

Zhaohui Huang

List of Publications by Year in descending order

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101
papers

4,275
citations

109321

35
h-index

118850

62
g-index

101
all docs

101
docs citations

101
times ranked

3349
citing authors

#	ARTICLE	IF	CITATIONS
1	Potassium-ion batteries: outlook on present and future technologies. <i>Energy and Environmental Science</i> , 2021, 14, 2186-2243.	30.8	402
2	Honeycomb-like structured biological porous carbon encapsulating PEG: A shape-stable phase change material with enhanced thermal conductivity for thermal energy storage. <i>Energy and Buildings</i> , 2018, 158, 1049-1062.	6.7	275
3	Enhanced thermal properties of novel shape-stabilized PEG composite phase change materials with radial mesoporous silica sphere for thermal energy storage. <i>Scientific Reports</i> , 2015, 5, 12964.	3.3	198
4	Enhancement of thermal conductivity by the introduction of carbon nanotubes as a filler in paraffin/expanded perlite form-stable phase-change materials. <i>Energy and Buildings</i> , 2017, 149, 463-470.	6.7	151
5	A textile-based SnO ₂ ultra-flexible electrode for lithium-ion batteries. <i>Energy Storage Materials</i> , 2019, 16, 597-606.	18.0	150
6	Preparation and thermal properties of fatty acid/diatomite form-stable composite phase change material for thermal energy storage. <i>Solar Energy Materials and Solar Cells</i> , 2018, 178, 273-279.	6.2	141
7	Cation Substitution Dependent Bimodal Photoluminescence in Whitlockite Structural Ca ₃ Si ₂ (PO ₄) ₂ :Eu ²⁺ (0-10%) Ternary Phosphors. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4675-4683.	5.5	71
8	Synthesis and characterization of lauric acid/expanded vermiculite as form-stabilized thermal energy storage materials. <i>Energy and Buildings</i> , 2016, 116, 677-683.	6.7	108
9	Thermal conductivity enhancement of form-stable tetradecanol/expanded perlite composite phase change materials by adding Cu powder and carbon fiber for thermal energy storage. <i>Applied Thermal Engineering</i> , 2019, 156, 653-659.	6.0	105
10	Shape-stabilized composite phase change materials with high thermal conductivity based on stearic acid and modified expanded vermiculite. <i>Renewable Energy</i> , 2017, 112, 113-123.	8.9	104
11	Thermal conductivity enhancement of polyethylene glycol/expanded perlite with carbon layer for heat storage application. <i>Energy and Buildings</i> , 2016, 130, 113-121.	6.7	89
12	Preparation and thermal properties of shape-stabilized composite phase change materials based on polyethylene glycol and porous carbon prepared from potato. <i>RSC Advances</i> , 2016, 6, 15821-15830.	3.6	85
13	Preparation and properties of fatty acid eutectics/expanded perlite and expanded vermiculite shape-stabilized materials for thermal energy storage in buildings. <i>Energy and Buildings</i> , 2017, 139, 197-204.	6.7	85
14	Preparation and characterization of the properties of polyethylene glycol @ Si ₃ N ₄ nanowires as phase-change materials. <i>Chemical Engineering Journal</i> , 2016, 301, 229-237.	12.7	79
15	Preparation and analysis of lightweight wall material with expanded graphite (EG)/paraffin composites for solar energy storage. <i>Applied Thermal Engineering</i> , 2017, 120, 107-114.	6.0	77
16	Lauric-stearic acid eutectic mixture/carbonized biomass waste corn cob composite phase change materials: Preparation and thermal characterization. <i>Thermochimica Acta</i> , 2019, 674, 21-27.	2.7	76
17	Form stable composite phase change materials from palmitic-lauric acid eutectic mixture and carbonized abandoned rice: Preparation, characterization, and thermal conductivity enhancement. <i>Energy and Buildings</i> , 2017, 154, 46-54.	6.7	75
18	Ca ₆ La ₄ (SiO ₄) ₂ (PO ₄) ₄ O ₂ :Eu ²⁺ a novel apatite green-emitting phosphor for near-ultraviolet excited w-LEDs. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4675-4683.	5.5	71

