List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Solar-driven interfacial evaporation. Nature Energy, 2018, 3, 1031-1041.	19.8	1,347
2	Temperature effect and thermal impact in lithium-ion batteries: A review. Progress in Natural Science: Materials International, 2018, 28, 653-666.	1.8	745
3	A Bioinspired, Reusable, Paperâ€Based System for Highâ€Performance Largeâ€5cale Evaporation. Advanced Materials, 2015, 27, 2768-2774.	11.1	698
4	Bioâ€Inspired Evaporation Through Plasmonic Film of Nanoparticles at the Air–Water Interface. Small, 2014, 10, 3234-3239.	5.2	418
5	Highâ€Performance Thermally Conductive Phase Change Composites by Largeâ€Size Oriented Graphite Sheets for Scalable Thermal Energy Harvesting. Advanced Materials, 2019, 31, e1905099.	11.1	298
6	Dispersion stability of thermal nanofluids. Progress in Natural Science: Materials International, 2017, 27, 531-542.	1.8	241
7	Coupling Interface Constructions of MoS ₂ /Fe ₅ Ni ₄ S ₈ Heterostructures for Efficient Electrochemical Water Splitting. Advanced Materials, 2018, 30, e1803151.	11.1	230
8	Bioinspired Engineering of Thermal Materials. Advanced Materials, 2015, 27, 428-463.	11.1	225
9	Bioinspired Multifunctional Paper-Based rGO Composites for Solar-Driven Clean Water Generation. ACS Applied Materials & Interfaces, 2016, 8, 14628-14636.	4.0	223
10	Bioinspired Bifunctional Membrane for Efficient Clean Water Generation. ACS Applied Materials & Interfaces, 2016, 8, 772-779.	4.0	187
11	Towards outperforming conventional sensor arrays with fabricated individual photonic vapour sensors inspired by Morpho butterflies. Nature Communications, 2015, 6, 7959.	5.8	171
12	Towards high-speed imaging of infrared photons with bio-inspired nanoarchitectures. Nature Photonics, 2012, 6, 195-200.	15.6	167
13	Paper-based membranes on silicone floaters for efficient and fast solar-driven interfacial evaporation under one sun. Journal of Materials Chemistry A, 2017, 5, 16359-16368.	5.2	158
14	Highly conductive phase change composites enabled by vertically-aligned reticulated graphite nanoplatelets for high-temperature solar photo/electro-thermal energy conversion, harvesting and storage. Nano Energy, 2021, 89, 106338.	8.2	153
15	In Situ Vertical Growth of Fe–Ni Layered Double-Hydroxide Arrays on Fe–Ni Alloy Foil: Interfacial Layer Enhanced Electrocatalyst with Small Overpotential for Oxygen Evolution Reaction. ACS Energy Letters, 2018, 3, 2357-2365.	8.8	150
16	Solar steam generation: Steam by thermal concentration. Nature Energy, 2016, 1, .	19.8	148
17	Dynamic tuning of optical absorbers for accelerated solar-thermal energy storage. Nature Communications, 2017, 8, 1478.	5.8	145
18	Efficient Solar-Thermal Energy Harvest Driven by Interfacial Plasmonic Heating-Assisted Evaporation. ACS Applied Materials & Interfaces, 2016, 8, 23412-23418.	4.0	144

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19	The impact of surface chemistry on the performance of localized solar-driven evaporation system. Scientific Reports, 2015, 5, 13600.	1.6	140
20	In Situ Environmental TEM in Imaging Gas and Liquid Phase Chemical Reactions for Materials Research. Advanced Materials, 2016, 28, 9686-9712.	11.1	124
21	Solar-driven interfacial desalination for simultaneous freshwater and salt generation. Desalination, 2020, 484, 114423.	4.0	121
