

Guiyin Fang

List of Publications by Year in descending order

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papers

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39113

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5857
citing authors

#	ARTICLE	IF	CITATIONS
1	An overview of thermal energy storage systems. <i>Energy</i> , 2018, 144, 341-378.	4.5	785
2	Thermal energy storage materials and systems for solar energy applications. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 68, 693-706.	8.2	673
3	Review on thermal conductivity enhancement, thermal properties and applications of phase change materials in thermal energy storage. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 82, 2730-2742.	8.2	568
4	Review on thermal performances and applications of thermal energy storage systems with inorganic phase change materials. <i>Energy</i> , 2018, 165, 685-708.	4.5	319
5	Thermal conductivity enhancement of phase change materials for thermal energy storage: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 62, 305-317.	8.2	300
6	Preparation and characterization of nano-encapsulated n-tetradecane as phase change material for thermal energy storage. <i>Chemical Engineering Journal</i> , 2009, 153, 217-221.	6.6	294
7	Thermal properties and applications of microencapsulated PCM for thermal energy storage: A review. <i>Applied Thermal Engineering</i> , 2019, 147, 841-855.	3.0	263
8	Synthesis, characterization and applications of microencapsulated phase change materials in thermal energy storage: A review. <i>Energy and Buildings</i> , 2017, 144, 276-294.	3.1	261
9	Synthesis and properties of microencapsulated paraffin composites with SiO ₂ shell as thermal energy storage materials. <i>Chemical Engineering Journal</i> , 2010, 163, 154-159.	6.6	260
10	Morphological characterization and applications of phase change materials in thermal energy storage: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 72, 128-145.	8.2	216
11	Development and applications of photovoltaic-thermal systems: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 102, 249-265.	8.2	207
12	Thermal properties and thermal conductivity enhancement of composite phase change materials using myristyl alcohol/metal foam for solar thermal storage. <i>Solar Energy Materials and Solar Cells</i> , 2017, 170, 68-76.	3.0	171
13	Preparation and characterization of stearic acid/expanded graphite composites as thermal energy storage materials. <i>Energy</i> , 2010, 35, 4622-4626.	4.5	168
14	Preparation and characteristics of microencapsulated palmitic acid with TiO ₂ shell as shape-stabilized thermal energy storage materials. <i>Solar Energy Materials and Solar Cells</i> , 2014, 123, 183-188.	3.0	158
15	Synthesis and thermal properties of shape-stabilized lauric acid/activated carbon composites as phase change materials for thermal energy storage. <i>Solar Energy Materials and Solar Cells</i> , 2012, 102, 131-136.	3.0	143
16	Synthesis and thermal properties of fatty acid eutectics and diatomite composites as shape-stabilized phase change materials with enhanced thermal conductivity. <i>Solar Energy Materials and Solar Cells</i> , 2015, 141, 218-224.	3.0	138
17	Comparative analyses on dynamic performances of photovoltaic-thermal solar collectors integrated with phase change materials. <i>Energy Conversion and Management</i> , 2017, 131, 79-89.	4.4	137
18	Palmitic acid/polyvinyl butyral/expanded graphite composites as form-stable phase change materials for solar thermal energy storage. <i>Applied Energy</i> , 2018, 228, 1801-1809.	5.1	126

