Scalable and Highly Efficient Mesoporous Woodâ€Base Localized Heat, Rapid Water Transport

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Citation Report

#	Article	IF	CITATIONS
1	Omnidirectional and effective salt-rejecting absorber with rationally designed nanoarchitecture for efficient and durable solar vapour generation. Journal of Materials Chemistry A, 2018, 6, 22976-22986.	5.2	48
2	Synthesis of mesoporous Fe ₃ Si aerogel as a photo-thermal material for highly efficient and stable corrosive-water evaporation. Journal of Materials Chemistry A, 2018, 6, 23263-23269.	5.2	23
3	Woodâ€Derived Hierarchically Porous Electrodes for Highâ€Performance Allâ€Solidâ€State Supercapacitors. Advanced Functional Materials, 2018, 28, 1806207.	7.8	170
4	Passive solar high-yield seawater desalination by modular and low-cost distillation. Nature Sustainability, 2018, 1, 763-772.	11.5	262
5	Spectrally Selective Smart Window with High Near-Infrared Light Shielding and Controllable Visible Light Transmittance. ACS Applied Materials & Interfaces, 2018, 10, 39819-39827.	4.0	136
6	Scalable Fabrication of Thermally Insulating Mechanically Resilient Hierarchically Porous Polymer Foams. ACS Applied Materials & Interfaces, 2018, 10, 38410-38417.	4.0	74
7	Flexible Fireâ€Resistant Photothermal Paper Comprising Ultralong Hydroxyapatite Nanowires and Carbon Nanotubes for Solar Energyâ€Driven Water Purification. Small, 2018, 14, e1803387.	5.2	136
8	Steam generation enabled by a high efficiency solar absorber with thermal concentration. Energy, 2018, 165, 1282-1291.	4.5	31
9	Mechanically interlocked 1T/2H phases of MoS2 nanosheets for solar thermal water purification. Nano Energy, 2018, 53, 949-957.	8.2	156
10	Highly efficient solar steam generation by hybrid plasmonic structured TiN/mesoporous anodized alumina membrane. Journal of Materials Research, 2018, 33, 3857-3869.	1.2	19
11	Robust aerogels based on conjugated microporous polymer nanotubes with exceptional mechanical strength for efficient solar steam generation. Journal of Materials Chemistry A, 2018, 6, 18183-18190.	5.2	120
12	Research progress on novel solar steam generation system based on black nanomaterials. Canadian Journal of Chemical Engineering, 2018, 96, 2086-2099.	0.9	13
13	A cake making strategy to prepare reduced graphene oxide wrapped plant fiber sponges for high-efficiency solar steam generation. Journal of Materials Chemistry A, 2018, 6, 14571-14576.	5.2	84
14	A scalable, low-cost and robust photo-thermal fabric with tunable and programmable 2D/3D structures towards environmentally adaptable liquid/solid-medium water extraction. Nano Energy, 2019, 65, 104002.	8.2	115
15	A wood–polypyrrole composite as a photothermal conversion device for solar evaporation enhancement. Journal of Materials Chemistry A, 2019, 7, 20706-20712.	5.2	189
16	Solar steam generation based on the photothermal effect: from designs to applications, and beyond. Journal of Materials Chemistry A, 2019, 7, 19203-19227.	5.2	175
17	Paper-based integrated evaporation device for efficient solar steam generation through localized heating. Solar Energy, 2019, 188, 1283-1291.	2.9	42
18	Chitosan/reduced graphene oxide-modified spacer fabric as a salt-resistant solar absorber for efficient solar steam generation. Journal of Materials Chemistry A, 2019, 7, 18311-18317.	5.2	146

#	Article	IF	CITATIONS
19	Pathways and challenges for efficient solar-thermal desalination. Science Advances, 2019, 5, eaax0763.	4.7	311
20	A Novel Flake-like Cu ₇ S ₄ Solar Absorber for High-Performance Large-Scale Water Evaporation. ACS Applied Energy Materials, 2019, 2, 5154-5161.	2.5	32
21	Deep Eutectic Solvent-Assisted In Situ Wood Delignification: A Promising Strategy To Enhance the Efficiency of Wood-Based Solar Steam Generation Devices. ACS Applied Materials & Interfaces, 2019, 11, 26032-26037.	4.0	97
22	Superwetting and mechanically robust MnO ₂ nanowire–reduced graphene oxide monolithic aerogels for efficient solar vapor generation. Journal of Materials Chemistry A, 2019, 7, 18092-18099.	5.2	59
23	Development and Evolution of the System Structure for Highly Efficient Solar Steam Generation from Zero to Three Dimensions. Advanced Functional Materials, 2019, 29, 1903255.	7.8	249
24	Sustainable Biochar-Based Solar Absorbers for High-Performance Solar-Driven Steam Generation and Water Purification. ACS Sustainable Chemistry and Engineering, 2019, 7, 19311-19320.	3.2	99
25	Efficient H2O2 generation and electro-Fenton degradation of pollutants in microchannels of oxidized monolithic-porous-carbon cathode. Water Science and Technology, 2019, 80, 970-978.	1.2	8
26	Mass production of superhydrophilic sponges for efficient and stable solar-driven highly corrosive water evaporation. Environmental Science: Water Research and Technology, 2019, 5, 2041-2047.	1.2	5
27	Beyond lotus: Plasma nanostructuring enables efficient energy and water conversion and use. Nano Energy, 2019, 66, 104125.	8.2	34
28	Arched Bamboo Charcoal as Interfacial Solar Steam Generation Integrative Device with Enhanced Water Purification Capacity. Advanced Sustainable Systems, 2019, 3, 1800144.	2.7	142
29	Novel onion-like graphene aerogel beads for efficient solar vapor generation under non-concentrated illumination. Journal of Materials Chemistry A, 2019, 7, 4400-4407.	5.2	62
30	Plasmon Based Double‣ayer Hydrogel Device for a Highly Efficient Solar Vapor Generation. Advanced Functional Materials, 2019, 29, 1901312.	7.8	136
31	Multifunctional Solar Waterways: Plasmaâ€Enabled Selfâ€Cleaning Nanoarchitectures for Energyâ€Efficient Desalination. Advanced Energy Materials, 2019, 9, 1901286.	10.2	109
32	Multifunctional molybdenum oxide for solar-driven water evaporation and charged dyes adsorption. Applied Surface Science, 2019, 491, 328-334.	3.1	38
33	Graphene Array-Based Anti-fouling Solar Vapour Gap Membrane Distillation with High Energy Efficiency. Nano-Micro Letters, 2019, 11, 51.	14.4	79
34	Nature-inspired salt resistant polypyrrole–wood for highly efficient solar steam generation. Sustainable Energy and Fuels, 2019, 3, 3000-3008.	2.5	100
35	Woodâ€Derived Materials for Advanced Electrochemical Energy Storage Devices. Advanced Functional Materials, 2019, 29, 1902255.	7.8	157
36	Self-floating aerogel composed of carbon nanotubes and ultralong hydroxyapatite nanowires for highly efficient solar energy-assisted water purification. Carbon, 2019, 150, 233-243.	5.4	85