22	Magnetically-accelerated large-capacity solar-thermal energy storage within high-temperature phase-change materials. Energy and Environmental Science, 2019, 12, 1613-1621.	15.6	110
23	Bioinspired Fabrication of Hierarchically Structured, pH-Tunable Photonic Crystals with Unique Transition. ACS Nano, 2013, 7, 4911-4918.	7.3	102
24	Platinumâ€Based Nanowires as Active Catalysts toward Oxygen Reduction Reaction: In Situ Observation of Surfaceâ€Diffusionâ€Assisted, Solidâ€State Oriented Attachment. Advanced Materials, 2017, 29, 1703460.	11.1	102
25	Discovery of the surface polarity gradient on iridescent <i>Morpho</i> butterfly scales reveals a mechanism of their selective vapor response. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15567-15572.	3.3	93
26	Floating rGO-based black membranes for solar driven sterilization. Nanoscale, 2017, 9, 19384-19389.	2.8	92
27	Infrared Detection Based on Localized Modification of <i>Morpho</i> Butterfly Wings. Advanced Materials, 2015, 27, 1077-1082.	11.1	90
28	Nanoscale kinetics of asymmetrical corrosion in core-shell nanoparticles. Nature Communications, 2018, 9, 1011.	5.8	87
29	All-in-one polymer sponge composite 3D evaporators for simultaneous high-flux solar-thermal desalination and electricity generation. Nano Energy, 2022, 93, 106882.	8.2	87
30	Neighboring Pt Atom Sites in an Ultrathin FePt Nanosheet for the Efficient and Highly CO-Tolerant Oxygen Reduction Reaction. Nano Letters, 2018, 18, 5905-5912.	4.5	84
31	Form-Stable Solar Thermal Heat Packs Prepared by Impregnating Phase-Changing Materials within Carbon-Coated Copper Foams. ACS Applied Materials & Interfaces, 2019, 11, 3417-3427.	4.0	83
32	Liquid Metal Composites with Enhanced Thermal Conductivity and Stability Using Molecular Thermal Linker. Advanced Materials, 2021, 33, e2103104.	11.1	79
33	Plasmonic-Enhanced Oxygen Reduction Reaction of Silver/Graphene Electrocatalysts. Nano Letters, 2019, 19, 1371-1378.	4.5	74
34	High-Efficiency Superheated Steam Generation for Portable Sterilization under Ambient Pressure and Low Solar Flux. ACS Applied Materials & Interfaces, 2019, 11, 18466-18474.	4.0	69
35	Bioâ€Inspired Superhydrophobic Closely Packed Aligned Nanoneedle Architectures for Enhancing Condensation Heat Transfer. Advanced Functional Materials, 2018, 28, 1800634.	7.8	68
36	Optical Functional Materials Inspired by Biology. Advanced Optical Materials, 2016, 4, 195-224.	3.6	67

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37	Rapid Charging of Thermal Energy Storage Materials through Plasmonic Heating. Scientific Reports, 2014, 4, 6246.	1.6	66
38	Highly sensitive, reproducible and uniform SERS substrates with a high density of three-dimensionally distributed hotspots: gyroid-structured Au periodic metallic materials. NPG Asia Materials, 2018, 10, e462-e462.	3.8	65
39	Enhancing Localized Evaporation through Separated Light Absorbing Centers and Scattering Centers. Scientific Reports, 2015, 5, 17276.	1.6	63
40	Visualization of fast "hydrogen pump―in core–shell nanostructured Mg@Pt through hydrogen-stabilized Mg ₃ Pt. Journal of Materials Chemistry A, 2019, 7, 14629-14637.	5.2	62
41	Bioinspired roll-to-roll solar-thermal energy harvesting within form-stable flexible composite phase change materials. Journal of Materials Chemistry A, 2020, 8, 20970-20978.	5.2	62