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19	A novel composite Phase change material of Stearic Acid/Carbonized sunflower straw for thermal energy storage. <i>Materials Letters</i> , 2018, 215, 42-45.	2.6	70
20	Hierarchically channel-guided porous wood-derived shape-stabilized thermal regulated materials with enhanced thermal conductivity for thermal energy storage. <i>Materials Research Express</i> , 2019, 6, 115515.	1.6	56
21	Preparation and characterization of capric-palmitic-stearic acid ternary eutectic mixture/expanded vermiculite composites as form-stabilized thermal energy storage materials. <i>Journal of Materials Science and Technology</i> , 2018, 34, 379-386.	10.7	54
22	In Situ Exfoliation of Graphene in Epoxy Resins: A Facile Strategy to Efficient and Large Scale Graphene Nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 24112-24122.	8.0	52
23	Enhanced thermal properties of stearic acid/carbonized maize straw composite phase change material for thermal energy storage in buildings. <i>Journal of Energy Storage</i> , 2021, 36, 102420.	8.1	52
24	Polyethylene glycol/Cu/SiO ₂ form stable composite phase change materials: preparation, characterization, and thermal conductivity enhancement. <i>RSC Advances</i> , 2016, 6, 58740-58748.	3.6	51
25	Growth of Si_3N_4 nanobelts via Ni-catalyzed thermal chemical vapour deposition and their violet-blue luminescent properties. <i>CrystEngComm</i> , 2013, 15, 785-790.	2.6	48
26	Metal-Based Nanocatalysts via a Universal Design on Cellular Structure. <i>Advanced Science</i> , 2020, 7, 1902051.	11.2	48
27	Preparation and performance of novel form-stable composite phase change materials based on polyethylene glycol/White Carbon Black assisted by super-ultrasound-assisted. <i>Thermochimica Acta</i> , 2016, 638, 35-43.	2.7	47
28	Bismuth oxyiodide coupled with bismuth nanodots for enhanced photocatalytic bisphenol A degradation: synergistic effects and mechanistic insight. <i>Nanoscale</i> , 2017, 9, 15484-15493.	5.6	47
29	Transverse and longitudinal flexural properties of unidirectional carbon fiber composites interleaved with hierarchical Aramid pulp micro/nano-fibers. <i>Composites Part B: Engineering</i> , 2020, 188, 107897.	12.0	45
30	Synthesis and characterization of beeswax-tetradecanol-carbon fiber/expanded perlite form-stable composite phase change material for solar energy storage. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 107, 180-188.	7.6	43
31	Luminescence and energy transfer of a color tunable phosphor: Tb ³⁺ and Eu ³⁺ co-doped ScPO ₄ . <i>RSC Advances</i> , 2016, 6, 28887-28894.	3.6	42
32	Polyacrylonitrile/polyethylene glycol phase-change material fibres prepared with hybrid polymer blends and nano-SiC fillers via centrifugal spinning. <i>Polymer</i> , 2020, 186, 122012.	3.8	38
33	Thermal behavior of composite phase change materials based on polyethylene glycol and expanded vermiculite with modified porous carbon layer. <i>Journal of Materials Science</i> , 2018, 53, 13067-13080.	3.7	37
34	Catalytic synthesis and growth mechanism of SiC@SiO ₂ nanowires and their photoluminescence properties. <i>CrystEngComm</i> , 2013, 15, 9032.	2.6	36
35	Graphite Nanoplatelet Modified Epoxy Resin for Carbon Fibre Reinforced Plastics with Enhanced Properties. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-10.	2.7	36
36	Preparation and performance of novel polyvinylpyrrolidone/polyethylene glycol phase change materials composite fibers by centrifugal spinning. <i>Chemical Physics Letters</i> , 2018, 691, 314-318.	2.6	36