	Сітаті	on Report	
#	ARTICLE	IF	CITATIONS
37	Low-cost carbonized kelp for highly efficient solar steam generation. AIP Advances, 2019, 9, .	0.6	39
38	Shape Conformal and Thermal Insulative Organic Solar Absorber Sponge for Photothermal Water Evaporation and Thermoelectric Power Generation. Advanced Energy Materials, 2019, 9, 1900250.	10.2	286
39	Reduced Graphene Oxide Coated Hollow Polyester Fibers for Efficient Solar Steam Generation. Energy Technology, 2019, 7, 1900265.	1.8	28
40	Photothermal Clothing for Thermally Preserving Pipeline Transportation of Crude Oil. Advanced Functional Materials, 2019, 29, 1900703.	7.8	46
41	The revival of thermal utilization from the Sun: interfacial solar vapor generation. National Science Review, 2019, 6, 562-578.	4.6	260
42	Self-Stabilizing Transpiration in Synthetic Leaves. ACS Applied Materials & Interfaces, 2019, 11, 13768-13776.	4.0	14
43	Scalable and robust bilayer polymer foams for highly efficient and stable solar desalination. Nano Energy, 2019, 60, 841-849.	8.2	262
44	Conductive hollow kapok fiber-PPy monolithic aerogels with excellent mechanical robustness for efficient solar steam generation. Journal of Materials Chemistry A, 2019, 7, 9673-9679.	5.2	141
45	Micro-/Macroscopically Synergetic Control of Switchable 2D/3D Photothermal Water Purification Enabled by Robust, Portable, and Cost-Effective Cellulose Papers. ACS Applied Materials & Interfaces, 2019, 11, 15498-15506.	4.0	73
46	Plant leaves inspired sunlight-driven purifier for high-efficiency clean water production. Nature Communications, 2019, 10, 1512.	5.8	160
47	N-doped porous carbon from different nitrogen sources for high-performance supercapacitors and CO2 adsorption. Journal of Alloys and Compounds, 2019, 786, 826-838.	2.8	81
48	Challenges and Opportunities for Solar Evaporation. Joule, 2019, 3, 683-718.	11.7	850
49	Carrot-inspired solar thermal evaporator. Journal of Materials Chemistry A, 2019, 7, 26911-26916.	5.2	101
50	Enhancement of solar vapor generation by a 3D hierarchical heat trapping structure. Journal of Materials Chemistry A, 2019, 7, 26496-26503.	5.2	28
51	Solar-to-Steam Generation via Porous Black Membranes with Tailored Pore Structures. ACS Applied Materials & Interfaces, 2019, 11, 48300-48308.	4.0	21
52	Janus Poly(ionic liquid) Monolithic Photothermal Materials with Superior Salt-Rejection for Efficient Solar Steam Generation. ACS Applied Energy Materials, 2019, 2, 8862-8870.	2.5	57
53	Recent progress in solar-driven interfacial water evaporation: Advanced designs and applications. Nano Energy, 2019, 57, 507-518.	8.2	597
54	Facile and Scalable Fabrication of Surfaceâ€Modified Sponge for Efficient Solar Steam Generation. ChemSusChem, 2019, 12, 426-433.	3.6	116

#	Article	IF	CITATIONS
55	Superwetting Monolithic Hollow arbonâ€Nanotubes Aerogels with Hierarchically Nanoporous Structure for Efficient Solar Steam Generation. Advanced Energy Materials, 2019, 9, 1802158.	10.2	356
56	Fastâ€Growing Field of Interfacial Solar Steam Generation: Evolutional Materials, Engineered Architectures, and Synergistic Applications. Solar Rrl, 2019, 3, 1800206.	3.1	132
57	Direct solar steam generation system for clean water production. Energy Storage Materials, 2019, 18, 429-446.	9.5	234
58	Thin film technology for solar steam generation: A new dawn. Solar Energy, 2019, 177, 561-575.	2.9	195
59	Vertically aligned Juncus effusus fibril composites for omnidirectional solar evaporation. Carbon, 2020, 156, 225-233.	5.4	54
60	Tailoring Aerogels and Related 3D Macroporous Monoliths for Interfacial Solar Vapor Generation. Advanced Functional Materials, 2020, 30, 1907234.	7.8	109
61	High efficient solar evaporation by airing multifunctional textile. International Journal of Heat and Mass Transfer, 2020, 147, 118866.	2.5	58
62	Superhydrophilic and mechanically robust phenolic resin as double layered photothermal materials for efficient solar steam generation. Materials Today Energy, 2020, 16, 100375.	2.5	31
63	A high-efficiency solar desalination evaporator composite of corn stalk, Mcnts and TiO ₂ : ultra-fast capillary water moisture transportation and porous bio-tissue multi-layer filtration. Journal of Materials Chemistry A, 2020, 8, 349-357.	5.2	151
64	A bridge-arched and layer-structured hollow melamine foam/reduced graphene oxide composite with an enlarged evaporation area and superior thermal insulation for high-performance solar steam generation. Journal of Materials Chemistry A, 2020, 8, 2701-2711.	5.2	103
65	Collective behaviors mediated multifunctional black sand aggregate towards environmentally adaptive solar-to-thermal purified water harvesting. Nano Energy, 2020, 68, 104311.	8.2	81
66	Solid waste and graphite derived solar steam generator for highly-efficient and cost-effective water purification. Applied Energy, 2020, 261, 114410.	5.1	70
67	Ferric tannate photothermal material for efficient water distillation. Environmental Science: Water Research and Technology, 2020, 6, 911-915.	1.2	30
68	Solar–Thermal Water Evaporation: A Review. ACS Energy Letters, 2020, 5, 437-456.	8.8	224
69	Exploring interface confined water flow and evaporation enables solar-thermal-electro integration towards clean water and electricity harvest via asymmetric functionalization strategy. Nano Energy, 2020, 68, 104385.	8.2	113
70	Highly Efficient Solar Steam Generation by Glassy Carbon Foam Coated with Two-Dimensional Metal Chalcogenides. ACS Applied Materials & Interfaces, 2020, 12, 2490-2496.	4.0	34
71	A 3D Hemispheric Steam Generator Based on An Organic–Inorganic Composite Light Absorber for Efficient Solar Evaporation and Desalination. Advanced Materials Interfaces, 2020, 7, 1901715.	1.9	45
72	Targeted synthesis of Zn-based porous aromatic framework for enhancing fire safety and anti-corrosion performance of wood substrate. Composites Part B: Engineering, 2020, 183, 107697.	5.9	12