42	All-Day Freshwater Harvesting through Combined Solar-Driven Interfacial Desalination and Passive Radiative Cooling. ACS Applied Materials & amp; Interfaces, 2020, 12, 47612-47622.	4.0	60
43	Bioinspired Au–CuS coupled photothermal materials: enhanced infrared absorption and photothermal conversion from butterfly wings. Nano Energy, 2015, 17, 52-62.	8.2	59
44	Three-Dimensional Porous Solar-Driven Interfacial Evaporator for High-Efficiency Steam Generation under Low Solar Flux. ACS Omega, 2019, 4, 3546-3555.	1.6	58
45	Synthesis of Liquid Gallium@Reduced Graphene Oxide Core–Shell Nanoparticles with Enhanced Photoacoustic and Photothermal Performance. Journal of the American Chemical Society, 2022, 144, 6779-6790.	6.6	57
46	Biotemplated <i>Morpho</i> Butterfly Wings for Tunable Structurally Colored Photocatalysts. ACS Applied Materials & Interfaces, 2018, 10, 4614-4621.	4.0	54
47	An open thermo-electrochemical cell enabled by interfacial evaporation. Journal of Materials Chemistry A, 2019, 7, 6514-6521.	5.2	52
48	Strong Electronic Interaction of Amorphous Fe ₂ O ₃ Nanosheets with Singleâ€Atom Pt toward Enhanced Carbon Monoxide Oxidation. Advanced Functional Materials, 2019, 29, 1904278.	7.8	51
49	Fabrication and performance evaluation of flexible heat pipes for potential thermal control of foldable electronics. Applied Thermal Engineering, 2016, 95, 445-453.	3.0	49
50	Patterned Surfaces for Solar-Driven Interfacial Evaporation. ACS Applied Materials & Interfaces, 2019, 11, 7584-7590.	4.0	49
51	Photothermally Enabled Pyro-Catalysis of a BaTiO ₃ Nanoparticle Composite Membrane at the Liquid/Air Interface. ACS Applied Materials & Interfaces, 2018, 10, 21246-21253.	4.0	48
52	Crumpled graphene ball-based broadband solar absorbers. Nanoscale, 2018, 10, 6306-6312.	2.8	47
53	Stably dispersed high-temperature Fe ₃ O ₄ /silicone-oil nanofluids for direct solar thermal energy harvesting. Journal of Materials Chemistry A, 2016, 4, 17503-17511.	5.2	45
54	Enhancing the Photocatalytic Hydrogen Evolution Performance of a Metal/Semiconductor Catalyst through Modulation of the Schottky Barrier Height by Controlling the Orientation of the Interface. ACS Applied Materials & Interfaces, 2017, 9, 12494-12500.	4.0	45

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55	Flexible heat pipes with integrated bioinspired design. Progress in Natural Science: Materials International, 2015, 25, 51-57.	1.8	43
56	Vapor-Enabled Propulsion for Plasmonic Photothermal Motor at the Liquid/Air Interface. Journal of the American Chemical Society, 2017, 139, 12362-12365.	6.6	43
57	Reconsidering the Benchmarking Evaluation of Catalytic Activity in Oxygen Reduction Reaction. IScience, 2020, 23, 101532.	1.9	42
58	Bioinspired Temperature Regulation in Interfacial Evaporation. Advanced Functional Materials, 2020, 30, 1910481.	7.8	42
59	Pyroelectric Synthesis of Metal–BaTiO ₃ Hybrid Nanoparticles with Enhanced Pyrocatalytic Performance. ACS Sustainable Chemistry and Engineering, 2019, 7, 2602-2609.	3.2	41
60	Stability of single-atom catalysts for electrocatalysis. Journal of Materials Chemistry A, 2022, 10, 5835-5849.	5.2	40
61	Substrateless Welding of Self-Assembled Silver Nanowires at Air/Water Interface. ACS Applied Materials & Interfaces, 2016, 8, 20483-20490.	4.0	39
