## Nature-inspired salt resistant bimodal porous solar eva water desalination

Energy and Environmental Science 12, 1558-1567 DOI: 10.1039/c9ee00945k

**Citation Report** 

#	Article	IF	CITATIONS
1	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
2	Harnessing Solarâ€Driven Photothermal Effect toward the Water–Energy Nexus. Advanced Science, 2019, 6, 1900883.	5.6	188
3	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
4	Flexible Anti-Biofouling MXene/Cellulose Fibrous Membrane for Sustainable Solar-Driven Water Purification. ACS Applied Materials & Interfaces, 2019, 11, 36589-36597.	4.0	216
5	An Interfacial Solar Heating Assisted Liquid Sorbent Atmospheric Water Generator. Angewandte Chemie, 2019, 131, 12182-12186.	1.6	34
6	Nature-inspired salt resistant polypyrrole–wood for highly efficient solar steam generation. Sustainable Energy and Fuels, 2019, 3, 3000-3008.	2.5	100
7	An Interfacial Solar Heating Assisted Liquid Sorbent Atmospheric Water Generator. Angewandte Chemie - International Edition, 2019, 58, 12054-12058.	7.2	152
8	A nanopump for low-temperature and efficient solar water evaporation. Journal of Materials Chemistry A, 2019, 7, 24311-24319.	5.2	34
9	Solar-to-Steam Generation via Porous Black Membranes with Tailored Pore Structures. ACS Applied Materials & Interfaces, 2019, 11, 48300-48308.	4.0	21
10	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
11	Saltâ€Resistant Carbon Nanotubes/Polyvinyl Alcohol Hybrid Gels with Tunable Water Transport for Highâ€Efficiency and Longâ€Term Solar Steam Generation. Energy Technology, 2020, 8, 1900721.	1.8	46
12	A strong, flame-retardant, and thermally insulating wood laminate. Chemical Engineering Journal, 2020, 383, 123109.	6.6	69
13	Facile fabrication of wood-inspired aerogel from chitosan for efficient removal of oil from Water. Journal of Hazardous Materials, 2020, 385, 121507.	6.5	127
14	Tailoring Aerogels and Related 3D Macroporous Monoliths for Interfacial Solar Vapor Generation. Advanced Functional Materials, 2020, 30, 1907234.	7.8	109
15	Natural phenolic compound–iron complexes: sustainable solar absorbers for wood-based solar steam generation devices. RSC Advances, 2020, 10, 1152-1158.	1.7	28
16	Candle soot nanoparticle-decorated wood for efficient solar vapor generation. Sustainable Energy and Fuels, 2020, 4, 354-361.	2.5	30
17	Overcoming Salt Crystallization During Solar Desalination Based on Diatomite-Regulated Water Supply. ACS Sustainable Chemistry and Engineering, 2020, 8, 1548-1554.	3.2	31
18	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

#	Article	IF	CITATIONS
19	Recent advances and challenges for solar-driven water evaporation system toward applications. Nano Energy, 2020, 68, 104324.	8.2	268
20	Accelerating solar desalination in brine through ion activated hierarchically porous polyion complex hydrogels. Materials Horizons, 2020, 7, 3187-3195.	6.4	99
21	Chinese ink enabled wood evaporator for continuous water desalination. Desalination, 2020, 496, 114727.	4.0	62
22	Capillary-fed, thin film evaporation devices. Journal of Applied Physics, 2020, 128, .	1.1	51
23	Nature-inspired design: p- toluenesulfonic acid-assisted hydrothermally engineered wood for solar steam generation. Nano Energy, 2020, 78, 105322.	8.2	61
24	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
25	Controlled heterogeneous water distribution and evaporation towards enhanced photothermal water-electricity-hydrogen production. Nano Energy, 2020, 77, 105102.	8.2	148
26	A self-rotating solar evaporator for continuous and efficient desalination of hypersaline brine. Journal of Materials Chemistry A, 2020, 8, 16212-16217.	5.2	76
27	A yolk@shell superhydrophobic/superhydrophilic solar evaporator for efficient and stable desalination. Journal of Materials Chemistry A, 2020, 8, 14736-14745.	5.2	61
28	Cellular Structured CNTs@SiO <sub>2</sub> Nanofibrous Aerogels with Vertically Aligned Vessels for Saltâ€Resistant Solar Desalination. Advanced Materials, 2020, 32, e1908269.	11.1	257
29	Recent Progress in Highâ€Strength and Robust Regenerated Cellulose Materials. Advanced Materials, 2021, 33, e2000682.	11.1	244
30	A Flexible Polymer Nanofiberâ€Gold Nanoparticle Composite Film for Solarâ€Thermal Seawater Desalination. Macromolecular Rapid Communications, 2020, 41, e2000390.	2.0	12
31	Janus Evaporators with Self-Recovering Hydrophobicity for Salt-Rejecting Interfacial Solar Desalination. ACS Nano, 2020, 14, 17419-17427.	7.3	150
32	Low cost, facile, environmentally friendly all biomass-based squid ink-starch hydrogel for efficient solar-steam generation. Journal of Materials Chemistry A, 2020, 8, 24108-24116.	5.2	55
33	An all-day solar-driven vapor generator <i>via</i> photothermal and Joule-heating effects. Journal of Materials Chemistry A, 2020, 8, 25178-25186.	5.2	50
34	Recent advances in solar-driven evaporation systems. Journal of Materials Chemistry A, 2020, 8, 25571-25600.	5.2	77
35	Salt-Resistant Photothermal Materials Based on Monolithic Porous Ionic Polymers for Efficient Solar Steam Generation. ACS Applied Energy Materials, 2020, 3, 8746-8754.	2.5	32
37	A Novel Salt-Rejecting Linen Fabric-Based Solar Evaporator for Stable and Efficient Water Desalination under Highly Saline Water. ACS Sustainable Chemistry and Engineering, 2020, 8, 11845-11852.	3.2	65

