Zhen Song

List of Publications by Year
in descending order

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		172207	197535
68	2,661	29	49
papers	citations	h-index	g-index

69	69	69	1455
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Double perovskite Cs₂AgInCl₆:Cr³⁺: broadband and near-infrared luminescent materials. Inorganic Chemistry Frontiers, 2019, 6, 3621-3628.	3.0	209
2	Luminescent perovskites: recent advances in theory and experiments. Inorganic Chemistry Frontiers, 2019, 6, 2969-3011.	3.0	185
3	Highly efficient near-infrared phosphor LaMgGa₁₁O₁₉:Cr³⁺. Inorganic Chemistry Frontiers, 2020, 7, 1467-1473.	3.0	166
4	Structural Confinement for Cr³⁺ Activators toward Efficient Near-Infrared Phosphors with Suppressed Concentration Quenching. Chemistry of Materials, 2021, 33, 3621-3630.	3.2	118
5	Tuning luminescence from NIR-I to NIR-II in Cr³⁺-doped olivine phosphors for nondestructive analysis. Journal of Materials Chemistry C, 2021, 9, 5469-5477.	2.7	92
6	Efficient broadband near-infrared phosphor Sr2ScSbO6:Cr3+ for solar-like lighting. Science China Materials, 2022, 65, 748-756.	3.5	85
7	Crystal field splitting of 4fnâ^'15d-levels of Ce3+ and Eu2+ in nitride compounds. Journal of Luminescence, 2018, 194, 461-466.	1.5	81
8	Efficient nearâ€infrared pyroxene phosphor LiInGe₂O₆:Cr³⁺ for NIR spectroscopy application. Journal of the American Ceramic Society, 2021, 104, 4577-4584.	1.9	81
9	A broadband near-infrared phosphor Ca3Y2Ge3O12:Cr3+ with garnet structure. Journal of Alloys and Compounds, 2021, 863, 158699.	2.8	71
10	Site engineering strategy toward enhanced luminescence thermostability of a Cr³⁺-doped broadband NIR phosphor and its application. Materials Chemistry Frontiers, 2021, 5, 3841-3849.	3.2	71
11	Tolerance factor and phase stability of the garnet structure. Acta Crystallographica Section C, Structural Chemistry, 2019, 75, 1353-1358.	0.2	67
12	Synthesis of YAG phosphor particles with excellent morphology by solid state reaction. Journal of Crystal Growth, 2013, 365, 24-28.	0.7	64
13	The synthesis of narrow-band red-emitting SrLiAl₃N₄:Eu²⁺phosphor and improvement of its luminescence properties. Journal of Materials Chemistry C, 2016, 4, 7332-7338.	2.7	63
14	Luminescence Tuning, Thermal Quenching, and Electronic Structure of Narrow-Band Red-Emitting Nitride Phosphors. Inorganic Chemistry, 2017, 56, 11837-11844.	1.9	56
15	The red persistent luminescence of (Sr,Ca)AlSiN3:Eu2+ and mechanism different to SrAl2O4:Eu2+,Dy3+. Journal of Luminescence, 2019, 208, 313-321.	1.5	55
16	Enhanced Persistence Properties through Modifying the Trap Depth and Density in Y₃Al₂Ga₃O₁₂:Ce³⁺,Yb³⁺ Phosphor by Co-doping B³⁺. Inorganic Chemistry, 2019, 58, 1684-1689.	1.9	49
17	Structural Confinement toward Controlling Energy Transfer Path for Enhancing Near-Infrared Luminescence. Chemistry of Materials, 2021, 33, 8360-8366.	3.2	47
18	Insight into the Relationship between Crystal Structure and Crystal-Field Splitting of Ce³⁺ Doped Garnet Compounds. Journal of Physical Chemistry C, 2018, 122, 3567-3574.	1.5	46