62	Silicone oil-based solar-thermal fluids dispersed with PDMS-modified Fe3O4@graphene hybrid nanoparticles. Progress in Natural Science: Materials International, 2018, 28, 554-562.	1.8	37
63	Ga-In liquid metal nanoparticles prepared by physical vapor deposition. Progress in Natural Science: Materials International, 2018, 28, 28-33.	1.8	36
64	Bioinspired Infrared Sensing Materials and Systems. Advanced Materials, 2018, 30, e1707632.	11.1	36
65	Heterostructure of ZnO Nanosheets/Zn with a Highly Enhanced Edge Surface for Efficient CO ₂ Electrochemical Reduction to CO. ACS Applied Materials & Interfaces, 2021, 13, 10837-10844.	4.0	33
66	Noncontact human-machine interaction based on hand-responsive infrared structural color. Nature Communications, 2022, 13, 1446.	5.8	33
67	Temperature-Induced Coalescence of Colliding Binary Droplets on Superhydrophobic Surface. Scientific Reports, 2014, 4, 4303.	1.6	32
68	Erythritol impregnated within surface-roughened hydrophilic metal foam for medium-temperature solar-thermal energy harvesting. Energy Conversion and Management, 2020, 222, 113241.	4.4	32
69	Integrating plasmonic nanostructures with natural photonic architectures in Pd-modified <i>Morpho</i> butterfly wings for sensitive hydrogen gas sensing. RSC Advances, 2018, 8, 32395-32400.	1.7	31
70	Butterfly Wing Hears Sound: Acoustic Detection Using Biophotonic Nanostructure. Nano Letters, 2019, 19, 2627-2633.	4.5	29
71	Design of a structure with low incident and viewing angle dependence inspired by Morpho butterflies. Scientific Reports, 2013, 3, 3427.	1.6	27
72	Vertical segregation in the self-assembly of nanoparticles at the liquid/air interface. Nanoscale, 2014, 6, 14662-14666.	2.8	25

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73	Light-driven motion of water droplets with directional control on nanostructured surfaces. Nanoscale, 2020, 12, 4295-4301.	2.8	24
74	Ternary Pt–Pd–Ag alloy nanoflowers for oxygen reduction reaction electrocatalysis. CrystEngComm, 2017, 19, 6964-6971.	1.3	23
75	Design of Highly Durable Coreâ^'Shell Catalysts by Controlling Shell Distribution Guided by Inâ€5itu Corrosion Study. Advanced Materials, 2021, 33, e2101511.	11.1	21
76	Clean water generation with switchable dispersion of multifunctional Fe3O4-reduced graphene oxide particles. Progress in Natural Science: Materials International, 2018, 28, 422-429.	1.8	20
77	Structural evolution of Pt-based oxygen reduction reaction electrocatalysts. Chinese Journal of Catalysis, 2022, 43, 47-58.	6.9	20
78	A bottom-up approach to generate isotropic liquid metal network in polymer-enabled 3D thermal management. Chemical Engineering Journal, 2022, 439, 135674.	6.6	19
79	Optical nanofluids for direct absorption-based solar-thermal energy harvesting at medium-to-high temperatures. Current Opinion in Chemical Engineering, 2019, 25, 51-56.	3.8	18
80	Large-visual-angle microstructure inspired from quantitative design of Morpho butterflies' lamellae deviation using the FDTD/PSO method. Optics Letters, 2013, 38, 169.	1.7	17
81	Subtractive Structural Modification of <i>Morpho </i> Butterfly Wings. Small, 2015, 11, 5705-5711.	5.2	17
82	Electrically Driven Interfacial Evaporation for High-Efficiency Steam Generation and Sterilization. ACS Omega, 2019, 4, 16603-16611.	1.6	17
83	Atomistic Imaging of Competition between Surface Diffusion and Phase Transition during the Intermetallic Formation of Faceted Particles. ACS Nano, 2021, 15, 5284-5293.	7.3	17