**CITATION REPORT** IF CITATIONS Banyan-inspired hierarchical evaporators for efficient solar photothermal conversion. Applied 5.163 Advanced Nanowood Materials for the Water–Energy Nexus. Advanced Materials, 2021, 33, e2001240. 11.1 Manipulating Interfacial Charge-Transfer Absorption of Cocrystal Absorber for Efficient Solar Seawater Desalination and Water Purification. ACS Energy Letters, 2020, 5, 2698-2705. 8.8 92

41	Towards highly efficient solar-driven interfacial evaporation for desalination. Journal of Materials Chemistry A, 2020, 8, 17907-17937.	5.2	115
42	Superwetting B4C bilayer foam for high cost-performance solar water purification. Materials Today Energy, 2020, 18, 100498.	2.5	9
43	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
44	Wood-Based Solar Interface Evaporation Device with Self-Desalting and High Antibacterial Activity for Efficient Solar Steam Generation. ACS Applied Materials & amp; Interfaces, 2020, 12, 47029-47037.	4.0	147
45	Biopolymers Derived from Trees as Sustainable Multifunctional Materials: A Review. Advanced Materials, 2021, 33, e2001654.	11.1	54
46	Solar passive distiller with high productivity and Marangoni effect-driven salt rejection. Energy and Environmental Science, 2020, 13, 3646-3655.	15.6	101
47	High-performance solar vapor generation by sustainable biomimetic snake-scale-like porous carbon. Sustainable Energy and Fuels, 2020, 4, 5522-5532.	2.5	25
48	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
49	Liquid Transport in Fibrillar Channels of Ion-Associated Cellular Nanowood Foams. ACS Applied Materials & Interfaces, 2020, 12, 58212-58222.	4.0	9
50	Polymeric Membranes with Selective Solutionâ€Diffusion for Intercepting Volatile Organic Compounds during Solarâ€Driven Water Remediation. Advanced Materials, 2020, 32, e2004401.	11.1	142
51	Structure–property–function relationships of natural and engineered wood. Nature Reviews Materials, 2020, 5, 642-666.	23.3	616
52	A self-regenerating air-laid paper wrapped ASA 3D cone-shaped Janus evaporator for efficient and stable solar desalination. Chemical Engineering Journal, 2020, 397, 125522.	6.6	73
53	Sandwich Photothermal Membrane with Confined Hierarchical Carbon Cells Enabling Highâ€Efficiency Solar Steam Generation. Small, 2020, 16, e2000573.	5.2	67
54	An â€~antifouling' porous loofah sponge with internal microchannels as solar absorbers and water pumpers for thermal desalination. Journal of Materials Chemistry A, 2020, 8, 12323-12333.	5.2	118
55	Woodâ€Derived Carbon Materials and Lightâ€Emitting Materials. Advanced Materials, 2021, 33, e2000596.	11.1	75

ARTICLE

Energy, 2020, 276, 115545.

