

# Le Zhang

## List of Publications by Year in descending order

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106  
papers

2,316  
citations

186265

28  
h-index

276875

41  
g-index

108  
all docs

108  
docs citations

108  
times ranked

1800  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and photoluminescence of Eu <sup>3+</sup> -activated double perovskite NaGdMg(W, Tj)ETQq1. <i>Journal of Materials Chemistry C</i> , 2013, 1, 54-57.	5.5	111
2	Molecular Level Study of Graphene Networks Functionalized with Phenylenediamine Monomers for Supercapacitor Electrodes. <i>Chemistry of Materials</i> , 2016, 28, 9110-9121.	6.7	98
3	Characterization of intrinsic donor defects in ZnO ceramics by dielectric spectroscopy. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	95
4	Protected-annealing regulated defects to improve optical properties and luminescence performance of Ce:YAG transparent ceramics for white LEDs. <i>Journal of Materials Chemistry C</i> , 2019, 7, 4057-4065.	5.5	76
5	Dual-channel enhanced luminescence of double perovskite NaGdMgWO <sub>6</sub> :Eu <sup>3+</sup> phosphor based on alternative excitation and delayed quenching. <i>Journal of Alloys and Compounds</i> , 2015, 642, 45-52.	5.5	67
6	Efficient spectral regulation in Ce:Lu <sub>3</sub> (Al,Cr)5O <sub>12</sub> and Ce:Lu <sub>3</sub> (Al,Cr)5O <sub>12</sub> /Ce:Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> transparent ceramics with high color rendering index for high-power white LEDs/LDs. <i>Journal of Advanced Ceramics</i> , 2021, 10, 1107-1118.	17.4	65
7	MgO assisted densification of highly transparent YAG ceramics and their microstructural evolution. <i>Journal of the European Ceramic Society</i> , 2018, 38, 687-693.	5.7	57
8	Enhanced light extraction of single-surface textured YAG:Ce transparent ceramics for high power white LEDs. <i>Applied Surface Science</i> , 2018, 455, 425-432.	6.1	54
9	High quantum yield ZnO quantum dots synthesizing via an ultrasonication microreactor method. <i>Ultrasonics Sonochemistry</i> , 2016, 33, 106-117.	8.2	51
10	High optical quality Y <sub>2</sub> O <sub>3</sub> transparent ceramics with fine grain size fabricated by low temperature air pre-sintering and post-HIP treatment. <i>Ceramics International</i> , 2016, 42, 4238-4245.	4.8	50
11	High recorded color rendering index in single Ce,(Pr,Mn):YAG transparent ceramics for high-power white LEDs/LDs. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4329-4337.	5.5	50
12	Improved full-color emission and switched luminescence in single Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> : Dy <sup>3+</sup> , Eu <sup>3+</sup> phosphors for white LEDs. <i>Journal of Alloys and Compounds</i> , 2017, 697, 215-221.	5.5	44
13	Weak thermal quenching and tunable luminescence in Ce:Y <sub>3</sub> (Al,Sc)5O <sub>12</sub> transparent ceramics for high power white LEDs/LDs. <i>Chemical Engineering Journal</i> , 2020, 398, 125486.	12.7	44
14	Systematic optimization of spray drying for YAG transparent ceramics. <i>Journal of the European Ceramic Society</i> , 2015, 35, 2391-2401.	5.7	43
15	Single CaO accelerated densification and microstructure control of highly transparent YAG ceramic. <i>Journal of the American Ceramic Society</i> , 2018, 101, 703-712.	3.8	43
16	Luminescence declining behaviors in YAG:Ce transparent ceramics for high power laser lighting. <i>Journal of Materials Chemistry C</i> , 2019, 7, 14357-14365.	5.5	43
17	Effects of Sintering Aids on the Transparency and Conversion Efficiency of Cr <sup>4+</sup> Ions in Cr: YAG Transparent Ceramics. <i>Journal of the American Ceramic Society</i> , 2015, 98, 2459-2464.	3.8	41
18	High sinterability nano-Y <sub>2</sub> O <sub>3</sub> powders prepared via decomposition of hydroxyl-carbonate precursors for transparent ceramics. <i>Journal of Materials Science</i> , 2017, 52, 8556-8567.	3.7	39