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37	Paraffin/Ti ₃ C ₂ T _x /Mxene@Gelatin Aerogels Composite Phase-Change Materials with High Solar-Thermal Conversion Efficiency and Enhanced Thermal Conductivity for Thermal Energy Storage. <i>Energy & Fuels</i> , 2021, 35, 2805-2814.	5.1	36
38	Tunable SrAl ₂ Si ₂ O ₈ : Eu phosphor prepared in air via valence state-controlled means. <i>Optical Materials</i> , 2015, 42, 80-86.	3.6	35
39	Crystal structure and luminescence property of a novel single-phase white light emission phosphor KCaBi(PO ₄) ₂ :Dy ³⁺ . <i>Materials Research Bulletin</i> , 2017, 86, 146-152.	5.2	35
40	Thermal energy storage properties and thermal reliability of PEG/bone char composite as a form-stable phase change material. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 132, 1753-1761.	3.6	33
41	Identification of dual luminescence centers from a single site in a novel blue-pumped Ca ₃ Sc ₂ Ge ₃ O ₁₂ :Ce ³⁺ phosphor. <i>Dalton Transactions</i> , 2019, 48, 11791-11802.	3.3	33
42	Enhanced thermal conductivity of composite phase change materials based on carbon modified expanded perlite. <i>Materials Chemistry and Physics</i> , 2021, 261, 124226.	4.0	33
43	Simple routes from natural graphite to graphite foams: Preparation, structure and properties. <i>Carbon</i> , 2020, 159, 527-541.	10.3	31
44	Photoluminescence properties of a Ce ³⁺ doped Sr ₃ MgSi ₂ O ₈ phosphor with good thermal stability. <i>RSC Advances</i> , 2018, 8, 15587-15594.	3.6	30
45	Directing helical CNT into chemically-etched micro-channels on aluminum substrate for strong adhesive bonding with carbon fiber composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 135, 105952.	7.6	28
46	Energy transfer and thermal stability of Ce ³⁺ , Tb ³⁺ co-doped Ca ₃ Si ₂ O ₄ N ₂ phosphors for white light-emitting diodes. <i>Chemical Physics Letters</i> , 2017, 690, 31-37.	2.6	27
47	Energy transfer mechanism and color-tunable luminescence properties of Eu ³⁺ -doped BaMg ₂ V ₂ O ₈ vanadate phosphors. <i>Chemical Physics Letters</i> , 2016, 662, 86-90.	2.6	26
48	Synthesis of ¹² -SiC nanowires via a facile CVD method and their photoluminescence properties. <i>RSC Advances</i> , 2016, 6, 24267-24272.	3.6	26
49	Controllable synthesis of Titania-Supported Bismuth Oxyiodide Heterostructured Nanofibers with Highly Exposed (100) Bismuth Oxyiodide Facets for Enhanced Photocatalytic Activity. <i>ChemCatChem</i> , 2016, 8, 3780-3789.	3.7	25
50	Luminescence properties and energy transfer behavior of colour-tunable white-emitting Sr ₄ Al ₁₄ O ₂₅ phosphors with co-doping of Eu ²⁺ , Eu ³⁺ and Mn ⁴⁺ . <i>RSC Advances</i> , 2017, 7, 52995-53001.	3.6	25
51	Preparation, structure, luminescence properties of europium doped zinc spinel structure green-emitting phosphor ZnAl ₂ O ₄ :Eu ²⁺ . <i>Journal of Rare Earths</i> , 2018, 36, 931-938.	4.8	25
52	Preparation and properties of polystyrene/silica fibres flexible thermal insulation materials by centrifugal spinning. <i>Polymer</i> , 2019, 185, 121964.	3.8	25
53	Adhesive bond strength enhancing between carbon fiber reinforced polymer and aluminum substrates with different surface morphologies created by three sulfuric acid solutions. <i>Composites Part A: Applied Science and Manufacturing</i> , 2021, 146, 106427.	7.6	25
54	Synthesis and formation mechanism of twinned SiC nanowires made by a catalyst-free thermal chemical vapour deposition method. <i>RSC Advances</i> , 2014, 4, 18360-18364.	3.6	22

