Zhiguo Song

List of Publications by Year
in descending order

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102 papers	2,227 citations	236925 25 h-index	276875 41 g-index
102 all docs	102 docs citations	102 times ranked	1704 citing authors

#	Article	IF	Citations
1	Reversible Upconversion Luminescence Modification Based on Photochromism in BaMgSiO₄:Yb³⁺,Tb³⁺ Ceramics for Antiâ€Counterfeiting Applications. Advanced Optical Materials, 2019, 7, 1900213.	7.3	122
2	Reversible 3D optical data storage and information encryption in photo-modulated transparent glass medium. Light: Science and Applications, 2021, 10, 140.	16.6	95
3	Coupling of Ag Nanoparticle with Inverse Opal Photonic Crystals as a Novel Strategy for Upconversion Emission Enhancement of NaYF₄: Yb³⁺, Er³⁺ Nanoparticles. ACS Applied Materials & Interfaces, 2015, 7, 25211-25218.	8.0	88
4	Photoluminescence properties of tellurite glasses doped Dy3+ and Eu3+ for the UV and blue converted WLEDs. Journal of Non-Crystalline Solids, 2017, 457, 1-8.	3.1	82
5	Enhancement of the up-conversion luminescence of Yb3+/Er3+ or Yb3+/Tm3+ co-doped NaYF4 nanoparticles by photonic crystals. Journal of Materials Chemistry C, 2013, 1, 6541.	5.5	73
6	Thermomchromic Reaction-Induced Reversible Upconversion Emission Modulation for Switching Devices and Tunable Upconversion Emission Based on Defect Engineering of WO₃:Yb³⁺,Er³⁺ Phosphor. ACS Applied Materials & Interfaces, 2018, 10, 14941-14947.	8.0	72
7	Multiple Anti-Counterfeiting and optical storage of reversible dual-mode luminescence modification in photochromic CaWO4: Yb3+, Er3+, Bi3+ phosphor. Chemical Engineering Journal, 2022, 429, 132333.	12.7	71
8	Novel Strategy for Designing Photochromic Ceramic: Reversible Upconversion Luminescence Modification and Optical Information Storage Application in the PbWO₄:Yb³⁺, Er³⁺ Photochromic Ceramic. ACS Applied Materials & Interfaces, 2020, 12, 21936-21943.	8.0	63
9	Upconversion Emission Enhancement of NaYF₄:Yb,Er Nanoparticles by Coupling Silver Nanoparticle Plasmons and Photonic Crystal Effects. Journal of Physical Chemistry C, 2014, 118, 17992-17999.	3.1	58
10	Reversible multiplexing for optical information recording, erasing, and reading-out in photochromic BaMgSiO4:Bi3+ luminescence ceramics. Science China Materials, 2020, 63, 582-592.	6.3	57
11	Laser induced thermochromism and reversible upconversion emission modulation of a novel WO3:Yb3+,Er3+ ceramic: dual-modal fingerprint acquisition application. Chemical Engineering Journal, 2020, 383, 123180.	12.7	48
12	Upconversion emission enhancement mechanisms of Nd³⁺-sensitized NaYF₄:Yb³⁺,Er³⁺ nanoparticles using tunable plasmonic Au films: plasmonic-induced excitation, radiative decay rate and energy-transfer enhancement. Journal of Materials Chemistry C, 2017, 5, 8535-8544.	5.5	47
13	Energy transfer and photoluminescence modification in Ybâ€“Erâ€“Tm triply doped Y2Ti2O7 upconversion inverse opal. Journal of Materials Chemistry, 2012, 22, 18558.	6.7	45
14	Entirely Reversible Photochromic Glass with High Coloration and Luminescence Contrast for 3D Optical Storage. ACS Energy Letters, 2022, 7, 2060-2069.	17.4	44
15	Farâ€Redâ€Emitting BiOCl:Eu³⁺ Phosphor with Excellent Broadband <scp>NUV</scp>â€Excitation for Whiteâ€Lightâ€Emitting Diodes. Journal of the American Ceramic Society, 2015, 98, 2170-2176.	3.8	42