#	Article	IF	CITATIONS
73	Ultralight Biomass Porous Foam with Aligned Hierarchical Channels as Salt-Resistant Solar Steam Generators. ACS Applied Materials & Interfaces, 2020, 12, 798-806.	4.0	117
74	Solar-assisted fabrication of dimpled 2H-MoS2 membrane for highly efficient water desalination. Water Research, 2020, 170, 115367.	5.3	60
75	Superhydrophilic and Oleophobic Porous Architectures Based on Basalt Fibers as Oilâ€Repellent Photothermal Materials for Solar Steam Generation. ChemSusChem, 2020, 13, 493-500.	3.6	62
76	Capillary-fed, thin film evaporation devices. Journal of Applied Physics, 2020, 128, .	1.1	51
77	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
78	Biomimetic Antigravity Water Transport and Remote Harvesting Powered by Sunlight. Global Challenges, 2020, 4, 2000043.	1.8	9
79	Flexible Salt-Rejecting Photothermal Paper Based on Reduced Graphene Oxide and Hydroxyapatite Nanowires for High-Efficiency Solar Energy-Driven Vapor Generation and Stable Desalination. ACS Applied Materials & Interfaces, 2020, 12, 32556-32565.	4.0	95
80	A yolk@shell superhydrophobic/superhydrophilic solar evaporator for efficient and stable desalination. Journal of Materials Chemistry A, 2020, 8, 14736-14745.	5.2	61
81	Cellular Structured CNTs@SiO ₂ Nanofibrous Aerogels with Vertically Aligned Vessels for Saltâ€Resistant Solar Desalination. Advanced Materials, 2020, 32, e1908269.	11.1	257
82	Concentrated Acidâ€Induced Dehydration of Fallen Leaves for Efficient, Sustainable, and Selfâ€Cleaning Solar Steam Generation. Advanced Energy and Sustainability Research, 2020, 1, 2000034.	2.8	21
83	Advanced Nanowood Materials for the Water–Energy Nexus. Advanced Materials, 2021, 33, e2001240.	11.1	59
84	Interfacial photothermal water evaporator based on nanoporous microwaveâ€expanded graphite and coconut waste fibers@recycled polystyrene as substrate. International Journal of Energy Research, 2020, 44, 10878-10893.	2.2	11
85	Bioinspired cellulose membrane with hierarchically porous structure for highly efficient solar steam generation. Cellulose, 2020, 27, 8255-8267.	2.4	17
86	Recycling of Particulate Photoabsorbers for Highly Stable Solar Desalination Operation. ACS Applied Energy Materials, 2020, 3, 8295-8301.	2.5	9
87	Towards highly efficient solar-driven interfacial evaporation for desalination. Journal of Materials Chemistry A, 2020, 8, 17907-17937.	5.2	115
88	Realizing Mechanically Robust and Electrically Conductive Wood via Vacuum Pressure Impregnation. ACS Applied Bio Materials, 2020, 3, 6071-6078.	2.3	4
89	Enhanced solar desalination by delignified wood coated with bimetallic Fe/Pd nanoparticles. Desalination, 2020, 493, 114657.	4.0	66
90	Nanoscale Ion Regulation in Woodâ€Based Structures and Their Device Applications. Advanced Materials, 2021, 33, e2002890.	11.1	75

#	Article	IF	CITATIONS
91	Highly Anisotropic Corncob as an Efficient Solar Steam-Generation Device with Heat Localization and Rapid Water Transportation. ACS Applied Materials & Interfaces, 2020, 12, 50397-50405.	4.0	51
92	A three-dimensional printed biomimetic hierarchical graphene architecture for high-efficiency solar steam-generation. Journal of Materials Chemistry A, 2020, 8, 19387-19395.	5.2	34
93	A low-cost lotus leaf-based carbon film for solar-driven steam generation. New Carbon Materials, 2020, 35, 436-443.	2.9	26
94	Cellulose Nanofibril-Stabilized Pickering Emulsion and In Situ Polymerization Lead to Hybrid Aerogel for High-Efficiency Solar Steam Generation. ACS Applied Polymer Materials, 2020, 2, 4581-4591.	2.0	53
95	Resilient biomass-derived hydrogel with tailored topography for highly efficient and long-term solar evaporation of high-salinity brine. Journal of Materials Chemistry A, 2020, 8, 22645-22656.	5.2	74
96	Vertically aligned reduced graphene oxide/Ti3C2Tx MXene hybrid hydrogel for highly efficient solar steam generation. Nano Research, 2020, 13, 3048-3056.	5.8	163
97	Wood nanotechnology: a more promising solution toward energy issues: a mini-review. Cellulose, 2020, 27, 8513-8526.	2.4	14
98	Cheap, facile, and upscalable activated carbon-based photothermal layers for solar steam generation. RSC Advances, 2020, 10, 42432-42440.	1.7	17
99	The assembly of a polymer and metal nanoparticle coated glass capillary array for efficient solar desalination. Journal of Materials Chemistry A, 2020, 8, 25904-25912.	5.2	28
100	Laser-Engineered Graphene on Wood Enables Efficient Antibacterial, Anti-Salt-Fouling, and Lipophilic-Matter-Rejection Solar Evaporation. ACS Applied Materials & Interfaces, 2020, 12, 51864-51872.	4.0	64
101	Structure–property–function relationships of natural and engineered wood. Nature Reviews Materials, 2020, 5, 642-666.	23.3	616
102	Three-Dimensional Wood-Inspired Bilayer Membrane Device Containing Microchannels for Highly Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2020, 12, 24328-24338.	4.0	44
103	Flexible and Mildew-Resistant Wood-Derived Aerogel for Stable and Efficient Solar Desalination. ACS Applied Materials & Interfaces, 2020, 12, 28179-28187.	4.0	114
104	Nitrogen-Doped Unusually Superwetting, Thermally Insulating, and Elastic Graphene Aerogel for Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2020, 12, 26200-26212.	4.0	55
105	Conversion of lignocellulose into biochar and furfural through boron complexation and esterification reactions. Bioresource Technology, 2020, 312, 123586.	4.8	39
106	A salt-rejecting anisotropic structure for efficient solar desalination <i>via</i> heat–mass flux decoupling. Journal of Materials Chemistry A, 2020, 8, 12089-12096.	5.2	27
107	Lotus-Inspired Evaporator with Janus Wettability and Bimodal Pores for Solar Steam Generation. Cell Reports Physical Science, 2020, 1, 100074.	2.8	43
108	Cellulose Nanomaterials in Interfacial Evaporators for Desalination: A "Natural―Choice. Advanced Materials, 2021, 33, e2000922.	11.1	132

#	Article	IF	CITATIONS
109	Constructing 3D optical absorption holes by stacking macroporous membrane for highly efficient solar steam generation. Renewable Energy, 2020, 159, 944-953.	4.3	15
110	Plasmonic wooden flower for highly efficient solar vapor generation. Nano Energy, 2020, 76, 104998.	8.2	126
111	Carbonized tofu as photothermal material for highly efficient solar steam generation. International Journal of Energy Research, 2020, 44, 9213-9221.	2.2	34
112	Corrugated Wood Fabricated Using Laser-Induced Graphitization for Salt-Resistant Solar Steam Generation. ACS Applied Materials & amp; Interfaces, 2020, 12, 30320-30327.	4.0	67
113	Highly Thermally Insulated and Superhydrophilic Corn Straw for Efficient Solar Vapor Generation. ACS Applied Materials & Interfaces, 2020, 12, 16503-16511.	4.0	108
114	A Scalable Nickel–Cellulose Hybrid Metamaterial with Broadband Light Absorption for Efficient Solar Distillation. Advanced Materials, 2020, 32, e1907975.	11.1	73
115	Wood-Derived Hybrid Scaffold with Highly Anisotropic Features on Mechanics and Liquid Transport toward Cell Migration and Alignment. ACS Applied Materials & Interfaces, 2020, 12, 17957-17966.	4.0	18
116	Structure Architecting for Saltâ€Rejecting Solar Interfacial Desalination to Achieve Highâ€Performance Evaporation With In Situ Energy Generation. Advanced Science, 2020, 7, 1903478.	5.6	224
117	Gradient Vertical Channels within Aerogels Based on N-Doped Graphene Meshes toward Efficient and Salt-Resistant Solar Evaporation. ACS Sustainable Chemistry and Engineering, 2020, 8, 4955-4965.	3.2	36
118	Synthesis of hollow copper sulfide nanocubes with low emissivity for highly efficient solar steam generation. Solar Energy Materials and Solar Cells, 2020, 210, 110484.	3.0	39
119	Robust carbon-dot-based evaporator with an enlarged evaporation area for efficient solar steam generation. Journal of Materials Chemistry A, 2020, 8, 14566-14573.	5.2	44
120	Biomass derived Janus solar evaporator for synergic water evaporation and purification. Sustainable Materials and Technologies, 2020, 25, e00180.	1.7	58
121	Sustainable Wood-Based Hierarchical Solar Steam Generator: A Biomimetic Design with Reduced Vaporization Enthalpy of Water. Nano Letters, 2020, 20, 5699-5704.	4.5	162
122	Economical Salt-Resistant Superhydrophobic Photothermal Membrane for Highly Efficient and Stable Solar Desalination. ACS Applied Materials & Interfaces, 2020, 12, 35142-35151.	4.0	82
123	Highly compact nanochannel thin films with exceptional thermal conductivity and water pumping for efficient solar steam generation. Journal of Materials Chemistry A, 2020, 8, 13927-13934.	5.2	28
124	Flexible and Highly Efficient Bilayer Photothermal Paper for Water Desalination and Purification: Self-Floating, Rapid Water Transport, and Localized Heat. ACS Applied Materials & Interfaces, 2020, 12, 11204-11213.	4.0	63
125	Migration Crystallization Device Based on Biomass Photothermal Materials for Efficient Salt-Rejection Solar Steam Generation. ACS Applied Energy Materials, 2020, 3, 3024-3032.	2.5	81
126	Porous Carbon Nanofoam Derived From Pitch as Solar Receiver for Efficient Solar Steam Generation. Global Challenges, 2020, 4, 1900098.	1.8	15