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19	Novel layered perovskite Sr <sub>3</sub> Ti <sub>2</sub> O <sub>7</sub> :Eu <sup>3+</sup> phosphor with high-efficiency luminescence enhanced by charge compensation. <i>Journal of Alloys and Compounds</i> , 2016, 657, 27-31.	5.5	38
20	Preparation, band-structure and luminescence of double perovskite Ba <sub>2</sub> MgMoO <sub>6</sub> :Eu <sup>3+</sup> orange-red phosphor for white LEDs. <i>Ceramics International</i> , 2018, 44, 17305-17312.	4.8	37
21	Enhanced luminescence properties of double perovskite (Ba, Sr)LaMgSbO <sub>6</sub> :Eu <sup>3+</sup> phosphors based on composition modulation. <i>Journal of Alloys and Compounds</i> , 2017, 717, 156-163.	5.5	35
22	Phenology-Based Rice Paddy Mapping Using Multi-Source Satellite Imagery and a Fusion Algorithm Applied to the Poyang Lake Plain, Southern China. <i>Remote Sensing</i> , 2020, 12, 1022.	4.0	35
23	Enhanced luminescence and structure evolution of double perovskite (K, Na)LaMgWO <sub>6</sub> :Eu <sup>3+</sup> phosphor for white LEDs. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 8083-8088.	2.2	32
24	Isobam assisted slurry optimization and gelcasting of transparent YAG ceramics. <i>Ceramics International</i> , 2018, 44, 1699-1704.	4.8	32
25	Composite structure Cr:YAG/Ce:YAG and (Ce,Cr):YAG/Ce:YAG transparent ceramics with high color rendering index for white LEDs/LDs. <i>Ceramics International</i> , 2021, 47, 11415-11422.	4.8	32
26	Defects and solarization in YAG transparent ceramics. <i>Photonics Research</i> , 2019, 7, 549.	7.0	32
27	The expansion of smallholder rubber farming in Xishuangbanna, China: A case study of two Dai villages. <i>Land Use Policy</i> , 2015, 42, 628-634.	5.6	29
28	Zinc interstitial as a universal microscopic origin for the electrical degradation of ZnO-based varistors under the combined DC and temperature condition. <i>Journal of the European Ceramic Society</i> , 2017, 37, 3535-3540.	5.7	29
29	Improved conversion efficiency of Cr <sup>4+</sup> ions in Cr: YAG transparent ceramics by optimization the particle sizes of sintering aids. <i>Optical Materials</i> , 2015, 50, 11-14.	3.6	28
30	Combined Zircon, Molybdenite, and Cassiterite Geochronology and Cassiterite Geochemistry of the Kuntabin Tin-Tungsten Deposit in Myanmar. <i>Economic Geology</i> , 2020, 115, 603-625.	3.8	28
31	Co-luminescence properties of terbium ions benzoic acid phen complexes doped with europium ions. <i>Rare Metals</i> , 2013, 32, 599-604.	7.1	27
32	The process of expansion in commercial banana cropping in tropical China: A case study at a Dai village, Mengla County. <i>Agricultural Systems</i> , 2014, 124, 32-38.	6.1	26
33	Probabilistic image reconstruction for radio interferometers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 438, 768-778.	4.4	25
34	Enhanced conversion efficiency of Cr <sup>4+</sup> ion in Cr: YAG transparent ceramic by optimizing the annealing process and doping concentration. <i>Journal of Alloys and Compounds</i> , 2017, 703, 34-39.	5.5	25
35	Low temperature-sintering and microstructure of highly transparent yttria ceramics. <i>Journal of Alloys and Compounds</i> , 2017, 695, 2580-2586.	5.5	24
36	Simple mass-preparation and enhanced thermal performance of Ce: YAG transparent ceramics for high power white LEDs. <i>Ceramics International</i> , 2019, 45, 6356-6362.	4.8	24