16	Emergence of photoluminescence enhancement of Eu³⁺ doped BiOCl single-crystalline nanosheets at reduced vertical dimensions. Nanoscale, 2018, 10, 4865-4871.	5.6	42
17	High multi-photon visible upconversion emissions of Er3+ singly doped BiOCl microcrystals: A photon avalanche of Er3+ induced by 980â€‰nm excitation. Applied Physics Letters, 2013, 103, 231104.	3.3	41
18	Efficient near-infrared to visible and ultraviolet upconversion in polycrystalline BiOCl:Er3+/Yb3+ synthesized at low temperature. Ceramics International, 2013, 39, 8911-8916.	4.8	40

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19	Preparation of ultra-small molecule-like Ag nano-clusters in silicate glass based on ion-exchange process: Energy transfer investigation from molecule-like Ag nano-clusters to Eu3+ ions. Chemical Engineering Journal, 2018, 341, 175-186.	12.7	34
20	Luminescence enhancement and white light generation of Eu3+ and Dy3+ single-doped and co-doped tellurite glasses by Ag nanoparticles based on Ag+-Na+ ion-exchange. Journal of Alloys and Compounds, 2018, 748, 717-729.	5.5	34
21	Photoluminescence enhancement of Eu³⁺ ions by Ag species in SiO₂ three-dimensionally ordered macroporous materials. Journal of Materials Chemistry C, 2015, 3, 7699-7708.	5.5	31
22	Electrochromism induced reversible upconversion luminescence modulation of WO3:Yb3+, Er3+ inverse opals for optical storage application. Chemical Engineering Journal, 2020, 394, 124967.	12.7	30
23	Giant Enhancement in Upconversion Luminescence of Î²-Ba₂ScAlO₅:Yb³⁺/Er³⁺ Phosphor by the Intermediate Band through Ca²⁺ Doping. Chemistry of Materials, 2022, 34, 3089-3098.	6.7	30
24	Reversible Modulated Upconversion Luminescence of MoO₃:Yb³⁺,Er³⁺ Thermochromic Phosphor for Switching Devices. Inorganic Chemistry, 2019, 58, 6950-6958.	4.0	29
25	Enhancement of solar-driven photocatalytic activity of oxygen vacancy-rich Bi/BiOBr/Sr2LaF7:Yb3+,Er3+ composites through synergetic strategy of upconversion function and plasmonic effect. Journal of Environmental Sciences, 2022, 115, 76-87.	6.1	27
26	0D/1D Heterojunction Implant with Electroâ€Mechanobiological Coupling Cues Promotes Osteogenesis. Advanced Functional Materials, 2021, 31, 2106249.	14.9	26
27	Anti-counterfeiting applications by photochromism induced modulation of reversible upconversion luminescence in TiO₂:Yb³⁺,Er³⁺ ceramic. Journal of Materials Chemistry C, 2022, 10, 6243-6251.	5.5	26
28	Enhanced photoluminescence property and mechanism of Eu³⁺â€doped tellurite glasses by the silver and gold nanoparticles. Journal of the American Ceramic Society, 2018, 101, 612-623.	3.8	25
29	A novel upconversion luminescence temperature sensing material: Negative thermal expansion Y2Mo3O12:Yb3+, Er3+ and positive thermal expansion Y2Ti2O7:Yb3+, Er3+ mixed phosphor. Journal of Alloys and Compounds, 2021, 880, 160156.	5.5	25
30	Splitting upconversion emission and phononâ€assisted population inversion of Ba₂Y(BO₃)₂Cl:Yb³⁺, Er³⁺ phosphor. Journal of the American Ceramic Society, 2017, 100, 4994-4998.	3.8	24
31	Color tunable and white light emitting via energy transfer in single-phase BiOCl:Er 3+ ,Sm 3+ phosphors for WLEDs. Journal of Rare Earths, 2018, 36, 231-237.	4.8	22
32	Preparation and blueâ€“white luminescence properties of Bi3+-doped Ba5SiO4Cl6. Journal of Materials Science, 2013, 48, 8566-8570.	3.7	21