#

38

#	Article	IF	CITATIONS
56	Flexible and Mildew-Resistant Wood-Derived Aerogel for Stable and Efficient Solar Desalination. ACS Applied Materials & Interfaces, 2020, 12, 28179-28187.	4.0	114
57	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
59	Lotus-Inspired Evaporator with Janus Wettability and Bimodal Pores for Solar Steam Generation. Cell Reports Physical Science, 2020, 1, 100074.	2.8	43
60	Cellulose Nanomaterials in Interfacial Evaporators for Desalination: A "Natural―Choice. Advanced Materials, 2021, 33, e2000922.	11.1	132
61	3D macroscopic graphene oxide/MXene architectures for multifunctional water purification. Carbon, 2020, 167, 285-295.	5.4	135
62	Constructing 3D optical absorption holes by stacking macroporous membrane for highly efficient solar steam generation. Renewable Energy, 2020, 159, 944-953.	4.3	15
63	Scalable, Flexible, Durable, and Salt-Tolerant CuS/Bacterial Cellulose Gel Membranes for Efficient Interfacial Solar Evaporation. ACS Sustainable Chemistry and Engineering, 2020, 8, 9017-9026.	3.2	38
64	Capillary-driven solar-thermal water desalination using a porous selective absorber. Materials Today Energy, 2020, 17, 100453.	2.5	29
65	Highly Thermally Insulated and Superhydrophilic Corn Straw for Efficient Solar Vapor Generation. ACS Applied Materials & Interfaces, 2020, 12, 16503-16511.	4.0	108
66	A Scalable Nickel–Cellulose Hybrid Metamaterial with Broadband Light Absorption for Efficient Solar Distillation. Advanced Materials, 2020, 32, e1907975.	11.1	73
67	Solar-driven interfacial desalination for simultaneous freshwater and salt generation. Desalination, 2020, 484, 114423.	4.0	121
68	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
69	A salt-resistant Janus evaporator assembled from ultralong hydroxyapatite nanowires and nickel oxide for efficient and recyclable solar desalination. Nanoscale, 2020, 12, 6717-6728.	2.8	72
70	Biomass derived Janus solar evaporator for synergic water evaporation and purification. Sustainable Materials and Technologies, 2020, 25, e00180.	1.7	58
71	Solar-thermal conversion and steam generation: a review. Applied Thermal Engineering, 2020, 179, 115691.	3.0	95
72	Hydrogels and Hydrogel-Derived Materials for Energy and Water Sustainability. Chemical Reviews, 2020, 120, 7642-7707.	23.0	646
73	A lotus leaf like vertical hierarchical solar vapor generator for stable and efficient evaporation of high-salinity brine. Chemical Engineering Journal, 2020, 401, 126108.	6.6	68
74	Designing a bioinspired synthetic tree by unidirectional freezing for simultaneous solar steam generation and salt collection. EcoMat, 2020, 2, e12018.	6.8	65

#	Article	IF	CITATIONS
75	Overcoming salt crystallization with ionic hydrogel for accelerating solar evaporation. Desalination, 2020, 482, 114385.	4.0	87
76	Preparation and characterizations of flexible photothermal Ti2O3-PVA nanocomposites. Journal of Alloys and Compounds, 2020, 825, 153998.	2.8	22
77	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
78	Resonant energy transfer enhances solar thermal desalination. Energy and Environmental Science, 2020, 13, 968-976.	15.6	33
79	Interfacial solar evaporation for water production: from structure design to reliable performance. Molecular Systems Design and Engineering, 2020, 5, 419-432.	1.7	35
80	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
81	Ultrahigh-efficiency desalination <i>via</i> a thermally-localized multistage solar still. Energy and Environmental Science, 2020, 13, 830-839.	15.6	317
82	Multifunctional perovskite oxide for efficient solar-driven evaporation and energy-saving regeneration. Nano Energy, 2020, 70, 104538.	8.2	32
83	High-Performance, Scalable Wood-Based Filtration Device with a Reversed-Tree Design. Chemistry of Materials, 2020, 32, 1887-1895.	3.2	65
84	Tunable Graphene Systems for Water Desalination. ChemNanoMat, 2020, 6, 1028-1048.	1.5	34
85	Stabilized Mo2S3 by FeS2 based porous solar evaporation systems for highly efficient clean freshwater collection. Solar Energy Materials and Solar Cells, 2020, 211, 110531.	3.0	24
86	Green fabrication method of layered and open-cell polylactide foams for oil-sorption via pre-crystallization and supercritical CO2-induced melting. Journal of Supercritical Fluids, 2020, 162, 104854.	1.6	27
87	Latest development in salt removal from solar-driven interfacial saline water evaporators: Advanced strategies and challenges. Water Research, 2020, 177, 115770.	5.3	131
88	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
89	3D Printing of Bioinspired Biomaterials for Tissue Regeneration. Advanced Healthcare Materials, 2020, 9, e2000208.	3.9	52
90	Photothermal Catalytic Gel Featuring Spectral and Thermal Management for Parallel Freshwater and Hydrogen Production. Advanced Energy Materials, 2020, 10, 2000925.	10.2	162
91	Laser-induced photothermal generation of flexible and salt-resistant monolithic bilayer membranes for efficient solar desalination. Carbon, 2020, 164, 349-356.	5.4	51
92	Molybdenum Carbide/Carbon-Based Chitosan Hydrogel as an Effective Solar Water Evaporation Accelerator. ACS Sustainable Chemistry and Engineering, 2020, 8, 7139-7149.	3.2	77