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37	Enhanced luminescence of Dy <sup>3+</sup> /Bi <sup>3+</sup> co-doped Gd <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> phosphors by high-efficiency energy transfer. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 8507-8514.	2.2	23
38	High quantum efficiency Ce:(Lu,Y) <sub>3</sub> (Al,Sc) <sub>2</sub> Al <sub>3</sub> O <sub>12</sub> transparent ceramics with excellent thermal stability for high-power white LEDs/LDs. <i>Journal of Materials Chemistry C</i> , 2020, 8, 16427-16435.	5.5	23
39	Sintering additives regulated Cr ion charge state in Cr doped YAG transparent ceramics. <i>Ceramics International</i> , 2018, 44, 13820-13826.	4.8	22
40	Reverse manipulation of intrinsic point defects in ZnO-based varistor ceramics through Zr-stabilized high ionic conducting $\text{Bi}^{2+}$ -Bi <sub>2</sub> O <sub>3</sub> intergranular phase. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1614-1620.	5.7	22
41	Annealing induced discoloration of transparent YAG ceramics using divalent additives in solid-state reaction sintering. <i>Journal of the European Ceramic Society</i> , 2017, 37, 4123-4128.	5.7	20
42	Alumina assisted grain refinement and physical performance enhancement of yttria transparent ceramics by two-step sintering. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 684, 466-469.	5.6	20
43	The Evolution and Role of $\text{NH}_4\text{Cl}$ Flux Used to Synthesize $\text{Sr}_2\text{SiO}_4:\text{Dy}^{3+}$ Phosphor by Solid-State Reaction Method. <i>Journal of the American Ceramic Society</i> , 2012, 95, 3871-3877.	3.8	19
44	Dy <sup>3+</sup> doped thermally stable garnet-based phosphors: luminescence improvement by changing the host-lattice composition and co-doping Bi <sup>3+</sup> . <i>RSC Advances</i> , 2016, 6, 32381-32388.	3.6	19
45	Gd <sub>2</sub> O <sub>3</sub> assisted densification of high quantity (Y, Gd)AG:Ce ceramic solid solutions and their luminescence characteristics. <i>Ceramics International</i> , 2018, 44, 8672-8678.	4.8	19
46	Surface texture induced light extraction of novel Ce:YAG ceramic tubes for outdoor lighting. <i>Journal of Materials Science</i> , 2019, 54, 159-171.	3.7	19
47	The exploration of quantum dot-molecular beacon based MoS <sub>2</sub> fluorescence probing for myeloma-related Mirnas detection. <i>Bioactive Materials</i> , 2022, 17, 360-368.	15.6	19
48	Ammonium citrate assisted surface modification and gel casting of YAG transparent ceramics. <i>Ceramics International</i> , 2018, 44, 21921-21927.	4.8	18
49	Taguchi method-assisted optimization of multiple effects on the optical and luminescence performance of Ce:YAG transparent ceramics for high power white LEDs. <i>Journal of Materials Chemistry C</i> , 2019, 7, 11431-11440.	5.5	18
50	Tunable blue/yellow emission in high-power white LED devices packaged with Ce:(Y, Gd)AG transparent ceramics. <i>Ceramics International</i> , 2019, 45, 14420-14425.	4.8	17
51	Broadband emission Gd <sub>3</sub> Sc <sub>2</sub> Al <sub>3</sub> O <sub>12</sub> :Ce <sup>3+</sup> transparent ceramics with a high color rendering index for high-power white LEDs/LDs. <i>Optics Express</i> , 2021, 29, 9474.	3.4	17
52	Fabrication, mechanical and optical performance of AM-gel casted YAG transparent ceramics. <i>Ceramics International</i> , 2020, 46, 2365-2372.	4.8	16
53	Fabrication and optical properties of divalent Cu <sup>2+</sup> ions incorporated Ce:YAG transparent ceramics for white LEDs. <i>Ceramics International</i> , 2019, 45, 4817-4823.	4.8	15
54	Dual effect synergistically triggered Ce:(Y,Tb) <sub>3</sub> (Al,Mn) <sub>5</sub> O <sub>12</sub> transparent ceramics enabling a high color-rendering index and excellent thermal stability for white LEDs. <i>Journal of the European Ceramic Society</i> , 2021, 41, 2834-2846.	5.7	14