33	Preparation and Upconversion Emission Modification of Crystalline Colloidal Arrays and Rare Earth Fluoride Microcrystal Composites. Scientific Reports, 2015, 5, 7636.	3.3	21
34	Multi-band photon avalanche controlling performance of BiOCl:Er³⁺ crystals through facile Yb³⁺ doping. Journal of Materials Chemistry C, 2015, 3, 8559-8565.	5.5	21
35	Unusually enhancing high-order photon avalanche upconversion of layered BiOCl:Er3+ semiconductor poly-crystals via Li+ ion intercalation doping. Materials and Design, 2016, 105, 290-295.	7.0	21
36	Investigation on the upconversion emission in 2D BiOBr:Yb3+/Ho3+ nanosheets. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 150, 135-141.	3.9	20

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37	Preparation, Growth Mechanism, Upconversion, and Near-Infrared Photoluminescence Properties of Convex-Lens-like NaYF₄ Microcrystals Doped with Various Rare Earth Ions Excited at 808 nm. Crystal Growth and Design, 2018, 18, 1758-1767.	3.0	20
38	Upconversion luminescence modification induced near infrared luminescence enhancement of Bi2Ti2O7:Yb3+, Er3+ inverse opals. Journal of Luminescence, 2019, 208, 150-154.	3.1	20
39	Two distinct simultaneous NIR looping behaviours of Er3+ singly doped BiOBr: The underlying nature of the Er3+ ion photon avalanche emission induced by a layered structure. Journal of Alloys and Compounds, 2019, 779, 440-449.	5.5	20
40	An unusal strategy of Ca2+ heterovalent doping enabled upconversion enhancement of Er3+ in bismuth oxychloride layered semiconducting crystals. Journal of Alloys and Compounds, 2021, 854, 157252.	5.5	20
41	Enhanced upconversion luminescence of BiOCl:Yb³⁺,Er³⁺ nanosheets via carbon dot modification and their optical temperature sensing. Materials Chemistry Frontiers, 2021, 5, 4280-4290.	5.9	20
42	Modulating Photon Harvesting Through Constructing Oxygen Vacanciesâ€Rich 0D/2D Plasmonic Bi/Bismuth Oxybromide Upconversion Nanosheets Toward Improved Solar Photocatalysis. Solar Rrl, 2021, 5, 2100619.	5.8	20
43	Comprehensive investigations of near infrared downshift and upconversion luminescence mechanisms in Yb³⁺ single-doped and Er³⁺,Yb³⁺ co-doped SiO₂ inverse opals. Physical Chemistry Chemical Physics, 2017, 19, 31997-32006.	2.8	19
44	Modification of the upconversion spontaneous emission in photonic crystals. Materials Chemistry and Physics, 2012, 133, 584-587.	4.0	18
45	NIR-NIR upconverting optical temperature sensing based on the thermally coupled levels of Yb3+-Tm3+ codoped Bi7F11O5 nanosheets. Journal of Luminescence, 2020, 221, 117034.	3.1	18
46	Effect of photonic bandgap on upconversion emission in YbPO_4:Er inverse opal photonic crystals. Applied Optics, 2011, 50, 287.	2.1	17
47	Color tunable upconversion emission in CeO2:Yb,Er three-dimensional ordered macroporous materials. Journal of Rare Earths, 2015, 33, 599-603.	4.8	17
48	Morphology/dimensionality induced tunable upconversion luminescence of BiOCl:Yb³⁺/Er³⁺ nano/microcrystals: intense single-band red emission and underlying mechanisms. CrystEngComm, 2018, 20, 2850-2860.	2.6	17
49	Large reversible upconversion luminescence modification and 3D optical information storage in femtosecond laser irradiation-subjected photochromic glass. Science China Materials, 2022, 65, 1586-1593.	6.3	17
50	BiOCl:Er3+ Nanosheets with Tunable Thickness for Photon Avalanche Phosphors. ACS Applied Nano Materials, 2019, 2, 7652-7660.	5.0	16