#	Article	IF	CITATIONS
93	Biomimetic MXeneâ€Polyvinyl Alcohol Composite Hydrogel with Vertically Aligned Channels for Highly Efficient Solar Steam Generation. Advanced Materials Technologies, 2020, 5, 2000065.	3.0	100
94	Efficient-heat-utilization 3D T-shaped porous sponge assists 2D photothermal films to achieve self-acting salt rejection and extra evaporation under high-concentration brine. Desalination, 2021, 499, 114806.	4.0	21
95	Salt Mitigation Strategies of Solarâ€Driven Interfacial Desalination. Advanced Functional Materials, 2021, 31, 2007855.	7.8	149
96	Boosting electrocatalytic hydrogen generation by a renewable porous wood membrane decorated with Fe-doped NiP alloys. Journal of Energy Chemistry, 2021, 56, 23-33.	7.1	72
97	Robust, 3D-printed hydratable plastics for effective solar desalination. Nano Energy, 2021, 79, 105436.	8.2	52
98	A review of natural materials for solar evaporation. Solar Energy Materials and Solar Cells, 2021, 219, 110814.	3.0	77
99	Solarâ€Driven Allâ€inâ€One Interfacial Water Evaporator Based on Electrostatic Flocking. Advanced Sustainable Systems, 2021, 5, .	2.7	16
100	Enhanced wood-derived photothermal evaporation system by in-situ incorporated lignin carbon quantum dots. Chemical Engineering Journal, 2021, 405, 126703.	6.6	66
101	Nanoenabled Photothermal Materials for Clean Water Production. Global Challenges, 2021, 5, 200055.	1.8	58
102	Porous evaporators with special wettability for low-grade heat-driven water desalination. Journal of Materials Chemistry A, 2021, 9, 702-726.	5.2	60
103	A flexible and salt-rejecting electrospun film-based solar evaporator for economic, stable and efficient solar desalination and wastewater treatment. Chemosphere, 2021, 267, 128916.	4.2	38
104	Semiconductor photothermal materials enabling efficient solar steam generation toward desalination and wastewater treatment. Desalination, 2021, 500, 114853.	4.0	179
105	Saltâ€Rejection Solar Absorbers Based on Porous Ionic Polymers Nanowires for Desalination. Macromolecular Rapid Communications, 2021, 42, 2000536.	2.0	28
106	Natural porous wood decorated with ZIF-8 for high efficient iodine capture. Materials Chemistry and Physics, 2021, 258, 123964.	2.0	28
107	Janus black cellulose paper for fast volume reduction of liquid pollutant using solar steam generation. Journal of Industrial and Engineering Chemistry, 2021, 94, 166-172.	2.9	11
108	Intelligent adjustment of light-to-thermal energy conversion efficiency of thermo-regulated fabric containing reversible thermochromic MicroPCMs. Chemical Engineering Journal, 2021, 408, 127276.	6.6	46
109	Carbon nanofibers enhanced solar steam generation device based on loofah biomass for water purification. Materials Chemistry and Physics, 2021, 258, 123998.	2.0	51
110	Solar-driven evaporators for water treatment: challenges and opportunities. Environmental Science: Water Research and Technology, 2021, 7, 24-39.	1.2	94

#	Article	IF	CITATIONS
111	Harvesting Solar Energy by 3D Graphene-based Macroarchitectures. Chemistry in the Environment, 2021, , 257-295.	0.2	0
112	A solution to break the salt barrier for high-rate sustainable solar desalination. Energy and Environmental Science, 2021, 14, 2451-2459.	15.6	87
113	Organic molecular sieve membranes for chemical separations. Chemical Society Reviews, 2021, 50, 5468-5516.	18.7	170
114	Robust superhydrophilic attapulgite-based aligned aerogels for highly efficient and stable solar steam generation in harsh environments. Journal of Materials Chemistry A, 2021, 9, 23117-23126.	5.2	46
115	Sustainable Solar Evaporation while Salt Accumulation. ACS Applied Materials & Interfaces, 2021, 13, 4935-4942.	4.0	46
116	Fluorescent wood sponge toward selective detection and efficient removal of Cr( <scp>vi</scp> ). Environmental Science: Nano, 2021, 8, 3331-3342.	2.2	9
117	Bioinspired structural and functional designs towards interfacial solar steam generation for clean water production. Materials Chemistry Frontiers, 2021, 5, 1510-1524.	3.2	42
118	Rational designs of interfacial-heating solar-thermal desalination devices: recent progress and remaining challenges. Journal of Materials Chemistry A, 2021, 9, 6612-6633.	5.2	51
119	A bioinspired solar evaporator for continuous and efficient desalination by salt dilution and secretion. Journal of Materials Chemistry A, 2021, 9, 17985-17993.	5.2	11
120	Nano/microstructured materials for solar-driven interfacial evaporators towards water purification. Journal of Materials Chemistry A, 2021, 9, 13746-13769.	5.2	31
121	Seawater desalination derived entirely from ocean biomass. Journal of Materials Chemistry A, 2021, 9, 22313-22324.	5.2	48
122	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
123	An integrated highly hydrated cellulose network with a synergistic photothermal effect for efficient solar-driven water evaporation and salt resistance. Journal of Materials Chemistry A, 2021, 9, 15482-15492.	5.2	71
124	A Nature-Inspired Monolithic Integrated Cellulose Aerogel-Based Evaporator for Efficient Solar Desalination. ACS Applied Materials & Interfaces, 2021, 13, 10612-10622.	4.0	61
125	A super-hydrophilic surface enhanced by the hierarchical reticular porous structure on a low-modulus Ti–24Nb–4Zr–8Sn alloy. Surface Engineering, 2021, 37, 1290-1300.	1.1	4
126	Salt-resistant solar still based on hollow sphere porous ionic polymers for desalination. Microporous and Mesoporous Materials, 2021, 314, 110871.	2.2	10
127	Review of interface solar-driven steam generation systems: High-efficiency strategies, applications and challenges. Applied Energy, 2021, 283, 116361.	5.1	55
128	Semiconductive, Flexible MnO <sub>2</sub> NWs/Chitosan Hydrogels for Efficient Solar Steam Generation. ACS Sustainable Chemistry and Engineering, 2021, 9, 3887-3900.	3.2	107