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19	Synthesis and characterization of microencapsulated paraffin with titanium dioxide shell as shape-stabilized thermal energy storage materials in buildings. <i>Energy and Buildings</i> , 2014, 72, 31-37.	3.1	121
20	Preparation and properties of palmitic acid/SiO ₂ composites with flame retardant as thermal energy storage materials. <i>Solar Energy Materials and Solar Cells</i> , 2011, 95, 1875-1881.	3.0	120
21	Synthesis and thermal properties of the MA/HDPE composites with nano-additives as form-stable PCM with improved thermal conductivity. <i>Applied Energy</i> , 2016, 180, 116-129.	5.1	120
22	Preparation, thermal properties and applications of shape-stabilized thermal energy storage materials. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 40, 237-259.	8.2	114
23	Microstructure and thermal properties of cetyl alcohol/high density polyethylene composite phase change materials with carbon fiber as shape-stabilized thermal storage materials. <i>Applied Energy</i> , 2017, 200, 19-27.	5.1	112
24	Preparation and properties of lauric acid/silicon dioxide composites as form-stable phase change materials for thermal energy storage. <i>Materials Chemistry and Physics</i> , 2010, 122, 533-536.	2.0	105
25	Preparation and characteristics of microencapsulated stearic acid as composite thermal energy storage material in buildings. <i>Energy and Buildings</i> , 2013, 62, 469-474.	3.1	99
26	Dynamic performances of solar heat storage system with packed bed using myristic acid as phase change material. <i>Energy and Buildings</i> , 2011, 43, 1091-1096.	3.1	98
27	Synthesis and characterization of microencapsulated myristic acid/palmitic acid eutectic mixture as phase change material for thermal energy storage. <i>Applied Energy</i> , 2017, 203, 677-685.	5.1	98
28	Dynamic performance analysis of photovoltaic-thermal solar collector with dual channels for different fluids. <i>Energy Conversion and Management</i> , 2016, 120, 13-24.	4.4	96
29	Maximizing the energy output of a photovoltaic-thermal solar collector incorporating phase change materials. <i>Energy and Buildings</i> , 2017, 153, 382-391.	3.1	96
30	Synthesis and properties of microencapsulated octadecane with silica shell as shape-stabilized thermal energy storage materials. <i>Solar Energy Materials and Solar Cells</i> , 2017, 160, 1-6.	3.0	91
31	Preparation, heat transfer and flow properties of microencapsulated phase change materials for thermal energy storage. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 66, 399-414.	8.2	87
32	Preparation and heat transfer characteristics of microencapsulated phase change material slurry: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2011, 15, 4624-4632.	8.2	83
33	Improved thermal properties of stearyl alcohol/high density polyethylene/expanded graphite composite phase change materials for building thermal energy storage. <i>Energy and Buildings</i> , 2017, 153, 41-49.	3.1	81
34	Comparative simulation analyses on dynamic performances of photovoltaic-thermal solar collectors with different configurations. <i>Energy Conversion and Management</i> , 2014, 87, 778-786.	4.4	80
35	Preparation and characterization of flame retardant n-hexadecane/silicon dioxide composites as thermal energy storage materials. <i>Journal of Hazardous Materials</i> , 2010, 181, 1004-1009.	6.5	79
36	Preparation and properties of shape-stabilized phase change materials based on fatty acid eutectics and cellulose composites for thermal energy storage. <i>Energy</i> , 2015, 80, 98-103.	4.5	79

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37	Preparation, characterization and thermal properties of fatty acid eutectics/bentonite/expanded graphite composites as novel form-stable thermal energy storage materials. <i>Solar Energy Materials and Solar Cells</i> , 2017, 166, 157-166.	3.0	79
38	Synthesis, characterization and properties of palmitic acid/high density polyethylene/graphene nanoplatelets composites as form-stable phase change materials. <i>Solar Energy Materials and Solar Cells</i> , 2016, 155, 421-429.	3.0	78
39	Preparation and thermal properties of n-octadecane/stearic acid eutectic mixtures with hexagonal boron nitride as phase change materials for thermal energy storage. <i>Energy and Buildings</i> , 2016, 131, 35-41.	3.1	78
40	Numerical analysis of photovoltaic-thermal collector using nanofluid as a coolant. <i>Solar Energy</i> , 2020, 196, 625-636.	2.9	77
41	Synthesis and properties of microencapsulated stearic acid/silica composites with graphene oxide for improving thermal conductivity as novel solar thermal storage materials. <i>Solar Energy Materials and Solar Cells</i> , 2019, 189, 197-205.	3.0	75
42	Experimental investigation on the photovoltaic-thermal solar heat pump air-conditioning system on water-heating mode. <i>Experimental Thermal and Fluid Science</i> , 2010, 34, 736-743.	1.5	74
43	Microencapsulation and thermal properties of myristic acid with ethyl cellulose shell for thermal energy storage. <i>Applied Energy</i> , 2018, 231, 494-501.	5.1	74
44	Performance evaluations and applications of photovoltaic-thermal collectors and systems. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 33, 467-483.	8.2	73
45	Experimental study on cool storage air-conditioning system with spherical capsules packed bed. <i>Energy and Buildings</i> , 2010, 42, 1056-1062.	3.1	70
46	Numerical study of a novel miniature compound parabolic concentrating photovoltaic/thermal collector with microencapsulated phase change slurry. <i>Energy Conversion and Management</i> , 2017, 153, 106-114.	4.4	70
47	Synthesis and Characterization of Microencapsulated Paraffin Microcapsules as Shape-Stabilized Thermal Energy Storage Materials. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2013, 17, 112-123.	1.4	64
48	Review on thermal conductivity improvement of phase change materials with enhanced additives for thermal energy storage. <i>Journal of Energy Storage</i> , 2022, 51, 104568.	3.9	61
49	Thermal performance simulations of a packed bed cool thermal energy storage system using n-tetradecane as phase change material. <i>International Journal of Thermal Sciences</i> , 2010, 49, 1752-1762.	2.6	60
50	Thermal properties and morphologies of MA-SA eutectics/CNTs as composite PCMs in thermal energy storage. <i>Energy and Buildings</i> , 2016, 127, 603-610.	3.1	56
51	Experimental investigation on n-octadecane/polystyrene/expanded graphite composites as form-stable thermal energy storage materials. <i>Energy</i> , 2018, 157, 625-632.	4.5	55
52	Preparation and thermal properties of n-eicosane/nano-SiO ₂ /expanded graphite composite phase-change material for thermal energy storage. <i>Materials Chemistry and Physics</i> , 2020, 240, 122178.	2.0	54
53	Performance evaluation of a novel solar photovoltaic-thermal collector with dual channel using microencapsulated phase change slurry as cooling fluid. <i>Energy Conversion and Management</i> , 2017, 145, 30-40.	4.4	52
54	Preparation and thermal properties of microencapsulated stearyl alcohol with silicon dioxide shell as thermal energy storage materials. <i>Applied Thermal Engineering</i> , 2020, 169, 114943.	3.0	52