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55	One-order-higher Cr <sup>4+</sup> conversion efficiency in Cr <sup>4+</sup> :YAG transparent ceramics for a high-frequency passively Q-switched laser. <i>Photonics Research</i> , 2019, 7, 933.	7.0	14
56	Application of Te-Based Glass in Silicon Solar Cells. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015, 28, 223-229.	2.9	13
57	Effect of $\beta$ -Al <sub>2</sub> O <sub>3</sub> additives on the microstructure of Y <sub>2</sub> O <sub>3</sub> ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 3384-3389.	2.2	13
58	Luminescence properties of novel double perovskite Gd <sub>2</sub> MgTiO <sub>6</sub> :Eu <sup>3+</sup> phosphors prepared by solid state method. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 12239-12245.	2.2	13
59	Stirring speed assisted homogenization of precipitation reaction for enhanced optical performance of Y <sub>2</sub> O <sub>3</sub> transparent ceramics. <i>Ceramics International</i> , 2018, 44, 4967-4972.	4.8	13
60	How transnational labor migration affects upland land use practices in the receiving country: Findings from the China-Myanmar borderland. <i>Land Use Policy</i> , 2019, 84, 163-176.	5.6	13
61	HIR4: cosmology from a simulated neutral hydrogen full sky using Horizon Run 4. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 495, 1788-1806.	4.4	12
62	Improved Ag-Si interface performance for Si solar cells using a novel Te-based glass and recrystallization process of Ag. <i>Rare Metals</i> , 2021, 40, 84-89.	7.1	12
63	Kinetics and mechanism of the sulfurization behavior of silver conductive material in automobile industry. <i>Rare Metals</i> , 2022, 41, 37-44.	7.1	12
64	Optical properties and energy transfer performances in high quality Cr,Nd: YAG transparent laser ceramics for solar pumped lasers. <i>Optics Express</i> , 2022, 30, 8762.	3.4	12
65	Improved forming performance of $\beta$ -TCP powders by doping silica for 3D ceramic printing. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 5391-5397.	2.2	11
66	Multilevel Modeling of Rural Livelihood Strategies from Peasant to Village Level in Henan Province, China. <i>Sustainability</i> , 2018, 10, 2967.	3.2	11
67	A novel spray co-precipitation method to prepare nanocrystalline Y <sub>2</sub> O <sub>3</sub> powders for transparent ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 4684-4689.	2.2	10
68	Synthesis and luminescence properties of double perovskite Gd <sub>2</sub> MgTiO <sub>6</sub> :Eu <sup>3+</sup> red phosphors for white light-emitting diodes. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 4122-4127.	2.2	10
69	Novel Fluorescent Probe Based on Rare-Earth Doped Upconversion Nanomaterials and Its Applications in Early Cancer Detection. <i>Nanomaterials</i> , 2022, 12, 1787.	4.1	10
70	Fabrication, optical and luminescence properties of low pressure injection molded YAG:Ce tubular ceramics for outdoor lighting. <i>Journal of the European Ceramic Society</i> , 2021, 41, 1564-1571.	5.7	9
71	Synthesis and co-luminescence properties of Tb <sup>3+</sup> -methacrylic acid-1,10-phenanthroline complexes doped with Eu <sup>3+</sup> . <i>Rare Metals</i> , 2012, 31, 479-483.	7.1	8
72	Optical property of SmAlO <sub>3</sub> applied as 1.06 $\mu$ m laser absorbing material. <i>Journal of Rare Earths</i> , 2013, 31, 1102-1105.	4.8	8

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73	Influence of charge compensators Li <sup>+</sup> /Na <sup>+</sup> /K <sup>+</sup> on luminescence properties of Sr <sub>2</sub> CeO <sub>4</sub> :Eu <sup>3+</sup> . Journal of Materials Science: Materials in Electronics, 2016, 27, 10207-10212.	2.2	8
74	Preliminary study of 3D ball-milled powder processing and SPS-accelerated densification of ZnSe ceramics. Optical Materials Express, 2017, 7, 1131.	3.0	8
75	A novel gelcasting induction method for YAG transparent ceramic. Ceramics International, 2021, 47, 4327-4332.	4.8	8
76	Research Progress of Solar Directly Pumped Solid-state Laser. Chinese Journal of Luminescence, 2021, 42, 10-27.	0.5	8
77	Cross-correlation of Planck cosmic microwave background lensing with DESI galaxy groups. Monthly Notices of the Royal Astronomical Society, 2022, 511, 3548-3560.	4.4	8
78	High dispersibility of $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> powders from coprecipitation method by step-by-step horizontal ball-milling. Journal of Materials Science: Materials in Electronics, 2017, 28, 16254-16261.	2.2	7
79	Viscoelastic behaviors and drying kinetics of different aqueous gelcasting systems for large Nd: YAG laser ceramics rods. Journal of the American Ceramic Society, 2020, 103, 3513-3527.	3.8	7
80	Chip-level Ce:GdYAG ceramic phosphors with excellent chromaticity parameters for high-brightness white LED device. Optics Express, 2021, 29, 11938.	3.4	7
81	Preparation of water soluble acrylic resin adhesive for fluorescent lamps and its modification. Rare Metals, 2011, 30, 657-660.	7.1	6
82	Agitator dependent homogeneity enhancement of co-precipitation reaction for improving the dispersibility of precursors and Y <sub>2</sub> O <sub>3</sub> powders. Ceramics International, 2017, 43, 16121-16127.	4.8	6
83	Weakly agglomerated $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> nanopowders prepared by a novel spray precipitation method. Ceramics International, 2018, 44, 11374-11380.	4.8	6
84	Excavating agrarian transformation under "secure"™ crop booms: insights from the China-Myanmar borderland. Journal of Peasant Studies, 2023, 50, 339-368.	4.5	6
85	Progress in the construction and testing of the Tianlai radio interferometers. , 2018, , .		6
86	Sensitivity tests of cosmic velocity fields to massive neutrinos. Monthly Notices of the Royal Astronomical Society, 2022, 512, 3319-3330.	4.4	6
87	GEOCHRONOLOGY OF Sn MINERALIZATION IN MYANMAR: METALLOGENIC IMPLICATIONS. Economic Geology, 2022, 117, 1387-1403.	3.8	6
88	Ultra-high order harmonic mode-locking of a Raman fiber laser. Applied Physics Express, 2019, 12, 092002.	2.4	5
89	A novel carbon thermal reduction approach to prepare recorded purity $\hat{\Gamma}$ -Ti <sub>3</sub> O <sub>5</sub> compacts from titanium dioxide and phenolic resin. Journal of Alloys and Compounds, 2021, 853, 157360.	5.5	5
90	A novel route to fabricate Yb:YAG ceramic fiber and its optical performance. Journal of the European Ceramic Society, 2021, 41, 4598-4608.	5.7	5