#	Article	IF	CITATIONS
129	Boosting photocatalytic hydrogen production from water by photothermally induced biphase systems. Nature Communications, 2021, 12, 1343.	5.8	209
131	A salt-rejecting solar evaporator for continuous steam generation. Journal of Environmental Chemical Engineering, 2021, 9, 105010.	3.3	31
132	Metal Organic Framework-Based CoNi Composites on Carbonized Wood as Advanced Freestanding Electrodes for Supercapacitors. Energy & Fuels, 2021, 35, 4604-4608.	2.5	14
133	Magnetically Driven 3D Cellulose Film for Improved Energy Efficiency in Solar Evaporation. ACS Applied Materials & Interfaces, 2021, 13, 7756-7765.	4.0	38
134	A Bioinspired Elastic Hydrogel for Solarâ€Ðriven Water Purification. Advanced Materials, 2021, 33, e2007833.	11.1	119
135	Biomass-Derived Carbonaceous Materials with Multichannel Waterways for Solar-Driven Clean Water and Thermoelectric Power Generation. ACS Sustainable Chemistry and Engineering, 2021, 9, 4571-4582.	3.2	56
137	Biomimetic Ultraâ€Black Sponge Derived from Loofah and Coâ€MOF for Longâ€Term Solarâ€Powered Vapor Generation and Desalination. Solar Rrl, 2021, 5, 2000817.	3.1	28
138	Review on the recent development and applications of three dimensional (3D) photothermal materials for solar evaporators. Journal of Cleaner Production, 2021, 293, 126122.	4.6	34
139	Self-contained Janus Aerogel with Antifouling and Salt-Rejecting Properties for Stable Solar Evaporation. ACS Applied Materials & amp; Interfaces, 2021, 13, 18829-18837.	4.0	86
140	Hierarchically Designed Saltâ€Resistant Solar Evaporator Based on Donnan Effect for Stable and Highâ€Performance Brine Treatment. Advanced Functional Materials, 2021, 31, 2100025.	7.8	94
141	Coating of Wood with Fe <sub>2</sub> O <sub>3</sub> -Decorated Carbon Nanotubes by One-Step Combustion for Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2021, 13, 22845-22854.	4.0	93
142	Anisotropic Evaporator with a Tâ€5hape Design for Highâ€Performance Solarâ€Driven Zeroâ€Liquid Discharge. Small, 2021, 17, e2100969.	5.2	39
143	Rational Design of Highâ€Performance Bilayer Solar Evaporator by Using Waste Polyesterâ€Derived Porous Carbonâ€Coated Wood. Energy and Environmental Materials, 2022, 5, 617-626.	7.3	116
144	Aligned Millineedle Arrays for Solar Power Seawater Desalination with Siteâ€Specific Salt Formation. Small, 2021, 17, e2101487.	5.2	36
145	Open Pore Morphology Evolution in Poly(butylene succinate)/Chitin Nanocrystal Nanocomposite Foams. Journal of Polymers and the Environment, 2022, 30, 401-414.	2.4	3
146	Reed Leaves Inspired Silica Nanofibrous Aerogels with Parallel-Arranged Vessels for Salt-Resistant Solar Desalination. ACS Nano, 2021, 15, 12256-12266.	7.3	121
147	Naturally Inspired Highly Stable Salt-Resisting Material for Solar Water Desalination. Processes, 2021, 9, 1019.	1.3	3
148	Achieving Highâ€Quality Freshwater from a Selfâ€Sustainable Integrated Solar Redoxâ€Flow Desalination Device. Small, 2021, 17, e2100490.	5.2	24