84	Galliumâ€Based Liquid Metal Composites with Enhanced Thermal and Electrical Performance Enabled by Structural Engineering of Filler. Advanced Engineering Materials, 2022, 24, 2101678.	1.6	16
85	Facile Approach to Enhance Electrical and Thermal Performance of Conducting Polymer PEDOT:PSS Films via Hot Pressing. ACS Applied Materials & Interfaces, 2022, 14, 10605-10615.	4.0	16
86	Evaporation: Bioâ€Inspired Evaporation Through Plasmonic Film of Nanoparticles at the Air–Water Interface (Small 16/2014). Small, 2014, 10, 3233-3233.	5.2	14
87	In Situ Transmission Electron Microscopy Study of Nanocrystal Formation for Electrocatalysis. ChemNanoMat, 2019, 5, 1439-1455.	1.5	14
88	Ethylene glycol-based solar-thermal fluids dispersed with reduced graphene oxide. RSC Advances, 2019, 9, 10282-10288.	1.7	14
89	Bubbleâ€Enabled Underwater Motion of a Lightâ€Driven Motor. Small, 2019, 15, e1804959.	5.2	14
90	Selfâ€Assembly in Hopper‧haped Crystals. Advanced Functional Materials, 2020, 30, 1908108.	7.8	14

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91	Human hand as a powerless and multiplexed infrared light source for information decryption and complex signal generation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	14
92	Construction of 3D Conductive Network in Liquid Gallium with Enhanced Thermal and Electrical Performance. Advanced Materials Technologies, 2022, 7, 2100970.	3.0	14
93	Rapid one-step scalable microwave synthesis of Ti ₃ C ₂ T _{<i>x</i>} MXene. Chemical Communications, 2021, 57, 12611-12614.	2.2	14
94	Waste heat recovery in an oscillating heat pipe using interfacial electrical double layers. Applied Physics Letters, 2018, 112, .	1.5	13
95	Enhancement of infrared emissivity by the hierarchical microstructures from the wing scales of butterfly <i>Rapala dioetas</i> . APL Photonics, 2021, 6, .	3.0	13
96	Facets Matching of Platinum and Ferric Oxide in Highly Efficient Catalyst Design for Low-Temperature CO Oxidation. ACS Applied Materials & amp; Interfaces, 2018, 10, 15322-15327.	4.0	12
97	Self-propelled rotation of paper-based Leidenfrost rotor. Applied Physics Letters, 2019, 114, .	1.5	12
98	Self-powered infrared detection using a graphene oxide film. Journal of Materials Chemistry A, 2020, 8, 9248-9255.	5.2	12
99	Controllable assembly of Pd nanosheets: a solution for 2D materials storage. CrystEngComm, 2017, 19, 3439-3444.	1.3	12
100	Silicone oil nanofluids dispersed with mesoporous crumpled graphene for medium-temperature direct absorption solar-thermal energy harvesting. Solar Energy Materials and Solar Cells, 2022, 243, 111794.	3.0	11
101	Coalescence, Spreading, and Rebound of Two Water Droplets with Different Temperatures on a Superhydrophobic Surface. ACS Omega, 2019, 4, 17615-17622.	1.6	9
102	Self-dispersible graphene quantum dots in ethylene glycol for direct absorption-based medium-temperature solar-thermal harvesting. RSC Advances, 2020, 10, 45028-45036.	1.7	8
103	Effectively Tuning the Ratio of CO and H ₂ into Syngas through CO ₂ Electrochemical Reduction over a Wide Potential Range on a ZnO Nanosheet via Ni Doping. ACS Applied Energy Materials, 2022, 5, 5531-5539.	2.5	8
104	Paste-like recyclable Ga liquid metal phase change composites loaded with miscible Ga2O3 particles for transient cooling of portable electronics. Applied Thermal Engineering, 2022, 213, 118766.	3.0	8