#	Article	IF	CITATIONS
127	Bioinspired Temperature Regulation in Interfacial Evaporation. Advanced Functional Materials, 2020, 30, 1910481.	7.8	42
128	In situ generation of carbonized polyaniline nanowires on thermally-treated and electrochemically-etched carbon fiber cloth for high efficient solar seawater desalination. Desalination, 2020, 481, 114303.	4.0	45
129	Solar-Driven Freshwater Generation from Seawater and Atmospheric Moisture Enabled by a Hydrophilic Photothermal Foam. ACS Applied Materials & Interfaces, 2020, 12, 10307-10316.	4.0	33
130	A simple, mild and versatile method for preparation of photothermal woods toward highly efficient solar steam generation. Nano Energy, 2020, 71, 104650.	8.2	167
131	Willow Catkins-Derived Porous Carbon Membrane with Hydrophilic Property for Efficient Solar Steam Generation. ACS Omega, 2020, 5, 2878-2885.	1.6	36
132	Interfacial solar evaporation for water production: from structure design to reliable performance. Molecular Systems Design and Engineering, 2020, 5, 419-432.	1.7	35
133	Solar vapor generation optimization of a carbonâ€black/woodâ€flour system with strength enhanced by polystyrene. International Journal of Energy Research, 2020, 44, 3687-3696.	2.2	17
134	Direction-limited water transport and inhibited heat convection loss of gradient-structured hydrogels for highly efficient interfacial evaporation. Solar Energy, 2020, 201, 581-588.	2.9	26
135	Latest development in salt removal from solar-driven interfacial saline water evaporators: Advanced strategies and challenges. Water Research, 2020, 177, 115770.	5.3	131
136	Realization of Low Latent Heat of a Solar Evaporator via Regulating the Water State in Wood Channels. ACS Applied Materials & Interfaces, 2020, 12, 18504-18511.	4.0	83
137	Hierarchical Porous Aluminophosphate-Treated Wood for High-Efficiency Solar Steam Generation. ACS Applied Materials & Interfaces, 2020, 12, 19511-19518.	4.0	86
138	Mechanically Robust and Flame-Retardant Silicon Aerogel Elastomers for Thermal Insulation and Efficient Solar Steam Generation. ACS Omega, 2020, 5, 8638-8646.	1.6	17
139	Tree-inspired ultra-rapid steam generation and simultaneous energy harvesting under weak illumination. Journal of Materials Chemistry A, 2020, 8, 10260-10268.	5.2	25
140	Ag/polypyrrole co-modified poly(ionic liquid)s hydrogels as efficient solar generators for desalination. Materials Today Energy, 2020, 16, 100417.	2.5	44
141	Three-dimensional self-floating foam composite impregnated with porous carbon and polyaniline for solar steam generation. Journal of Colloid and Interface Science, 2021, 581, 504-513.	5.0	67
142	Bioinspired Fractal Design of Waste Biomassâ€Derived Solar–Thermal Materials for Highly Efficient Solar Evaporation. Advanced Functional Materials, 2021, 31, 2007648.	7.8	98
143	Stable Selfâ€Floating Reduced Graphene Oxide Hydrogel Membrane for High Rate of Solar Vapor Evaporation under 1 sun. Global Challenges, 2021, 5, 2000053.	1.8	15
144	Multifunctional solar bamboo straw: Multiscale 3D membrane for self-sustained solar-thermal water desalination and purification and thermoelectric waste heat recovery and storage. Carbon, 2021, 171, 359-367.	5.4	44

#	Article	IF	CITATIONS
145	A review of natural materials for solar evaporation. Solar Energy Materials and Solar Cells, 2021, 219, 110814.	3.0	77
146	Enhanced wood-derived photothermal evaporation system by in-situ incorporated lignin carbon quantum dots. Chemical Engineering Journal, 2021, 405, 126703.	6.6	66
147	Facile preparation of polydimethylsiloxane/carbon nanotubes modified melamine solar evaporators for efficient steam generation and desalination. Journal of Colloid and Interface Science, 2021, 584, 602-609.	5.0	63
148	Exceptional interfacial solar evaporation <i>via</i> heteromorphic PTFE/CNT hollow fiber arrays. Journal of Materials Chemistry A, 2021, 9, 390-399.	5.2	45
149	Solarâ€Driven Interfacial Evaporation and Selfâ€Powered Water Wave Detection Based on an All ellulose Monolithic Design. Advanced Functional Materials, 2021, 31, 2008681.	7.8	150
150	Marine biomass-derived composite aerogels for efficient and durable solar-driven interfacial evaporation and desalination. Chemical Engineering Journal, 2021, 417, 128051.	6.6	90
151	Superwetting monolithic hypercrosslinked polymers nanotubes with high salt-resistance for efficient solar steam generation. Solar Energy Materials and Solar Cells, 2021, 221, 110913.	3.0	33
152	Effect of crystal defects on solar steam generation performance of black phosphorous nanosheets. Materials Today Energy, 2021, 19, 100553.	2.5	4
153	Carbon nanofibers enhanced solar steam generation device based on loofah biomass for water purification. Materials Chemistry and Physics, 2021, 258, 123998.	2.0	51
154	Solar-driven evaporators for water treatment: challenges and opportunities. Environmental Science: Water Research and Technology, 2021, 7, 24-39.	1.2	94
155	Composited Gels from Nature Growing Scaffold: Synthesis, Properties, and Application. ACS Applied Materials & Interfaces, 2021, 13, 5498-5507.	4.0	7
156	Low-cost and scalable carbon bread used as an efficient solar steam generator with high performance for water desalination and purification. RSC Advances, 2021, 11, 8674-8681.	1.7	8
157	Multifunctional Hydrothermal arbonized Sugarcane for Highly Efficient Direct Solar Steam Generation. Solar Rrl, 2021, 5, 2000782.	3.1	23
158	Bioinspired structural and functional designs towards interfacial solar steam generation for clean water production. Materials Chemistry Frontiers, 2021, 5, 1510-1524.	3.2	42
159	Nano/microstructured materials for solar-driven interfacial evaporators towards water purification. Journal of Materials Chemistry A, 2021, 9, 13746-13769.	5.2	31
160	A thermally insulated solar evaporator coupled with a passive condenser for freshwater collection. Journal of Materials Chemistry A, 2021, 9, 22428-22439.	5.2	16
161	All old Evaporation under One Sun with Zero Energy Loss by Using a Heatsink Inspired Solar Evaporator. Advanced Science, 2021, 8, 2002501.	5.6	225
162	Efficient and antifouling interfacial solar desalination guided by a transient salt capacitance model. Cell Reports Physical Science, 2021, 2, 100330.	2.8	9