#	Article	IF	CITATIONS
149	Printed Honeycomb-Structured Reduced Graphene Oxide Film for Efficient and Continuous Evaporation-Driven Electricity Generation from Salt Solution. ACS Applied Materials & Interfaces, 2021, 13, 26989-26997.	4.0	42
150	Comparative investigation on removal characteristics of tetracycline from water by modified wood membranes with different channel walls. Science of the Total Environment, 2021, 775, 145617.	3.9	13
151	Dualâ€Zone Photothermal Evaporator for Antisalt Accumulation and Highly Efficient Solar Steam Generation. Advanced Functional Materials, 2021, 31, 2102618.	7.8	226
152	Interfacial solar vapor generation for desalination and brine treatment: Evaluating current strategies of solving scaling. Water Research, 2021, 198, 117135.	5.3	57
153	Recent advances and challenges for water evaporation-induced electricity toward applications. Nano Energy, 2021, 85, 105979.	8.2	88
154	Solar-Powered Sustainable Water Production: State-of-the-Art Technologies for Sunlight–Energy–Water Nexus. ACS Nano, 2021, 15, 12535-12566.	7.3	220
155	Scalable Wood Hydrogel Membrane with Nanoscale Channels. ACS Nano, 2021, 15, 11244-11252.	7.3	60
156	High performance carbonized corncob-based 3D solar vapor steam generator enhanced by environmental energy. Carbon, 2021, 179, 337-347.	5.4	70
157	Volcanic relationship between wettability of the interface and water migration rate in solar steam generation systems. Nano Research, 0, , 1.	5.8	3
158	Hierarchical Photothermal Fabrics with Low Evaporation Enthalpy as Heliotropic Evaporators for Efficient, Continuous, Salt-Free Desalination. ACS Nano, 2021, 15, 13007-13018.	7.3	191
159	Efficient solar seawater desalination constructed by oxide composite hydrogel with chitin as the base. Inorganic Chemistry Communication, 2021, 129, 108651.	1.8	6
160	Sustainable self-cleaning evaporator for long-term solar desalination using gradient structure tailored hydrogel. Chemical Engineering Journal, 2021, 415, 128893.	6.6	80
161	Design and Utilization of Infrared Light for Interfacial Solar Water Purification. ACS Energy Letters, 2021, 6, 2645-2657.	8.8	29
162	3D Printing a Biomimetic Bridgeâ€Arch Solar Evaporator for Eliminating Salt Accumulation with Desalination and Agricultural Applications. Advanced Materials, 2021, 33, e2102443.	11.1	172
163	Photothermal, photocatalytic, and anti-bacterial Ti-Ag-O nanoporous powders for interfacial solar driven water evaporation. Ceramics International, 2021, 47, 19800-19808.	2.3	15
164	Self-Propelled Aerogel Solar Evaporators for Efficient Solar Seawater Purification. Langmuir, 2021, 37, 9532-9539.	1.6	19
165	Remarkable Rate of Water Evaporation through Naked Veins of Natural Tree Leaves. ACS Omega, 2021, 6, 20379-20387.	1.6	5
166	Advances of Adsorption and Filtration Techniques in Separating Highly Viscous Crude Oil/Water Mixtures. Advanced Materials Interfaces, 2021, 8, 2100061.	1.9	52

#	Article	IF	CITATIONS
167	Tailoring Photophysical Properties of Diketopyrrolopyrrole Small Molecules with Electron-Withdrawing Moieties for Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2021, 13, 38365-38374.	4.0	12
168	Salt-Resistive Photothermal Materials and Microstructures for Interfacial Solar Desalination. Frontiers in Energy Research, 2021, 9, .	1.2	6
169	Grafting polymers from cellulose nanocrystals via surfaceâ€initiated atom transfer radical polymerization. Journal of Applied Polymer Science, 2021, 138, 51458.	1.3	20
170	Highly Saltâ€Resistant 3D Hydrogel Evaporator for Continuous Solar Desalination via Localized Crystallization. Advanced Functional Materials, 2021, 31, 2104380.	7.8	122
171	Enhancing solar desalination performance based on restricted salt ions transport. Journal of Environmental Chemical Engineering, 2021, 9, 105272.	3.3	4
172	Evaporation-Induced Diffusion Acceleration in Liquid-Filled Porous Materials. ACS Omega, 2021, 6, 21646-21654.	1.6	8
173	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
174	Combining carbonized sawdust beds with preheating water design for efficient solar steam generation. Applied Thermal Engineering, 2021, 195, 117238.	3.0	19
175	Enhanced Evaporation of Ultrathin Water Films on Silicon-Terminated Si3N4 Nanopore Membranes. Langmuir, 2021, 37, 10046-10051.	1.6	6
176	Fully Biomass-Based Hybrid Hydrogel for Efficient Solar Desalination with Salt Self-Cleaning Property. ACS Applied Materials & amp; Interfaces, 2021, 13, 42832-42842.	4.0	47
177	A scalable, cost-effective and salt-rejecting MoS2/SA@melamine foam for continuous solar steam generation. Nano Energy, 2021, 87, 106213.	8.2	99
178	Recent Progress on the Solarâ€Driven Interfacial Evaporation Based on Natural Products and Synthetic Polymers. Solar Rrl, 2021, 5, 2100475.	3.1	41
179	Aligned Attapulgite-based aerogels with excellent mechanical property for the highly efficient solar steam generation. Separation and Purification Technology, 2021, 271, 118869.	3.9	42
180	Photovoltaic-multistage desalination of hypersaline waters for simultaneous electricity, water and salt harvesting via automatic rinsing. Nano Energy, 2021, 87, 106163.	8.2	30
181	Solar absorber with tunable porosity to control the water supply velocity to accelerate water evaporation. Desalination, 2021, 511, 115113.	4.0	43
182	Highly efficient solar desalination and wastewater treatment by economical wood-based double-layer photoabsorbers. Journal of Industrial and Engineering Chemistry, 2021, 101, 334-347.	2.9	57
183	Farm-waste-derived recyclable photothermal evaporator. Cell Reports Physical Science, 2021, 2, 100549.	2.8	10
184	Biomass-based photothermal materials for interfacial solar steam generation: a review. Materials Today Energy, 2021, 21, 100716.	2.5	48