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55	Dynamic performances modeling of a photovoltaic-thermal collector with water heating in buildings. <i>Energy and Buildings</i> , 2013, 66, 485-494.	3.1	51
56	Properties evaluation and applications of thermal energystorage materials in buildings. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 48, 500-522.	8.2	50
57	Encapsulation of inorganic phase change thermal storage materials and its effect on thermophysical properties: A review. <i>Solar Energy Materials and Solar Cells</i> , 2022, 241, 111747.	3.0	50
58	Dynamic discharging characteristics simulation on solar heat storage system with spherical capsules using paraffin as heat storage material. <i>Renewable Energy</i> , 2011, 36, 1190-1195.	4.3	49
59	Experimental investigation on performance of ice storage air-conditioning system with separate heat pipe. <i>Experimental Thermal and Fluid Science</i> , 2009, 33, 1149-1155.	1.5	48
60	Preparation and thermal properties of stearic acid/titanium dioxide composites as shape-stabilized phase change materials for building thermal energy storage. <i>Energy and Buildings</i> , 2014, 80, 352-357.	3.1	48
61	Flow and heat transfer characteristics of microencapsulated phase change slurry in thermal energy systems: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 134, 110101.	8.2	47
62	Preparation and thermal properties of n-octadecane/molecular sieve composites as form-stable thermal energy storage materials for buildings. <i>Energy and Buildings</i> , 2012, 49, 423-428.	3.1	43
63	Synthesis of shape-stabilized paraffin/silicon dioxide composites as phase change material for thermal energy storage. <i>Journal of Materials Science</i> , 2010, 45, 1672-1676.	1.7	41
64	Synthesis and characterization of microencapsulated sodium sulfate decahydrate as phase change energy storage materials. <i>Applied Energy</i> , 2019, 255, 113830.	5.1	39
65	Thermal properties of polyvinyl butyral/graphene composites as encapsulation materials for solar cells. <i>Solar Energy</i> , 2018, 161, 187-193.	2.9	37
66	Improved thermal properties of stearic acid/high density polyethylene/carbon fiber composite heat storage materials. <i>Solar Energy Materials and Solar Cells</i> , 2021, 219, 110782.	3.0	37
67	Preparation and thermal properties of form-stable palmitic acid/active aluminum oxide composites as phase change materials for latent heat storage. <i>Materials Chemistry and Physics</i> , 2012, 137, 558-564.	2.0	33
68	Dynamic characteristics modeling of a hybrid photovoltaic-thermal solar collector with active cooling in buildings. <i>Energy and Buildings</i> , 2014, 78, 215-221.	3.1	33
69	Discharging characteristics modeling of cool thermal energy storage system with coil pipes using n-tetradecane as phase change material. <i>Applied Thermal Engineering</i> , 2012, 37, 336-343.	3.0	32
70	Thermal and electrical characterization of polymer/ceramic composites with polyvinyl butyral matrix. <i>Materials Chemistry and Physics</i> , 2018, 205, 401-415.	2.0	30
71	Synthesis and characterization of chain-extended and branched polyurethane copolymers as form stable phase change materials for solar thermal conversion storage. <i>Solar Energy Materials and Solar Cells</i> , 2018, 186, 14-28.	3.0	27
72	Preparation and characteristics of composite phase change material (CPCM) with SiO ₂ and diatomite as endothermal-hydroscopic material. <i>Energy and Buildings</i> , 2015, 86, 1-6.	3.1	26