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19	Relationship of Stokes shift with composition and structure in Ce3+/Eu2+-doped inorganic compounds. Journal of Luminescence, 2019, 212, 250-263.	1.5	46
20	Sunlight-activated yellow long persistent luminescence from Nb-doped Sr₃SiO₅:Eu²⁺ for warm-color mark applications. Journal of Materials Chemistry C, 2020, 8, 1143-1150.	2.7	46
21	After-glow, luminescent thermal quenching, and energy band structure of Ce-doped yttrium aluminum-gallium garnets. Journal of Luminescence, 2017, 192, 1278-1287.	1.5	44
22	Consequence of Optimal Bonding on Disordered Structure and Improved Luminescence Properties in T-Phase (Ba,Ca)₂SiO₄:Eu²⁺ Phosphor. Inorganic Chemistry, 2018, 57, 4146-4154.	1.9	43
23	Relationship between thermal quenching of Eu2+ luminescence and cation ordering in (Ba1â^'Sr) Tj ETQq1 1 0.784314 rgBT /Overloc	1.5	42
24	Effects of full-range Eu concentration on Sr2-2xEu2xSi5N8 phosphors: AÂdeep-red emission and luminescent thermal quenching. Journal of Alloys and Compounds, 2019, 770, 1069-1077.	2.8	41
25	5d-level centroid shift and coordination number of Ce3+ in nitride compounds. Journal of Luminescence, 2018, 200, 35-42.	1.5	40
26	Green persistent luminescence and the electronic structure of Î²-Sialon:Eu²⁺. Journal of Materials Chemistry C, 2019, 7, 12544-12551.	2.7	38
27	Crystallographic control for Cr⁴⁺ activators toward efficient NIR-II luminescence. Inorganic Chemistry Frontiers, 2022, 9, 1912-1919.	3.0	36
28	Synthesis, structure and tunable red emissions of Ca(Al/Si)2N2(N1â^'xOx):Eu2+prepared by alloy-nitridation method. Journal of Luminescence, 2013, 137, 173-179.	1.5	34
29	Infrared-photostimulable and long-persistent ultraviolet-emitting phosphor LiLuGeO₄:Bi³⁺,Yb³⁺ for biophotonic applications. Materials Chemistry Frontiers, 2021, 5, 1468-1476.	3.2	33
30	Control of Luminescence in Eu²⁺-Doped Orthosilicate-Orthophosphate Phosphors by Chainlike Polyhedra and Electronic Structures. Inorganic Chemistry, 2018, 57, 609-616.	1.9	30
31	Red persistent and photostimulable phosphor SrLiAl₃N₄:Eu²⁺. Journal of Materials Chemistry C, 2020, 8, 4956-4964.	2.7	30
32	UV-Red Light-Chargeable Near-Infrared-Persistent Phosphors and Their Applications. ACS Applied Materials & Interfaces, 2022, 14, 1496-1504.	4.0	29
33	Color-Tunable Persistent Luminescence of Ca₁₀M(PO₄)₇:Eu²⁺ (M = Li, Na, and K) with a Î²-Ca₃(PO₄)₂-Type Structure. Inorganic Chemistry, 2021, 60, 3952-3960.	1.9	28
34	Enhanced Yellow Persistent Luminescence in Sr₃SiO₅:Eu²⁺ through Ge Incorporation. Inorganic Chemistry, 2019, 58, 8694-8701.	1.9	27
35	Broadband deepâ€redâ€toâ€nearâ€infrared emission from Mn²⁺ in strong crystalâ€field of nitride MgAlSiN₃. Journal of the American Ceramic Society, 2020, 103, 6793-6800.	1.9	27
36	Stability of divalent/trivalent oxidation state of europium in some Sr-based inorganic compounds. Journal of Luminescence, 2012, 132, 1768-1773.	1.5	26