#	Article	IF	CITATIONS
185	A self-floating electrospun nanofiber mat for continuously high-efficiency solar desalination. Chemosphere, 2021, 280, 130719.	4.2	29
186	A nature-inspired suspended solar evaporator for water desalination of high-salinity brines. Chemical Engineering Journal, 2021, 421, 129824.	6.6	47
187	Interfacial solar evaporator for clean water production and beyond: From design to application. Applied Energy, 2021, 299, 117317.	5.1	33
188	Assembling carbon dots on vertically aligned acetate fibers as ideal salt-rejecting evaporators for solar water purification. Chemical Engineering Journal, 2021, 421, 129822.	6.6	57
189	Ultralong polypyrrole nanotubes aerogels with excellent elasticity for efficient solar steam generation. Journal of the Taiwan Institute of Chemical Engineers, 2021, 127, 157-165.	2.7	16
190	Zwitterionic hydrogel coated superhydrophilic hierarchical antifouling floater enables unimpeded interfacial steam generation and multi-contamination resistance in complex conditions. Chemical Engineering Journal, 2021, 421, 130344.	6.6	48
191	Controllable synthesis of sea urchin-like carbon from metal-organic frameworks for advanced solar vapor generators. Chemical Engineering Journal, 2021, 423, 130268.	6.6	105
192	Recent advanced self-propelling salt-blocking technologies for passive solar-driven interfacial evaporation desalination systems. Nano Energy, 2021, 89, 106468.	8.2	106
193	Carbonized cattle manure-based photothermal evaporator with hierarchically bimodal pores for solar desalination in high-salinity brines. Desalination, 2021, 520, 115345.	4.0	22
194	Achieving excellent thermal transfer in highly light absorbing conical aerogel for simultaneous passive cooling and solar steam generation. Chemical Engineering Journal, 2022, 429, 132089.	6.6	34
195	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
196	Salt-resistant Schiff base cross-linked superelastic photothermal cellulose aerogels for long-term seawater desalination. Chemical Engineering Journal, 2022, 427, 131618.	6.6	78
197	Formation of S defects in MoS <sub>2</sub> -coated wood for high-efficiency seawater desalination. Environmental Science: Nano, 2021, 8, 2069-2080.	2.2	16
198	Photothermal Devices for Sustainable Uses Beyond Desalination. Advanced Energy and Sustainability Research, 2021, 2, 2000056.	2.8	32
199	Eco-friendly and sustainable processing of wood-based materials. Green Chemistry, 2021, 23, 2198-2232.	4.6	48
200	Sustainable off-grid desalination of hypersaline waters using Janus wood evaporators. Energy and Environmental Science, 2021, 14, 5347-5357.	15.6	133
201	Directional solution transfer of a 3D solar evaporator inhibiting salt crystallization. Journal of Materials Chemistry A, 2021, 9, 22472-22480.	5.2	24
202	Innovative salt-blocking technologies of photothermal materials in solar-driven interfacial desalination. Journal of Materials Chemistry A, 2021, 9, 16233-16254.	5.2	107

		CITATION R	EPORT	
#	Article		IF	CITATIONS
203	Salt-Rejecting Solar Interfacial Evaporation. Cell Reports Physical Science, 2021, 2, 1003	310.	2.8	76
204	Passive, high-efficiency thermally-localized solar desalination. Energy and Environmenta 2021, 14, 1771-1793.	Science,	15.6	142
205	Ultraâ€Black Pinecone for Efficient Solar Steam Generation under Omnidirectional Illum Advanced Sustainable Systems, 2021, 5, 2000244.	ination.	2.7	16
206	Solarâ€driven brine desalination and concentration by controlled salt excretion. EcoMa	c, 2021, 3, .	6.8	14
207	Polymeric materials for solar water purification. Journal of Polymer Science, 2021, 59, 3	084-3099.	2.0	21
208	Perspective for removing volatile organic compounds during <scp>solarâ€driven</scp> evaporation toward water production. EcoMat, 2021, 3, e12147.	water	6.8	22
209	Self-pumping ultra-thin film evaporation on CNT-embedded silicon nitride nanopore me Research, 2022, 15, 1725-1729.	nbrane. Nano	5.8	9
210	The role of nanostructure morphology of nickel-infused alumina on solar-thermal energy conversion. Journal of Optics (United Kingdom), 2021, 23, 015101.	,	1.0	7
211	Metal organic framework enabled wood evaporator for solar-driven water purification. S and Purification Technology, 2022, 281, 119912.	Separation	3.9	48
212	High-rate long-lasting solar desalination towards hypersaline brine enabled by introduci siphon-drop mode. Chemical Engineering Journal, 2022, 430, 133043.	ng a	6.6	10
213	A floating vapor condensation structure in a heat-localized solar evaporation system for desalination. Applied Thermal Engineering, 2022, 201, 117834.	facile solar	3.0	31
214	Cobalt nanoparticle–carbon nanoplate as the solar absorber of a wood aerogel evapo continuously efficient desalination. Environmental Science: Water Research and Techno 151-161.	rator for logy, 2021, 8,	1.2	14
215	Development and experimental analysis of an innovative self-cleaning low vacuum hemi floating solar still for low-cost desalination. Energy Conversion and Management, 2022	spherical , 251, 114902.	4.4	25
216	Superhydrophobic MXene based fabric composite for high efficiency solar desalination. 2022, 524, 115475.	Desalination,	4.0	90
217	Environmentally safe and renewable solar vapor generation device based on Prussian bl nanoparticles immobilized on cellulose nanofibers. Desalination, 2022, 524, 115477.	ле	4.0	12
218	Highly Elastic Interconnected Porous Hydrogels through Selfâ€Assembled Templating fo Purification. Angewandte Chemie, 2022, 134, e202114074.	br Solar Water	1.6	16
219	Forest-like Laser-Induced Graphene Film with Ultrahigh Solar Energy Utilization Efficience 2021, 15, 19490-19502.	y. ACS Nano,	7.3	90
220	Highly Elastic Interconnected Porous Hydrogels through Selfâ€Assembled Templating fo Purification. Angewandte Chemie - International Edition, 2022, 61, e202114074.	or Solar Water	7.2	70