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73	Thermal properties and characterization of palmitic acid/nano silicon dioxide/graphene nanoplatelet for thermal energy storage. <i>International Journal of Energy Research</i> , 2020, 44, 5621-5633.	2.2	26
74	Dynamic thermal characteristics analysis of microencapsulated phase change suspensions flowing through rectangular mini-channels for thermal energy storage. <i>Energy and Buildings</i> , 2017, 134, 37-51.	3.1	25
75	Dynamic Characteristics Modeling of a Hybrid Photovoltaic-Thermal Heat Pump System. <i>International Journal of Green Energy</i> , 2010, 7, 537-551.	2.1	24
76	Exergy analysis of ice storage air-conditioning system with heat pipe during charging period. <i>Energy for Sustainable Development</i> , 2010, 14, 149-153.	2.0	19
77	Dynamic characteristics of cool thermal energy storage systems—a review. <i>International Journal of Green Energy</i> , 2016, 13, 1-13.	2.1	19
78	Numerical evaluation on the flow and heat transfer characteristics of microencapsulated phase change slurry flowing in a circular tube. <i>Applied Thermal Engineering</i> , 2018, 144, 845-853.	3.0	19
79	Thermal properties improvement of lauric acid/iron foam composites with graphene nanoplates as thermal energy storage materials. <i>Journal of Energy Storage</i> , 2020, 27, 101163.	3.9	18
80	Enhanced thermal conductivity of palmitic acid/copper foam composites with carbon nanotube as thermal energy storage materials. <i>Journal of Energy Storage</i> , 2021, 40, 102783.	3.9	17
81	Thermal properties of stearic acid/active aluminum oxide/graphene nanoplates composite phase change materials for heat storage. <i>Materials Chemistry and Physics</i> , 2021, 269, 124747.	2.0	17
82	Synthesis and thermal properties of 1-octadecanol/nano-TiO ₂ /carbon nanofiber composite phase change materials for thermal energy storage. <i>Materials Chemistry and Physics</i> , 2021, 272, 125041.	2.0	16
83	Performance optimization of a photovoltaic/thermal collector using microencapsulated phase change slurry. <i>International Journal of Energy Research</i> , 2020, 44, 1812-1827.	2.2	15
84	Numerical flow characteristics of microencapsulated phase change slurry flowing in a helically coiled tube for thermal energy storage. <i>Energy</i> , 2021, 223, 120128.	4.5	14
85	Thermal properties of 1-hexadecanol/high density polyethylene/graphene nanoplates composites as form-stable heat storage materials. <i>Solar Energy Materials and Solar Cells</i> , 2022, 237, 111580.	3.0	14
86	Structural transitions for 2D systems with competing interactions in logarithmic traps. <i>Journal of Chemical Physics</i> , 2020, 152, 054906.	1.2	4
87	Solidification Characteristics Modeling of Phase Change Material in Plate Capsule of Cool Storage System. <i>International Journal of Green Energy</i> , 2011, 8, 734-747.	2.1	3
88	Nonequilibrium pattern formation in circularly confined two-dimensional systems with competing interactions. <i>Physical Review E</i> , 2021, 103, 012604.	0.8	2
89	Thermal performances evaluation of a flat-plate solar collector using microencapsulated phase-change slurry as heat transfer medium. <i>International Journal of Energy Research</i> , 2022, 46, 14044-14059.	2.2	2
90	Thermal properties of myristyl alcohol/polyvinyl butyral/carbon nanotubes as composite phase change materials for thermal energy storage. <i>International Journal of Energy Research</i> , 2022, 46, 15804-15815.	2.2	2

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91	Thermal Performance of Microencapsulated Phase-Change Slurry in a Circular Tube for Heat Storage. Chemical Engineering and Technology, 0, , .	0.9	0