#	Article	IF	CITATIONS
163	Tailoring of a Piezoâ€Photoâ€Thermal Solar Evaporator for Simultaneous Steam and Power Generation. Advanced Functional Materials, 2021, 31, 2010422.	7.8	50
164	Magnetically Driven 3D Cellulose Film for Improved Energy Efficiency in Solar Evaporation. ACS Applied Materials & Interfaces, 2021, 13, 7756-7765.	4.0	38
165	Confinement Capillarity of Thin Coating for Boosting Solarâ€Driven Water Evaporation. Advanced Functional Materials, 2021, 31, 2011114.	7.8	131
166	Interfacial Solar Vapor Generation: Materials and Structural Design. Accounts of Materials Research, 2021, 2, 198-209.	5.9	75
167	Enhanced solar steam generation of hydrogel composite with aligned channel and shape memory behavior. Composites Science and Technology, 2021, 204, 108633.	3.8	75
168	Enhanced Solar-to-Heat Efficiency of Photothermal Materials Containing an Additional Light-Reflection Layer for Solar-Driven Interfacial Water Evaporation. ACS Applied Energy Materials, 2021, 4, 2932-2943.	2.5	44
169	A Gelation‣tabilized Strategy toward Photothermal Architecture Design for Highly Efficient Solar Water Evaporation. Solar Rrl, 2021, 5, 2100133.	3.1	27
170	Integrated multifunctional device based on Bi2S3/Pd: Localized heat channeling for efficient photothermic vaporization and real-time health monitoring. Nano Energy, 2021, 82, 105700.	8.2	41
171	Evaporation efficiency monitoring device based on biomass photothermal material for salt-resistant solar-driven interfacial evaporation. Solar Energy Materials and Solar Cells, 2021, 222, 110941.	3.0	38
172	Polypyrroleâ€Reinforced N,Sâ€Đoping Graphene Foam for Efficient Solar Purification of Wastewater. Solar Rrl, 2021, 5, 2100210.	3.1	17
173	Anisotropic Evaporator with a Tâ€Shape Design for Highâ€Performance Solarâ€Driven Zeroâ€Liquid Discharge. Small, 2021, 17, e2100969.	5.2	39
174	Interfacial Solar EvaporatorÂ- Physical Principles and Fabrication Methods. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 1347-1367.	2.7	16
175	Solar Seawater Distillation by Flexible and Fully Passive Multistage Membrane Distillation. Nano Letters, 2021, 21, 5068-5074.	4.5	66
176	Rational Design of Highâ€Performance Bilayer Solar Evaporator by Using Waste Polyesterâ€Đerived Porous Carbon oated Wood. Energy and Environmental Materials, 2022, 5, 617-626.	7.3	116
177	Reed Leaves Inspired Silica Nanofibrous Aerogels with Parallel-Arranged Vessels for Salt-Resistant Solar Desalination. ACS Nano, 2021, 15, 12256-12266.	7.3	121
178	Carbon Materials for Solar Water Evaporation and Desalination. Small, 2021, 17, e2007176.	5.2	186
179	Synthetic trees for enhanced solar evaporation and water harvesting. Applied Physics Letters, 2021, 118, .	1.5	9
180	Dualâ€Zone Photothermal Evaporator for Antisalt Accumulation and Highly Efficient Solar Steam Generation. Advanced Functional Materials, 2021, 31, 2102618.	7.8	226

#	Δρτιςι ε	IF	
181	Facile Preparation of a Carbon-Based Hybrid Film for Efficient Solar-Driven Interfacial Water Evaporation. ACS Applied Materials & amp; Interfaces, 2021, 13, 33427-33436.	4.0	51
182	Sandwich-Structured Photothermal Wood for Durable Moisture Harvesting and Pumping. ACS Applied Materials & Interfaces, 2021, 13, 33713-33721.	4.0	18
183	Robust 3D Graphene/Cellulose Nanocrystals Hybrid Lamella Network for Stable and Highly Efficient Solar Desalination. Solar Rrl, 2021, 5, 2100317.	3.1	29
184	Scalable Wood Hydrogel Membrane with Nanoscale Channels. ACS Nano, 2021, 15, 11244-11252.	7.3	60
185	High performance carbonized corncob-based 3D solar vapor steam generator enhanced by environmental energy. Carbon, 2021, 179, 337-347.	5.4	70
186	Multi-Synergistic Removal of Low-Boiling-Point Contaminants with Efficient Carbon Aerogel-Based Solar Purifier. ACS Applied Materials & Interfaces, 2021, 13, 31624-31634.	4.0	20
187	Solar-driven high-efficiency remediation of wastewater containing small dye molecules. Science China Technological Sciences, 2021, 64, 2237-2245.	2.0	11
188	Multi-functional carbon nanotube paper for solar water evaporation combined with electricity generation and storage. Energy Conversion and Management, 2021, 241, 114306.	4.4	46
189	Grafting polymers from cellulose nanocrystals via surfaceâ€initiated atom transfer radical polymerization. Journal of Applied Polymer Science, 2021, 138, 51458.	1.3	20
190	Carbon materials for solar-powered seawater desalination. New Carbon Materials, 2021, 36, 683-701.	2.9	22
191	Solar vapor generator: A natural all-in-one 3D system derived from cattail. Solar Energy Materials and Solar Cells, 2021, 227, 111127.	3.0	29
192	Spray Cooling on Enhanced Surfaces: A Review of the Progress and Mechanisms. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.2	50
193	Materials and structures engineering of sun-light absorbers for efficient direct solar steam generation. Solar Energy, 2021, 225, 747-772.	2.9	18
194	Recent Progress on the Solarâ€Driven Interfacial Evaporation Based on Natural Products and Synthetic Polymers. Solar Rrl, 2021, 5, 2100475.	3.1	41
195	Biomimetic 3D Membranes with MXene Heterostructures for Superior Solar Steam Generation, Water Treatment, and Electricity Generation. Solar Rrl, 2021, 5, 2100593.	3.1	35
196	Implication of Wood-Derived Hierarchical Carbon Nanotubes for Micronutrient Delivery and Crop Biofortification. ACS Omega, 2021, 6, 23654-23665.	1.6	3
197	Superhydrophilic and oil-repellent porous material based on halloysite nanotubes and wood fibers for efficient solar steam generation. Materials Today Energy, 2021, 21, 100726.	2.5	11
198	Recycling Polymeric Solid Wastes for Energyâ€Efficient Water Purification, Organic Distillation, and Oil Spill Cleanup. Small, 2021, 17, e2102459.	5.2	11