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37	Enhanced performance of Sr2Si5N8: Eu2+ red afterglow phosphor by co-doping with boron and oxygen. Journal of Luminescence, 2018, 204, 36-40.	1.5	26
38	Effects of Neighboring Polyhedron Competition on the 5d Level of Ce³⁺ in Lanthanide Garnets. Journal of Physical Chemistry C, 2019, 123, 8656-8662.	1.5	25
39	Tolerance Factor and Phase Stability of the Normal Spinel Structure. Crystal Growth and Design, 2020, 20, 2014-2018.	1.4	24
40	Tolerance factor, phase stability and orderâ€“disorder of the pyrochlore structure. Inorganic Chemistry Frontiers, 2020, 7, 1583-1590.	3.0	24
41	Orange super-long persistent luminescent materials: (Sr_{1â^'x}Ba_x)₃SiO₅:Eu²⁺,Nb⁵⁺. Materials Chemistry Frontiers, 2021, 5, 333-340.	3.2	23
42	A red oxide phosphor, Sr ₂ ScAlO ₅ :Eu ²⁺ with perovskite-type structure, for white light-emitting diodes. Chinese Physics B, 2010, 19, 127808.	0.7	21
43	Synthesis, structure and luminescence of SrLiAl3N4:Ce3+ phosphor. Journal of Luminescence, 2018, 199, 271-277.	1.5	21
44	Charge Transfer, Local Structure, and the Inductive Effect in Rare-Earth-Doped Inorganic Solids. Inorganic Chemistry, 2018, 57, 12376-12383.	1.9	19
45	Structure and photoluminescence properties of Ca_{0.99â^'}<scp>_xS</scp>r_xAlSiN₃:0.01Ce³⁺ solid solutions. Journal of the American Ceramic Society, 2019, 102, 4648-4658.	3.9	18
46	Novel Cr3+-activated far-red emitting phosphors with Î²-Ca3(PO4)2-type structure for indoor plant cultivation. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1286-1294.	2.4	18
47	Improvement of red-emitting afterglow properties via tuning electronic structure in perovskite-type (Ca1-Na) [Ti1-Nb] O3: Pr3+ compounds. Journal of Alloys and Compounds, 2017, 729, 663-670.	2.8	16
48	Moisture-induced degradation of the narrow-band red-emitting SrLiAl3N4:Eu2+ phosphor. Journal of Rare Earths, 2018, 36, 341-345.	2.5	16
49	Synthesis and luminescence properties of europium activated Ca3Al2O6-Sr3Al2O6 system. Journal of Rare Earths, 2012, 30, 632-636.	2.5	14
50	Thermochromic material Sr2SiO4:Eu2+ based on displacive transformation. Journal of Luminescence, 2014, 152, 199-202.	1.5	14
51	Correlation between the energy level structure of cerium-doped yttrium aluminum garnet and luminescent behavior at varying temperatures. Materials Research Express, 2016, 3, 055501.	0.8	13
52	Luminescent thermal stability and electronic structure of narrow-band green-emitting Sr-Sialon:Eu2+ phosphors for LED/LCD backlights. Journal of Alloys and Compounds, 2019, 805, 1246-1253.	2.8	13
53	Yellow persistent luminescence and electronic structure of Ca-Î±-Sialon: Eu2+. Journal of Alloys and Compounds, 2020, 821, 153482.	2.8	13
54	Effect of polyhedron deformation on the 5d energy level of Ce³⁺in lanthanide aluminum perovskites. Physical Chemistry Chemical Physics, 2019, 21, 2372-2377.	1.3	11

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55	Structural Indicator to Characterize the Crystal-Field Splitting of Ce³⁺ in Garnets. Journal of Physical Chemistry C, 2020, 124, 870-873.	1.5	11
56	Photoluminescence properties of Ce³⁺and Mn²⁺-activated Ba₉Sc₂Si₆O₂₄phosphor for white light emitting diodes. Chinese Physics B, 2013, 22, 077801.	0.7	10
57	The Inductive Effect in Nitridosilicates and Oxysilicates and Its Effects on 5d Energy Levels of Ce3+. Inorganic Chemistry, 2018, 57, 2320-2331.	1.9	10
58	Understanding the abnormal lack of spectral shift with cation substitution in highly efficient phosphor La₃Si₆N₁₁:Ce³⁺. Physical Chemistry Chemical Physics, 2020, 22, 14162-14168.	1.3	8
59	Crystal-field splitting of Ce3+ in narrow-band phosphor SrLiAl3N4. Journal of Rare Earths, 2021, 39, 386-389.	2.5	8
60	Selecting nitride host for Yb3+ toward near-infrared emission with low-energy charge transfer band. Journal of Rare Earths, 2021, 39, 1484-1491.	2.5	8
61	Solid solubility and photoluminescence of Y ₃ Al ₅ O ₁₂ :Ce		