105	Coupling effects in 3D plasmonic structures templated by <i>Morpho</i> butterfly wings. Nanoscale, 2018, 10, 533-537.	2.8	7
106	Butterfly Wing Inspired High Performance Infrared Detection with Spectral Selectivity. Advanced Optical Materials, 2020, 8, 1901647.	3.6	7
107	Boosting Oxygen and Peroxide Reduction Reactions on PdCu Intermetallic Cubes. ChemElectroChem, 2020, 7, 2614-2620.	1.7	7
108	Thickness dependent thermal performance of a poly(3,4-ethylenedioxythiophene) thin film synthesized <i>>via</i> an electrochemical approach. RSC Advances, 2022, 12, 1897-1903.	1.7	7

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109	Transparent nanofluids with high thermal conductivity for improved convective thermal management of optoelectronic devices. Experimental Heat Transfer, 2022, 35, 183-195.	2.3	6
110	Unzipping Carbon Nanotube Bundles through NHâ^ḯ€ Stacking for Enhanced Electrical and Thermal Transport. ACS Applied Materials & Interfaces, 2021, 13, 28583-28592.	4.0	6
111	Crumpled particles of ethanol-wetted graphene oxide for medium-temperature nanofluidic solar-thermal energy harvesting. Carbon, 2022, 186, 492-500.	5.4	6
112	Ag ₃ PO ₄ electrocatalyst for oxygen reduction reaction: enhancement from positive charge. RSC Advances, 2018, 8, 5382-5387.	1.7	5
113	Bioinspired infrared detection using thermoresponsive hydrogel nanoparticles. Pure and Applied Chemistry, 2015, 87, 1029-1038.	0.9	4
114	Hydrogen evolution from silicon nanowire surfaces. RSC Advances, 2018, 8, 41657-41662.	1.7	3
115	Pyroelectric synthesis of Au/Pt bimetallic nanoparticles–BaTiO ₃ hybrid nanomaterials. RSC Advances, 2020, 10, 22616-22621.	1.7	3
116	The impact of surface chemistry on the interfacial evaporation-driven self-assembly of thermoplasmonic gold nanoparticles. Nanoscale, 2021, 13, 20521-20530.	2.8	3
117	A Nonâ€Pt Electronically Coupled Semiconductor Heterojunction for Enhanced Oxygen Reduction Electrocatalytic Property. ChemistrySelect, 2019, 4, 5264-5268.	0.7	2
118	Light-Driven Nanodroplet Generation Using Porous Membranes. Nano Letters, 2020, 20, 7874-7881.	4.5	2
119	Bioinspired Color Change through Guided Reflection. Advanced Optical Materials, 2018, 6, 1800464.	3.6	1
120	Boosting electrocatalysis of oxygen reduction reaction through photovoltaic-driven potential manipulation strategy. Materials Today Energy, 2018, 10, 34-39.	2.5	1
121	Vapor detection through dynamic process of molecule desorption from butterfly wings. Pure and Applied Chemistry, 2020, 92, 223-232.	0.9	1
122	Integration of Biological Components into Engineered Functional Systems. Matter, 2020, 3, 974-976.	5.0	1
123	Ethylene glycol nanofluids dispersed with monolayer graphene oxide nanosheet for high-performance subzero cold thermal energy storage. RSC Advances, 2021, 11, 30495-30502.	1.7	1
124	Pyroelectric Synthesis of the Siteâ€5pecific Auâ€ZnO Nanorod Array. ChemistrySelect, 2021, 6, 11224-11230.	0.7	1
125	Research progress of bio-inspired radiative cooling. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 024401.	0.2	1
126	Hopper‧haped Crystals: Selfâ€Assembly in Hopper‧haped Crystals (Adv. Funct. Mater. 26/2020). Advanced Functional Materials, 2020, 30, 2070170.	7.8	0

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127 10.1063/1.5084231.3., 2019, , .	0