#	Article	IF	CITATIONS
199	Optimization of preparation process and characterization for hydrophobic α-Al2O3 ceramic membrane. Materials Chemistry and Physics, 2022, 276, 125280.	2.0	8
200	Farm-waste-derived recyclable photothermal evaporator. Cell Reports Physical Science, 2021, 2, 100549.	2.8	10
201	A self-floating electrospun nanofiber mat for continuously high-efficiency solar desalination. Chemosphere, 2021, 280, 130719.	4.2	29
202	Oriented thermal etching of hollow carbon spheres with delicate heat management for efficient solar steam generation. International Journal of Heat and Mass Transfer, 2021, 178, 121579.	2.5	8
203	The energy efficiency of interfacial solar desalination. Applied Energy, 2021, 302, 117581.	5.1	60
204	Ultra-robust vertically aligned three-dimensional (3D) Janus hollow fiber membranes for interfacial solar-driven steam generation with salt-resistant and multi-media purification. Chemical Engineering Journal, 2021, 425, 130118.	6.6	45
205	Guiding cellular channels of artificial nanohybrid woods for anisotropic properties and solar-thermal evaporation. Chemical Engineering Journal, 2022, 428, 132060.	6.6	13
206	Breathable and superhydrophobic photothermic fabric enables efficient interface energy management via confined heating strategy for sustainable seawater evaporation. Chemical Engineering Journal, 2022, 428, 131142.	6.6	20
207	Formation of S defects in MoS ₂ -coated wood for high-efficiency seawater desalination. Environmental Science: Nano, 2021, 8, 2069-2080.	2.2	16
208	A scalable, eco-friendly, and ultrafast solar steam generator fabricated using evolutional 3D printing. Journal of Materials Chemistry A, 2021, 9, 9909-9917.	5.2	36
209	Ultraâ€Black Pinecone for Efficient Solar Steam Generation under Omnidirectional Illumination. Advanced Sustainable Systems, 2021, 5, 2000244.	2.7	16
210	Effect of folding on 3D photothermal cones with efficient solar-driven water evaporation. Applied Thermal Engineering, 2020, 178, 115636.	3.0	23
211	Agricultural waste-derived moisture-absorber for all-weather atmospheric water collection and electricity generation. Nano Energy, 2020, 74, 104922.	8.2	91
212	Biomass-derived porous carbon for excellent low intensity solar steam generation and seawater desalination. Solar Energy Materials and Solar Cells, 2020, 215, 110604.	3.0	59
213	The hygroscopicity of moso bamboo (Phyllostachys edulis) with a gradient fiber structure. Journal of Materials Research and Technology, 2021, 15, 4309-4316.	2.6	26
214	Construction of Novel Biomassâ€Based Solar Evaporator with Asymmetric Dualâ€Layer Structure for Water Desalination. Advanced Sustainable Systems, 2022, 6, 2100274.	2.7	5
215	2D Ferrous Ionâ€Crosslinked Ti ₃ C ₂ T <i>_x</i> MXene Aerogel Evaporators for Efficient Solar Steam Generation. Advanced Sustainable Systems, 2021, 5, 2100263.	2.7	30
216	Woodâ€Đerived Monolithic Ultrathick Porous Carbon Electrodes Filled with Reduced Graphene Oxide for Highâ€Performance Supercapacitors with Ultrahigh Areal Capacitances. ChemElectroChem, 2021, 8, 4328-4336.	1.7	9

		CITATION REPORT		
#	Article		IF	CITATIONS
217	Polymeric materials for solar water purification. Journal of Polymer Science, 2021, 59, 3084-30	99.	2.0	21
218	Numerical analysis of a steady flow in a non-uniform capillary. Thermal Science, 2020, 24, 2385	5-2391.	0.5	1
219	Flexible MCNTs cross-linked polyimide membranes with high light absorbance and hierarchical distribution for photo-thermal conversion in solar water evaporation. Carbon, 2022, 187, 310-3	pore 320.	5.4	17
220	Thermal performance of hydrophobic α-Al2O3 ceramic membrane for solar-thermal membrane water desalination process. Solar Energy, 2022, 231, 27-40.	coupling	2.9	5
221	A floating vapor condensation structure in a heat-localized solar evaporation system for facile s desalination. Applied Thermal Engineering, 2022, 201, 117834.	solar	3.0	31
222	Cobalt nanoparticle–carbon nanoplate as the solar absorber of a wood aerogel evaporator fo continuously efficient desalination. Environmental Science: Water Research and Technology, 2 151-161.	or 021, 8,	1.2	14
223	Low-cost bilayered structure for improving the performance of solar stills: Performance/cost analysis and water yield prediction using machine learning. Sustainable Energy Technologies ar Assessments, 2022, 49, 101783.	ıd	1.7	19
224	Scalable Carbon Black Enhanced Nanofiber Network Films for Highâ€Efficiency Solar Steam Ge Advanced Materials Interfaces, 2021, 8, 2101160.	neration.	1.9	14
225	Hierarchical porous aero-cryogels for wind energy enhanced solar vapor generation. Cellulose, 229, 953-966.	2022,	2.4	8
226	An efficient torrefaction Bamboo-based evaporator in interfacial solar steam generation. Solar Energy, 2021, 230, 1095-1105.		2.9	24
227	Solar-driven interfacial evaporation toward clean water production: burgeoning materials, conc and technologies. Journal of Materials Chemistry A, 2021, 9, 27121-27139.	epts	5.2	63
228	ZrB2 assembled all-ceramic solar steam evaporator employing aluminum silicate ceramic fiberb a supporting substrate for highly efficient desalination. Chemical Engineering Journal, 2022, 43 134333.	oard as 1,	6.6	7
229	A bioinspired 3D solar evaporator with balanced water supply and evaporation for highly efficie photothermal steam generation. Journal of Materials Chemistry A, 2022, 10, 2856-2866.	nt	5.2	61
230	Scalable Fabrication of Conjugated Microporous Polymer Sponges for Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2022, 14, 4522-4531.		4.0	55
231	Metal-free functionalized carbonized cotton for efficient solar steam generation and wastewat treatment. RSC Advances, 2021, 12, 1043-1050.	er	1.7	11
232	Upscaling 3D Engineered Trees for Off-Grid Desalination. Environmental Science & amp; Techno 2022, 56, 1289-1299.	blogy,	4.6	26
233	Natural Porous Materials for Interfacial Solar Steam Generation toward Clean Water Productio Solar Rrl, 2022, 6, .	n.	3.1	37
234	An integrative cellulose-based composite material with controllable structure and properties fo solar-driven water evaporation. Cellulose, 2022, 29, 2461-2477.	r	2.4	10