51	Improving upconversion emission of NaYF4:Yb3+, Er3+ nanoparticles by coupling Au nanoparticles and photonic crystals: The detection enhancement of Rhodamine B. Journal of Alloys and Compounds, 2019, 788, 1265-1273.	5.5	16
52	Abnormally heat-enhanced Yb excited state lifetimes in Bi7F11O5 nanocrystals and the potential applications in lifetime luminescence nanothermometry. Journal of Materials Chemistry C, 2019, 7, 13811-13817.	5.5	16
53	Photonic band gap and upconversion emission properties of Yb, Er co-doped lead lanthanum titanate inverse opal photonic crystals. Applied Physics A: Materials Science and Processing, 2011, 103, 995-999.	2.3	15
54	Intense one-band near-infrared upconversion luminescence induced by using spontaneous polarization BiOCl sheet crystals as hosts for Yb³⁺ and Tm³⁺ ions. Inorganic Chemistry Frontiers, 2019, 6, 612-620.	6.0	15

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55	Enhancing the near-infrared photocatalytic activity and upconversion luminescence of BiOCl:Yb³⁺â€“Er³⁺ nanosheets with polypyrrole in situ modification. Journal of Materials Chemistry C, 2021, 9, 15251-15262.	5.5	14
56	Au nanoparticles embedded inverse opal photonic crystals as substrates for upconversion emission enhancement. Journal of the American Ceramic Society, 2017, 100, 988-997.	3.8	13
57	Selective preparation of Ag species on photoluminescence of Sm 3+ in borosilicate glass via Ag + â€Na + ion exchange. Journal of the American Ceramic Society, 2020, 103, 955-964.	3.8	13
58	Photoluminescence Enhancement of SiO₂â€Coated LaPO₄:Eu³⁺ Inverse Opals by Surface Plasmon Resonance of Ag Nanoparticles. Journal of the American Ceramic Society, 2016, 99, 3330-3335.	3.8	12
59	Color Tunable Upconversion Emission in Yb, Er Co-Doped Bismuth Titanate Inverse Opal. Journal of the American Ceramic Society, 2011, 94, 2308-2310.	3.8	11
60	Investigation on existing states and photoluminescence property of silver in the SiO₂three-dimensionally ordered macroporous materials. RSC Advances, 2014, 4, 33607.	3.6	11
61	Effect of Zn2+ dopant on photon avalanche upconversion behavior of BiOCl:Er3+ crystals. Journal of Rare Earths, 2015, 33, 1098-1103.	4.8	11
62	Preparation and characterization of Er3+-Yb3+-Ce3+ co-doped transparent glass ceramic containing nano Ca5(PO4)3F crystals. Journal of Rare Earths, 2013, 31, 400-404.	4.8	10
63	Ag2O dependent up-conversion luminescence properties in Tm3+/Er3+/Yb3+ co-doped oxyfluorogermanate glasses. Journal of Applied Physics, 2014, 115, .	2.5	10
64	Modification on upconversion luminescence of Er 3+ -Yb 3+ co-doped BiOCl semiconductor nanosheets through interaction between nanohost and doping lanthanide. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 177, 111-117.	3.9	10
65	Preparation and photoluminescence enhancement of Au nanoparticles embedded La<scp>PO</scp>₄:Eu³⁺ inverse opals. Journal of the American Ceramic Society, 2018, 101, 2689-2694.	3.8	10
66	Preparation and photoluminescence enhancement of Au nanoparticles with ultraâ€broad plasmonic absorption in glasses. Journal of the American Ceramic Society, 2019, 102, 4200-4212.	3.8	10
67	Intense single-band red upconversion emission in BiOCl:Er3+ layered semiconductor via co-doping Ho3+. Journal of Rare Earths, 2020, 38, 577-583.	4.8	10
