup>3+</sup> Complex@Nanozeolite@Luminescent Glass Composite with High CRI for Organic-Resin-Free Warm White LEDs. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 7272-7281.	8.0	42
71	Facile synthesis, morphology and photoluminescence of a novel red fluoride nanophosphor K <sub>2</sub> NaAlF <sub>6</sub> :Mn <sup>4+</sup> . <i>Journal of Materials Chemistry C</i> , 2017, 5, 6420-6426.	5.5	104
72	Concentration-Driven Selectivity of Energy Transfer Channels and Color Tunability in Ba <sub>3</sub> La(PO <sub>4</sub> ) <sub>3</sub> :Tb <sup>3+</sup> , Sm <sup>3+</sup> for Warm White LEDs. <i>Inorganic Chemistry</i> , 2017, 56, 7433-7442.	4.0	65

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73	All-Inorganic Light Converter Based on Phosphor-in-Glass Engineering for Next-Generation Modular High-Brightness White LEDs/LDs. <i>ACS Photonics</i> , 2017, 4, 986-995.	6.6	223
74	Controlling of Structural Ordering and Rigidity of $\text{f}^2\text{-SiAlON:Eu}$ through Chemical Cosubstitution to Approach Narrow-Band-Emission for Light-Emitting Diodes Application. <i>Chemistry of Materials</i> , 2017, 29, 6781-6792.	6.7	57
75	Pollen derived blue fluorescent carbon dots for bioimaging and monitoring of nitrogen, phosphorus and potassium uptake in <i>Brassica parachinensis</i> . <i>RSC Advances</i> , 2017, 7, 33459-33465.	3.6	39
76	Bioimaging Application and Growth-Promoting Behavior of Carbon Dots from Pollen on Hydroponically Cultivated Rome Lettuce. <i>ACS Omega</i> , 2017, 2, 3958-3965.	3.5	73
77	Enhanced persistent properties of $\text{Mn}^{2+}$ activated $\text{CaZnOS}$ . <i>RSC Advances</i> , 2017, 7, 38498-38505.	3.6	6
78	Double substitution induced tunable luminescent properties of $\text{Ca}_3\text{Al}_x\text{Y}_x\text{Sc}_2\text{Mg}_x\text{Si}_3\text{O}_{12}:\text{Ce}^{3+}$ phosphors for white LEDs. <i>Journal of Materials Chemistry C</i> , 2016, 4, 5671-5678.	5.5	32
79	Facile Atmospheric Pressure Synthesis of High Thermal Stability and Narrow-Band Red-Emitting $\text{SrLiAl}_3\text{N}_4:\text{Eu}^{2+}$ Phosphor for High Color Rendering Index White Light-Emitting Diodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 19612-19617.	8.0	120
80	Robust and Stable Narrow-Band Green Emitter: An Option for Advanced Wide-Color-Gamut Backlight Display. <i>Chemistry of Materials</i> , 2016, 28, 8493-8497.	6.7	164
81	Enhance Color Rendering Index via Full Spectrum Employing the Important Key of Cyan Phosphor. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 30677-30682.	8.0	85
82	Blue-emitting phosphor $\text{Ba}_4\text{OCl}_6:\text{Eu}^{2+}$ with good thermal stability and a tiny chromaticity shift for white LEDs. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2367-2373.	5.5	66
83	Spectroscopy and Luminescence Dynamics of $\text{Ce}^{3+}$ and $\text{Sm}^{3+}$ in $\text{LiYSiO}_4$ . <i>Journal of Physical Chemistry C</i> , 2016, 120, 4529-4537.	3.1	75
84	HF-Free Hydrothermal Route for Synthesis of Highly Efficient Narrow-Band Red Emitting Phosphor $\text{K}_2\text{SiF}_6:\text{Mn}^{4+}$ for Warm White Light-Emitting Diodes. <i>Chemistry of Materials</i> , 2016, 28, 1495-1502.	6.7	365
85	Facile Preparation and Ultrastable Performance of Single-Component White-Light-Emitting Phosphor-in-Glass used for High-Power Warm White LEDs. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 28122-28127.	8.0	112
86	Tunable Luminescent Properties and Concentration-Dependent, Site-Preferable Distribution of $\text{Eu}^{2+}$ Ions in Silicate Glass for White LEDs Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 10044-10054.	8.0	197
87	Synthesis and photoluminescence properties of a cyan-emitting phosphor $\text{Ca}_3(\text{PO}_4)_2:\text{Eu}^{2+}$ for white light-emitting diodes. <i>Optical Materials</i> , 2015, 39, 173-177.	3.6	51
88	Highly Thermally Stable Single-Component White-Emitting Silicate Glass for Organic-Resin-Free White-Light-Emitting Diodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 2709-2717.	8.0	220
89	A Stable and Efficient Red-Emitting Color Converter Based on $\text{K}_2\text{SiF}_6:\text{Mn}^{4+}$ Phosphor-Glass Film for Next-Generation Laser-Excited Lighting and Display. <i>Advanced Photonics Research</i> , 0, , 2100146.	3.6	9