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55	Crystal structure tailoring and luminescence tuning of Sr _{1-x} Ba _x Al ₂ Si ₂ O ₈ :Eu ²⁺ phosphors for white-light-emitting diodes. <i>Journal of Alloys and Compounds</i> , 2019, 776, 554-559.	5.5	21
56	Novel, low-cost solid-liquid-solid process for the synthesis of Si ₃ N ₄ nanowires at lower temperatures and their luminescence properties. <i>Scientific Reports</i> , 2015, 5, 17250.	3.3	20
57	Enhanced Thermal and Electrical Properties of Polystyrene-Graphene Nanofibers via Electrospinning. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-8.	2.7	20
58	Thermal conductivity enhanced polyethylene glycol/expanded perlite shape-stabilized composite phase change materials with Cu powder for thermal energy storage. <i>Materials Research Express</i> , 2018, 5, 095503.	1.6	20
59	Discovery of novel solid solution Ca ₃ Si _{3-x} O _{3+x} N ₄ ^{2x} :Eu ²⁺ phosphors: structural evolution and photoluminescence tuning. <i>Scientific Reports</i> , 2017, 7, 18103.	3.3	19
60	Preparation, structure, luminescence properties of terbium doped perovskite-like structure green-emitting phosphors SrLaAlO ₄ :Tb ³⁺ . <i>Optical Materials</i> , 2019, 95, 109191.	3.6	19
61	The Influence of Platelet-Like LaMgAl ₁₁ O ₁₉ on the Toughness of 3 mol% Ytria Partially Stabilized Zirconia Ceramic. <i>International Journal of Applied Ceramic Technology</i> , 2015, 12, 176-183.	2.1	18
62	Synthesis and luminescence properties of nitrided lanthanum magnesium hexaluminat LaMgAl ₁₁ O ₁₉ phosphors. <i>Ceramics International</i> , 2014, 40, 4535-4539.	4.8	17
63	Multienergy-Triggered Composite Phase-Change Materials Based on Graphite Foams Synthesized from Graphite Extracted from Spent Lithium-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 8051-8063.	6.7	17
64	Ni(NO ₃) ₂ -Assisted Catalytic Synthesis and Photoluminescence Property of Ultralong Single Crystal Sialon Nanobelts. <i>Crystal Growth and Design</i> , 2013, 13, 10-14.	3.0	16
65	Preparation and properties of polyacrylonitrile/polyethylene glycol composite fibers phase change materials by centrifugal spinning. <i>Materials Research Express</i> , 2019, 6, 095502.	1.6	16
66	Form-stable and tough paraffin-Al ₂ O ₃ /high density polyethylene composites as environment-friendly thermal energy storage materials: preparation, characterization and analysis. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 146, 2089-2099.	3.6	16
67	Effect of LaMgAl ₁₁ O ₁₉ addition and temperature on the mechanical properties of Al ₂ O ₃ -based ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 655, 160-167.	5.6	15
68	Molten salt synthesis, growth mechanism, and photoluminescence of rod chlorapatite microcrystallites. <i>CrystEngComm</i> , 2019, 21, 1809-1817.	2.6	15
69	Cyan-emitting Ba _{0.45} Ca _{2.5} La ₆ (SiO ₄) ₆ :0.05 Eu ²⁺ and Ba _{1.45} Ca _{1.5} La ₆ (SiO ₄) ₆ :0.05 Eu ²⁺ solid-solution phosphors for white light-emitting diodes. <i>Ceramics International</i> , 2021, 47, 12348-12356.	4.8	15
70	Growth mechanism and synchronous synthesis of 1D sialon nanostructures and sialon-Si ₃ N ₄ composite powders by a process of reduction nitridation. <i>Materials Research Express</i> , 2019, 6, 065054.	1.6	14
71	Thermally Conductive and Shape-Stabilized Polyethylene Glycol/Carbon Foam Phase-Change Composites for Thermal Energy Storage. <i>ChemistrySelect</i> , 2020, 5, 3217-3224.	1.5	14
72	Preparation and Characterization of Flexible Smart Glycol/Polyvinylpyrrolidone/Nano-Al ₂ O ₃ Phase Change Fibers. <i>Energy & Fuels</i> , 2021, 35, 877-882.	5.1	14