68	Unusual photoluminescence regulation of single-crystalline BiOCl:Eu3+ nanosheet by C-heterovalent doping: The evidence of photoferroelectric effect on the transitions of the RE3+ optical activator. Ceramics International, 2020, 46, 8299-8307.	4.8	10
69	Frequency up-conversion luminescence properties and mechanism of Tm3+/Er3+/Yb3+ co-doped oxyfluorogermanate glasses. Journal Wuhan University of Technology, Materials Science Edition, 2011, 26, 393-397.	1.0	9
70	<scp>NIR</scp> Enhancement Based on Energy Transfer Process of <scp>Ce</scp>³⁺â€“<scp>Yb</scp>³⁺ in Inverse Opal Photonic Crystals. Journal of the American Ceramic Society, 2016, 99, 911-916.	3.8	9
71	Upconversion luminescence enhancement of NaYF 4 :Yb 3+ ,Er 3+ nanocrystals induced by the surface plasmon resonance of nonstoichiometric WO 2.72 semiconductor. Journal of the American Ceramic Society, 2018, 101, 4463-4467.	3.8	9
72	Influence of upconversion luminescence modification on near infrared luminescence and cooperative energy transfer in the YbPO4:Er3+, Nb3+/Er3+inverse opals excited at 980 or 808â€¯nm. Journal of Alloys and Compounds, 2018, 767, 16-22.	5.5	9

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73	Influence of glass composition on photoluminescence from Ge²⁺ or Ag nanoâ€cluster in germanate glasses for white lightâ€emitting diodes. Journal of the American Ceramic Society, 2019, 102, 1169-1179.	3.8	9
74	Enhancement of green upconversion luminescence of Yb3+/Tb3+ co-doped BiOBr nanosheets and its potential applications in photocatalysis. Journal of Solid State Chemistry, 2022, 308, 122897.	2.9	9
75	Preparation and upconversion luminescence modification ofÂYbPO 4 :Er 3+ inverse opal heterostructure. Journal of Rare Earths, 2017, 35, 1180-1185.	4.8	8
76	A new strategy of interlayer doping of Li ions for the photoluminescence enhancement of Eu³⁺-doped bismuth oxychloride layered semiconductors. Inorganic Chemistry Frontiers, 2020, 7, 3106-3114.	6.0	8
77	Tunable and ultra-broad plasmon enhanced upconversion emission of NaYF₄:Yb³⁺, Er³⁺nanoparticles deposited on Au films with papilla Au nanoparticles. RSC Advances, 2016, 6, 56963-56970.	3.6	7
78	Intermediate excited state suppression and upconversion enhancement of Er3+ ions by carbon-doping boosting photocarrier separation in bismuth oxychloride nanosheets. Journal of Colloid and Interface Science, 2021, 588, 838-846.	9.4	7
79	Blue and green upconversion luminescence modification of Tb3+â€“Yb3+ co-doped Ca5(PO4)3F inverse opal. Journal of Sol-Gel Science and Technology, 2012, 62, 149-152.	2.4	6
80	Broadband orange emission from Bi activated calcium fluorophosphate. Materials Research Bulletin, 2014, 50, 490-493.	5.2	6
81	Fingerprint Acquisition Based on Photoâ€Thermal Coloration of MoO 3 Ceramic upon the Irradiation of Multiband Light outside the Bandgap. Advanced Materials Technologies, 2020, 5, 2000562.	5.8	6
82	Modification photon avalanche emission of BiOCl: Er3+ nanosheets through facile solvent-thermal synthesis. Inorganic Chemistry Communication, 2020, 117, 107934.	3.9	6
83	Ag Nanoparticlesâ€Enhanced Photoluminescence in La<scp>PO</scp>₄: Eu Threeâ€Dimensional Ordered Macroporous Films. Journal of the American Ceramic Society, 2015, 98, 1562-1566.	3.8	5
84	Near infrared lightâ€induced photocurrent in NaYF₄:Yb³⁺, Er³⁺/WO_{2.72} composite film. Journal of the American Ceramic Society, 2020, 103, 1677-1684.	3.8	5