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91	An Agent-Based Sustainability Perspective on Payment for Ecosystem Services: Analytical Framework and Empirical Application. Sustainability, 2021, 13, 253.	3.2	5
92	pH-induced phase evolution and enhanced physical properties of co-precipitated WO <sub>3</sub> -CuO powders and reduced bodies for microelectronics packaging. Ceramics International, 2018, 44, 22601-22608.	4.8	4
93	Ammonium sulfate and PEG composite surfactant to promote dispersibility of precursors and Y <sub>2</sub> O <sub>3</sub> powders for transparent ceramics. Ceramics International, 2018, 44, 16859-16867.	4.8	4
94	Highly Sensitive Detection of miRNA-155 Using Molecular Beacon-Functionalized Monolayer MoS <sub>2</sub> Nanosheet Probes with Duplex-Specific Nuclease-Mediated Signal Amplification. Journal of Biomedical Nanotechnology, 2021, 17, 1034-1043.	1.1	4
95	Fabrication of heavily doped Nd:YAG transparent ceramics and their thin disc solid state laser performance. Ceramics International, 2022, 48, 27799-27806.	4.8	4
96	HIR4: cosmological signatures imprinted on the cross-correlation between a 21-cm map and galaxy clustering. Monthly Notices of the Royal Astronomical Society, 2020, 499, 4613-4625.	4.4	3
97	Effective calcination pretreatment of Lu <sub>2</sub> O <sub>3</sub> powders for LuAG transparent ceramics. Ceramics International, 2021, 47, 6023-6029.	4.8	3
98	Highly efficient Ce: Lu(Mg,Al) <sub>2</sub> (Si,Al) <sub>3</sub> O <sub>12</sub> phosphor ceramics for high-power white LEDs/LDs. Optics Express, 2022, 30, 25078.	3.4	3
99	Surface energy matching to improve the wetting behaviour of aqueous slurries with carrier tapes for the production of large YAG transparent ceramic flakes. Ceramics International, 2022, 48, 30564-30573.	4.8	3
100	Luminescence characteristics of single-phase white-emitting phosphor Sr <sub>2</sub> CeO <sub>4</sub> :Eu <sup>3+</sup> . Journal of Materials Science: Materials in Electronics, 2017, 28, 10131-10138.	2.2	2
101	Over 19W Single-Mode 1545nm Er,Yb Codoped All-Fiber Laser. Advances in Condensed Matter Physics, 2017, 2017, 1-5.	1.1	2
102	A Statistical Approach for Effectively Analyzing the Grain Size Distribution Along the Thickness Direction in Commercial ZnO-Based Varistor Ceramics. , 2018, , .		2
103	Large bismuth oxide single crystal prepared by aerosol assisted chemical vapor deposition on amorphous substrates. Materials Letters, 2020, 268, 127588.	2.6	2
104	Defect analysis during vacuum sintering of large Nd: YAG laser ceramics by FEM. Journal of Materials Science: Materials in Electronics, 2021, 32, 2925-2935.	2.2	1
105	Simulation of the analysis of interferometric microwave background polarization data. Proceedings of the International Astronomical Union, 2014, 10, 156-158.	0.0	0
106	The evolution and role of NH <sub>4</sub> Cl flux used to synthesize double perovskite BaLaMgSbO <sub>6</sub> : a potential red phosphor for white LEDs. Journal of Materials Science: Materials in Electronics, 2017, 28, 5352-5359.	2.2	0