#	Article	IF	CITATIONS
235	Evaporation Performance of Woodâ€Based Evaporator for Solar Interfacial Vapor Generation. Energy Technology, 2022, 10, .	1.8	6
236	Photothermal converting polypyrrole/polyurethane composite foams for effective solar desalination. Desalination, 2022, 527, 115581.	4.0	43
237	Synergetic Photo-Thermo Catalytic Hydrogen Production by Carbon Materials. Journal of Physical Chemistry Letters, 2022, 13, 1602-1608.	2.1	12
238	A bioinspired solar evaporator with a horizontal channel-like framework for efficient and stable high-salinity brine desalination. Nanoscale, 2022, 14, 6066-6074.	2.8	8
239	A mild, versatile and time-saving interfacial gelation blackening strategy for fabricating high-quality 3D porous solar steam evaporators. Journal of Materials Chemistry A, 2022, 10, 9482-9487.	5.2	16
240	Solar-driven simultaneous desalination and power generation enabled by graphene oxide nanoribbon papers. Journal of Materials Chemistry A, 2022, 10, 9184-9194.	5.2	17
241	Superhydrophilic 2D Covalent Organic Frameworks as Broadband Absorbers for Efficient Solar Steam Generation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	57
242	Pistiaâ€Inspired Photothermal Fabric based on Waste Carbon Fiber for Lowâ€Cost Vapor Generation: An Industrialization Route. Advanced Functional Materials, 2022, 32, .	7.8	27
243	Biomimetic Design of Macroporous 3D Truss Materials for Efficient Interfacial Solar Steam Generation. ACS Nano, 2022, 16, 3554-3562.	7.3	67
244	Superhydrophilic 2D Covalent Organic Frameworks as Broadband Absorbers for Efficient Solar Steam Generation. Angewandte Chemie, 0, , .	1.6	4
245	Novel Wearable Pyrothermoelectric Hybrid Generator for Solar Energy Harvesting. ACS Applied Materials & Interfaces, 2022, 14, 17330-17339.	4.0	12
246	Flexible MXene-based Janus porous fibrous membranes for sustainable solar-driven desalination and emulsions separation. Journal of Cleaner Production, 2022, 347, 131324.	4.6	45
247	Sustainable cellulose nanomaterials for environmental remediation - Achieving clean air, water, and energy: A review. Carbohydrate Polymers, 2022, 285, 119251.	5.1	23
248	Transforming wood as nextâ€generation structural and functional materials for a sustainable future. EcoMat, 2022, 4, .	6.8	40
249	Environmentally Friendly and Efficient Hornet Nest Envelope-Based Photothermal Absorbers. ACS Omega, 2021, 6, 34555-34562.	1.6	3
250	Biomimetic Hybridization of Janus-like Graphene Oxide into Hierarchical Porous Hydrogels for Improved Mechanical Properties and Efficient Solar Desalination Devices. ACS Nano, 2021, 15, 19877-19887.	7.3	76
251	Fully Superhydrophilic, Self-Floatable, and Multi-Contamination-Resistant Solar Steam Generator Inspired by Seaweed. Engineering, 2023, 20, 153-161.	3.2	10
252	Superhydrophobic elastomer with leaf-spring microstructure made from natural wood without any modification chemicals. Chemical Engineering Journal, 2022, 442, 136338.	6.6	30

#	ARTICLE	IF	CITATIONS
253	A highly efficient and stable solar energy-driven device using lignocellulosic biomass <i>Juncus effusus</i> for the recovery of ethanol–water mixture. Green Chemistry, 2022, 24, 4812-4823.	4.6	8
254	Enzyme Immobilization on a Delignified Bamboo Scaffold as a Green Hierarchical Bioreactor. ACS Sustainable Chemistry and Engineering, 2022, 10, 6244-6254.	3.2	12
255	Watermelon Fleshâ€Đerived Carbon Aerogel with Hierarchical Porous Structure for Interfacial Solar Steam Generation. Solar Rrl, 2022, 6, .	3.1	12
256	Ambient photothermal catalytic CO oxidation over a carbon-supported palladium catalyst. Applied Catalysis B: Environmental, 2022, 313, 121439.	10.8	15
257	Porous Flexible Wood Scaffolds Designed for High-Performance Electrochemical Energy Storage. ACS Sustainable Chemistry and Engineering, 2022, 10, 7078-7090.	3.2	11
258	Marangoni Effect Drives Salt Crystallization Away from the Distillation Zone for Large-Scale Continuous Solar Passive Desalination. ACS Applied Materials & Interfaces, 2022, 14, 30324-30331.	4.0	19
259	Three-Dimensional Artificial Transpiration Structure Based on 1T/2H-MoS ₂ /Activated Carbon Fiber Cloth for Solar Steam Generation. ACS Applied Materials & Interfaces, 2022, 14, 29788-29796.	4.0	18
260	Zwitterionic functionalized catalytic evaporator enables simultaneous solar distillation and organic pollutant degradation. Applied Energy, 2022, 321, 119372.	5.1	11
261	Woven cattail leaf slips for large-scale, high-efficient and salt-resistant solar water evaporation. Industrial Crops and Products, 2022, 186, 115185.	2.5	5
262	Rational Design of Woodâ€5tructured Thick Electrode for Electrochemical Energy Storage. Advanced Functional Materials, 2022, 32, .	7.8	33
263	Towards highly salt-rejecting solar interfacial evaporation: Photothermal materials selection, structural designs, and energy management. , 2022, 1, e9120014.		49
264	Lightweight, High-Strength Wood Prepared by Deep Eutectic Solvent Treatment as a Green Structural Material. ACS Sustainable Chemistry and Engineering, 2022, 10, 9600-9611.	3.2	17
265	Plastic Waste Valorization by Leveraging Multidisciplinary Catalytic Technologies. ACS Catalysis, 2022, 12, 9307-9324.	5.5	47
266	Enhanced vapor condensation by thermal redistribution on the evaporation surface in heat-localized solar desalination. Applied Thermal Engineering, 2022, 215, 118941.	3.0	10
267	Wood Scrolls as Highly Efficient Allâ€Day Steam Generators. Advanced Sustainable Systems, 2022, 6, .	2.7	2
268	Interfacial solar steam generator by MWCNTs/carbon black nanoparticles coated wood. AEJ - Alexandria Engineering Journal, 2023, 63, 1-10.	3.4	10
269	Experimental study of the solar-driven interfacial evaporation based on a novel magnetic nano solar absorber. Applied Thermal Engineering, 2022, 217, 119170.	3.0	7
270	Sustainable Self-Cleaning Evaporators for Highly Efficient Solar Desalination Using a Highly Elastic Sponge-like Hydrogel. ACS Applied Materials & amp; Interfaces, 2022, 14, 36116-36131.	4.0	19