85	Intense single-band red upconversion luminescence of Er3+/Yb3+ codoped BiOCl nanocrystals via a facile solvothermal strategy. Journal of Solid State Chemistry, 2022, 307, 122744.	2.9	5
86	Preparation and Enhanced Luminescence of Au Nanoparticles Including SiO₂:Tb³⁺ Threeâ€Dimensional Ordered Macroporous Films. Journal of the American Ceramic Society, 2015, 98, 2011-2013.	3.8	4
87	Multimode Highly Tunable Photoluminescence of Eu3+ Ions Induced by Surface Photovoltage of Bi9V2O18Cl Perovskite Oxychloride Nanosheets and Application for Advanced Anticounterfeiting Agents. Journal of Physical Chemistry C, 2020, 124, 27811-27819.	3.1	4
88	Ultra-sensitive photoluminescence modification of Eu3+ ion based on light-tuning surface potential of Bi3O4Cl layered semiconductor and application for facile UV light detector. Journal of Materials Chemistry C, 0, , .	5.5	4
89	Investigation on morphology and broadband blue-white emission modification of La 1â^' x Bi x OCl polycrystals. Journal of Rare Earths, 2017, 35, 53-57.	4.8	2
90	Fingerprint Acquisition: Fingerprint Acquisition Based on Photoâ€Thermal Coloration of MoO₃ Ceramic upon the Irradiation of Multiband Light outside the Bandgap (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.8	2

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91	808Ânm-excited multiband NIR emission with looping mechanism and intrinsic bistability in Er3+ singly-doped BiOCl layered semiconductor. Optical Materials, 2020, 102, 109806.	3.6	2
92	980Ânm-excited multiphoton photocarrier separation process of Yb3+ ions under internal electric field and its upconverting modification on Eu3+ ions. Journal of Luminescence, 2021, 229, 117710.	3.1	2
93	Multi-photon near-infrared emission of Er3+ ions induced by upconversion self-sensitization of layered polarized Bi9V2O18Cl semiconductor with narrow-band. Journal of Luminescence, 2021, 232, 117819.	3.1	2
94	Internal electric field and oxygen vacancies synergistically enhancing luminescence properties of Eu3+-doped bismuth oxychloride microcrystals. Journal of Luminescence, 2021, 240, 118454.	3.1	2
95	Programmable biological state-switching photoelectric nanosheets for the treatment of infected wounds. Materials Today Bio, 2022, 15, 100292.	5.5	2
96	Synthesis and Near-Infrared Fluorescent Properties of Nd3+-Yb3+ Co-Doped Lanthanum Phosphate. , 2012, , .		1
97	Upconversion of Nd3+ in Nd3+-Yb3+ Co-Doped Transparent Glass Ceramics Embededing Nano Ca5(Po4)3F Crystals. , 2012, , .		1
98	Continuous modification of upconversion luminescence of fluorescent dye in the crystalline colloidal arrays. Colloid and Polymer Science, 2014, 292, 613-617.	2.1	1
99	Enhanced one-band near infrared upconversion luminescence of Yb3+-Tm3+ co-doped BiOCl1-xBrx nanosheet by tuning band gap. Journal of Luminescence, 2021, 238, 118295.	3.1	1
100	Locking Energy Transfer of Rare Earth Ions via an â€œElectron Jamâ€•Caused by Vertical Photocarrier Separation of a Layered Semiconductor. Journal of Physical Chemistry C, 0, , .	3.1	1
101	Upconversion emission properties of CeO₂: Tm³⁺, Yb³⁺ inverse opal photonic crystals. Modern Physics Letters B, 2014, 28, 1450218.	1.9	0
102	Unusual Effect of Cerium Codoping on Stokes and Anti-Stokes Luminescence of BiOCl:Er ³⁺ Crystal. IEEE Photonics Journal, 2015, 7, 1-8.	2.0	0