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73	Form-Stable Phase Change Materials with Enhanced Thermal Conductivity Based on Binary Capric-Palmitic Acid and Graphite Carbon In Situ Modified Expanded Perlite. ACS Applied Energy Materials, 2021, 4, 9124-9132.	5.1	14
74	Microstructure and electrochemical properties of polyacrylonitrile-based carbon micro- and nanofibers fabricated by centrifugal spinning. Chemical Physics Letters, 2017, 684, 14-19.	2.6	13
75	Phase formation of (Y,Ce)2BaAl4SiO12 yellow microcrystal-glass phosphor for blue LED pumped white lighting. Ceramics International, 2017, 43, 6425-6429.	4.8	12
76	Direct-white-emitting phosphor SrAl ₂ O ₄ : Eu ^{2+/3+} with colour-tunable photoluminescence by variation of europium activator valence. Materials Research Express, 2018, 5, 096202.	1.6	12
77	Color tunable Ba0.79Al10.9O17.14:xEu phosphor prepared in air via valence state control. Journal of Advanced Ceramics, 2017, 6, 81-89.	17.4	11
78	Preparation and photoluminescence properties of red-emitting phosphor ZnAl ₂ O ₄ :Eu ³⁺ with an intense ⁵ D ₀ → ⁷ F ₂ transition. Materials Research Express, 2018, 5, 025501.	1.6	11
79	Preparation and performance of shape-stable phase change materials based on carbonized-abandoned orange peel and paraffin. Fullerenes Nanotubes and Carbon Nanostructures, 2019, 27, 289-298.	2.1	11
80	A novel nano-porous aluminum substrate with anodizing treatment to encapsulate 1-tetrapropanol as composite phase change materials for thermal energy utilization. Chemical Engineering Journal, 2021, 404, 124588.	12.7	11
81	Investigation on the Photoelectrocatalytic Activity of Well-Aligned TiO ₂ Nanotube Arrays. International Journal of Photoenergy, 2012, 2012, 1-7.	2.5	10
82	Luminescence properties and energy transfer in K₂MgSiO₄:Ce³+Tb³ as a green phosphor. Materials Express, 2016, 6, 37-44.	0.5	10
83	Photoluminescent properties of single-phase white-light Ca ₈ ZnGd(PO ₄) ₇ :Eu ²⁺ ,Mn ²⁺ phosphor. Chemical Physics Letters, 2020, 743, 137185.	2.6	10
84	Si ₃ N ₄ -SiCpComposites Reinforced byIn SituCo-Catalyzed Generated Si ₃ N ₄ Nanofibers. Journal of Nanomaterials, 2014, 2014, 1-6.	2.7	9
85	Paraffin/expanded graphite phase change composites with enhanced thermal conductivity prepared by implanted ¹² C-SiC nanowires with chemical vapor deposition method. Materials Research Express, 2018, 5, 025503.	1.6	9
86	Attapulgit: a promising natural mineral as carrier material for fatty acids phase change material. Journal of Thermal Analysis and Calorimetry, 2022, 147, 7203-7212.	3.6	9
87	Photoluminescence properties and application of yellow Ca 0.65 Si 10 Al 2 O 0.7 N 15.3 : x Eu 2+ phosphors for white LEDs. Solid State Sciences, 2017, 64, 84-90.	3.2	8
88	Single-phased chromaticity-tunable phosphor of Sr ₄ Al ₁₄ O ₂₅ : Eu ^{2+/3+} co-doped with Tb ³⁺ for white-light-emitting diodes. Materials Research Express, 2019, 6, 115903.	1.6	8
89	Tunable photoluminescence of apatite phosphor Ca ₅ (OH)(PO _{3.8}) ₄ (SiO ₄) ₂ (PO ₄) ₄ and its application in light-emitting diodes. Journal of the American Ceramic Society, 2019, 102, 4226-4235.	3.8	8
90	Preparation and characterization of form-stable tetradecanol-palmitic acid expanded perlite composites containing carbon fiber for thermal energy storage. Journal of Thermal Analysis and Calorimetry, 2019, 136, 1217-1225.	3.6	8

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91	Crystal structure and luminescence properties of green-emitting Sr ¹⁺ Al ₁₂ O ₁₉ :xEu ²⁺ phosphors. <i>Ceramics International</i> , 2016, 42, 5995-5999.	4.8	7
92	Fe-Sialon-Ti(C,N) composites from carbothermal reduction-nitridation of low-priced minerals and their application in taphole clay refractories. <i>Ceramics International</i> , 2014, 40, 9709-9714.	4.8	5
93	Dependence of crystal structure on mechanical and thermophysical properties of magnetoplumbite-type LnMgAl ₁₁ O ₁₉ ceramics with substitution of Ln ³⁺ ions. <i>International Journal of Applied Ceramic Technology</i> , 2019, 16, 1596-1605.	2.1	5
94	An Efficient Environmentally Friendly Composite Material Based on Carbonized Biological Cellulose/Paraffin: Thermal and Sustainable Properties Analysis. <i>ChemistrySelect</i> , 2020, 5, 12051-12056.	1.5	5
95	Assembly of SiC Nanowires film and humidity sensing performance. <i>International Journal of Applied Ceramic Technology</i> , 2019, 16, 1193-1199.	2.1	4
96	New apatite-type phosphor Ca ₉ La(PO ₄) ₅ (SiO ₄)F ₂ :Tb ³⁺ ,Dy ³⁺ with improved color rendering index. <i>Journal of the American Ceramic Society</i> , 2020, 103, 2602-2609.	1.8	4
97	Preparation and Characterization of Composite Phase Change Materials Based on Lauric-Myristic Acid and Expanded Vermiculite with Carbon Layer. <i>ChemistrySelect</i> , 2021, 6, 3884-3890.	1.5	4
98	Synthesis and Characterization of Er ³⁺ -Doped SrNb ₂ O ₆ Phosphor for FIR Based Thermometer. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 046001.	1.8	3
99	Facile synthesis of Si ₃ N ₄ nanoneedles and their photoluminescence properties. <i>International Journal of Applied Ceramic Technology</i> , 2019, 16, 2373-2379.	2.1	2
100	Effect of purity and proportion of microcrystalline graphite ore on the electrical, mechanical and tribological performance of copper-carbon composites. <i>Materials Research Express</i> , 2019, 6, 125604.	1.6	2
101	N-Si doped carbon-embedded TiO ₂ composite fibers: a new photocatalysts with high yields by centrifugal spinning. <i>Materials Research Express</i> , 2019, 6, 1150h1.	1.6	1