#	Article	IF	CITATIONS
271	Evaporation performance of self-cleaning evaporator with one-dimensional water supply channel for solar evaporation. Journal of Photonics for Energy, 2022, 12, .	0.8	0
272	Reviewing wood-based solar-driven interfacial evaporators for desalination. Water Research, 2022, 223, 119011.	5.3	68
273	Heat-transfer analysis of interfacial solar evaporation and effect of surface wettability on water condensation and collection. International Journal of Thermal Sciences, 2023, 184, 107911.	2.6	5
274	A self-descaling Janus nanofibrous evaporator enabled by a "moving interface―for durable solar-driven desalination of hypersaline water. Journal of Materials Chemistry A, 2022, 10, 20856-20865.	5.2	23
275	Bi-functional water-purification materials derived from natural wood modified TiO ₂ by photothermal effect and photocatalysis. RSC Advances, 2022, 12, 26245-26250.	1.7	4
276	High-efficiency wood-based evaporators for solar-driven interfacial evaporation. Solar Energy, 2022, 244, 322-330.	2.9	16
277	Mechanically robust bamboo node and its hierarchically fibrous structural design. National Science Review, 2023, 10, .	4.6	19
278	Interfacial solar steam generation by wood-based devices to produce drinking water: a review. Environmental Chemistry Letters, 2023, 21, 285-318.	8.3	28
279	Antibacterial Evaporator Based on Wood-Reduced Graphene Oxide/Titanium Oxide Nanocomposite for Long-Term and Highly Efficient Solar-Driven Wastewater Treatment. Industrial & Engineering Chemistry Research, 2023, 62, 4573-4586.	1.8	25
280	Transparent wood-based functional materials via a top-down approach. Progress in Materials Science, 2023, 132, 101025.	16.0	38
281	Real-time and in situ monitoring of evaporation rate and salt precipitation during interfacial solar evaporation. Nano Energy, 2022, 104, 107961.	8.2	4
282	Fabrication of a Highly Efficient Wood-Based Solar Interfacial Evaporator with Self-Desalting and Sterilization Performance. Langmuir, 2022, 38, 12813-12821.	1.6	4
283	High-Performance Solar Steam Generator Using Low-Cost Biomass Waste Photothermal Material and Engineering of the Structure. ACS Omega, 2022, 7, 39895-39906.	1.6	7
284	Architecting Janus hydrogel evaporator with polydopamine-TiO2 photocatalyst for high-efficient solar desalination and purification. Separation and Purification Technology, 2023, 304, 122403.	3.9	26
285	Hofmeister Effectâ€Enhanced Hydration Chemistry of Hydrogel for Highâ€Efficiency Solarâ€Driven Interfacial Desalination. Advanced Materials, 2023, 35, .	11.1	57
286	Sandwich-structured MXene/wood aerogel with waste heat utilization for continuous desalination. Chemical Engineering Journal, 2023, 454, 140362.	6.6	20
287	An easily scalable, durable, and highly efficient three-dimensional solar evaporator inspired by a rice paddy field. Desalination, 2023, 548, 116251.	4.0	7
288	Heat-localized solar evaporation: Transport processes and applications. Nano Energy, 2023, 107, 108086.	8.2	27

#	Article	IF	CITATIONS
289	High-Performance Organic Photothermal Material Based on Fusion of the Donor–Acceptor Structure for Water Evaporation and Thermoelectric Power Generation. ACS Applied Energy Materials, 2022, 5, 15758-15767.	2.5	9
290	Solar interfacial evaporation based oil/water separation from emulsion using a wood-melamine/calcium alginate composite structure. Solar Energy, 2023, 250, 59-69.	2.9	2
291	Flake-like CuO nanostructure coated on flame treated eucalyptus wood evaporator for efficient solar steam generation at outdoor conditions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 662, 130975.	2.3	6
292	Robust, Scalable, and Cost-Effective Surface Carbonized Pulp Foam for Highly Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2023, 15, 7414-7426.	4.0	16
293	Nature-inspired wood-based solar evaporation system for efficient desalination and water purification. Journal of Materials Science, 2023, 58, 6220-6236.	1.7	7
294	Recent advances in wood-derived monolithic carbon materials: Synthesis approaches, modification methods and environmental applications. Chemical Engineering Journal, 2023, 463, 142332.	6.6	40
295	All-in-one solar-driven evaporator for high-performance water desalination and synchronous volatile organic compound degradation. Desalination, 2023, 555, 116536.	4.0	10
296	Three-dimensional multimodal porous graphene-carbonized wood for highly efficient solar steam generation. Sustainable Energy Technologies and Assessments, 2023, 57, 103199.	1.7	1
297	Wood-inspired anisotropic PU/chitosan/MXene aerogel used as an enhanced solar evaporator with superior salt-resistance. Desalination, 2023, 555, 116462.	4.0	14
298	Engineering salt-rejecting solar evaporator from naturally hierarchical tree root for sufficient clean water production. Industrial Crops and Products, 2023, 196, 116507.	2.5	1
299	Exploitation of renewable energy sources for water desalination using biological tools. Environmental Science and Pollution Research, 2023, 30, 32193-32213.	2.7	4
300	Evaluation of Water Transfer Capacity of Poplar with Pectinase Treated under the Solar Interface Evaporation. Journal of Renewable Materials, 2023, 11, 2265-2278.	1.1	Ο
301	Smart Strategies for Light and Thermal Management in Highâ€Efficiency Solar Steam Generation. Solar Rrl, 2023, 7, .	3.1	11
302	Portable solar interfacial evaporator based on polyimide nanofiber aerogel for efficient desalination. Chemical Engineering Journal, 2023, 461, 141909.	6.6	20
303	Wooden Solar Evaporator Design Based on the Water Transpiration Principle of Trees. Materials, 2023, 16, 1628.	1.3	0
304	A three-dimensional antifungal wooden cone evaporator for highly efficient solar steam generation. Npj Clean Water, 2023, 6, .	3.1	12
305	Using soil as photoabsorber for solar steam generation. Journal of Thermal Analysis and Calorimetry, 2023, 148, 8041-8050.	2.0	2
306	Preparation of carbon nanotube/cellulose hydrogel composites and their uses in interfacial solar-powered water evaporation. New Carbon Materials, 2023, 38, 162-172.	2.9	7

#	Article	IF	CITATIONS
307	Turning dead leaves into an active multifunctional material as evaporator, photocatalyst, and bioplastic. Nature Communications, 2023, 14, .	5.8	27
308	Robust flexural performance and fracture behavior of TiO2 decorated densified bamboo as sustainable structural materials. Nature Communications, 2023, 14, .	5.8	11
309	Understanding Interfacial Properties for Enhanced Solar Evaporation Devices: From Geometrical to Physical Interfaces. ACS Energy Letters, 2023, 8, 1680-1687.	8.8	24
310	Superhydrophilic Polydopamine-Modified Carbon-Fiber Membrane with Rapid Seawater-Transferring Ability for Constructing Efficient Hanging-Model Evaporator. Advanced Fiber Materials, 2023, 5, 1063-1075.	7.9	23
311	Synergistic Photothermal Effect of the Woodâ€SnSâ€AgNPs for Efficient Solarâ€Driven Steam Generation. Energy Technology, 0, , 2201284.	1.8	0
312	Fibrous Aerogels with Tunable Superwettability for High-Performance Solar-Driven Interfacial Evaporation. Nano-Micro Letters, 2023, 15, .	14.4	28
313	Recent advances in carbonâ€based materials for solarâ€driven interfacial photothermal conversion water evaporation: Assemblies, structures, applications, and prospective. , 2023, 5, .		28
314	Synergistic realization of high efficiency solar desalination and carbon dioxide reduction. Nano Research, 2023, 16, 10530-10536.	5.8	5
315	A 3D solar-driven evaporator based on electrospun recycled PET film for efficient seawater desalination. Journal of Cleaner Production, 2023, 408, 137113.	4.6	8
316	Lowâ€Grade Waste Heat Enables Over 80ÂLÂm ^{â^'} ² Âh ^{â^'1} Interfacial Stear Generation Based on 3D Superhydrophilic Foam. Advanced Materials, 2023, 35, .	^m 11.1	4
317	Engineered Wood: Sustainable Technologies and Applications. Annual Review of Materials Research, 2023, 53, 195-223.	4.3	3
324	Photothermal Nanomaterials: A Powerful Light-to-Heat Converter. Chemical Reviews, 2023, 123, 6891-6952.	23.0	137
356	DIRECT SOLAR THERMAL DISTILLATION WITH FLOWER-MIMICKED VAPOR GENERATOR FOR FRESHWATER COLLECTION. , 2023, , .		1
361	Natural polymer-based aerogels for filtration applications. , 2024, , 205-229.		0