	CITATION	REPORT	
#	Article	IF	CITATIONS
221	Ultra low-cost and bio-sustainable carbonized green algae for wastewater purification in gold smelting industry. Environmental Science and Pollution Research, 2022, 29, 22082-22092.	2.7	2
222	Applications of bio-derived/bio-inspired materials in the field of interfacial solar steam generation. Nano Research, 2022, 15, 3122-3142.	5.8	19
223	Design of a Separated Solar Interfacial Evaporation System for Simultaneous Water and Salt Collection. ACS Applied Materials & Interfaces, 2021, 13, 59518-59526.	4.0	26
224	A 3D-macroporous pomelo peel foam based on anti-shrinkage properties of MnOx for solar water purification. Journal of Environmental Chemical Engineering, 2022, 10, 106890.	3.3	5
225	Nature Inspired MXene-Decorated 3D Honeycomb-Fabric Architectures Toward Efficient Water Desalination and Salt Harvesting. Nano-Micro Letters, 2022, 14, 10.	14.4	104
226	Solar-driven interfacial evaporation toward clean water production: burgeoning materials, concepts and technologies. Journal of Materials Chemistry A, 2021, 9, 27121-27139.	5.2	63
227	A robust and renewable solar steam generator for high concentration dye wastewater purification. Journal of Materials Chemistry A, 2022, 10, 3436-3442.	5.2	21
228	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
229	Shape-controlled fabrication of cost-effective, scalable and anti-biofouling hydrogel foams for solar-powered clean water production. Chemical Engineering Journal, 2022, 431, 134144.	6.6	40
230	Recent advances and challenges of emerging solar-driven steam and the contribution of photocatalytic effect. Chemical Engineering Journal, 2022, 431, 134024.	6.6	85
231	ZrB2 assembled all-ceramic solar steam evaporator employing aluminum silicate ceramic fiberboard as a supporting substrate for highly efficient desalination. Chemical Engineering Journal, 2022, 431, 134333.	6.6	7
232	A self-floating and integrated bionic mushroom for highly efficient solar steam generation. Journal of Colloid and Interface Science, 2022, 612, 88-96.	5.0	28
233	Hierarchically structured evaporator with integrated water supply and evaporation layers to retard salt accumulation. International Journal of Heat and Mass Transfer, 2022, 185, 122447.	2.5	19
234	Greener and higher conversion of esterification via interfacial photothermal catalysis. Nature Sustainability, 2022, 5, 348-356.	11.5	29
235	A selfâ€saltâ€cleaning architecture in cold vapor generation system for hypersaline brines. EcoMat, 2022, 4, .	6.8	12
236	Accessing Highly Efficient Photothermal Conversion with Stable Openâ€5hell Aromatic Nitric Acid Radicals. Angewandte Chemie - International Edition, 2022, 61, .	7.2	18
237	Accessing Highly Efficient Photothermal Conversion with Stable Openâ€5hell Aromatic Nitric Acid Radicals. Angewandte Chemie, 0, , .	1.6	5
238	Scalable Fabrication of Conjugated Microporous Polymer Sponges for Efficient Solar Steam Generation. ACS Applied Materials & amp; Interfaces, 2022, 14, 4522-4531.	4.0	55

#	Article	IF	CITATIONS
239	Metal-free functionalized carbonized cotton for efficient solar steam generation and wastewater treatment. RSC Advances, 2021, 12, 1043-1050.	1.7	11
240	Hyperstable and compressible plant fibers/chitosan aerogel as portable solar evaporator. Solar Energy, 2022, 231, 828-836.	2.9	17
241	Woodâ€Based, Bifunctional, Mulberryâ€Like Nanostructured Black Titania Evaporator for Solarâ€Driven Clean Water Generation. Energy Technology, 2022, 10, .	1.8	7
242	Upscaling 3D Engineered Trees for Off-Grid Desalination. Environmental Science & Technology, 2022, 56, 1289-1299.	4.6	26
243	Interfacial Solar Steam/Vapor Generation for Heating and Cooling. Advanced Science, 2022, 9, e2104181.	5.6	42
244	Biomass eggplant-derived photothermal aerogels with Janus wettability for cost-effective seawater desalination. Desalination, 2022, 527, 115585.	4.0	57
245	Rattan-based solar evaporator with natural hierarchical and gradient pore structure for synergetic salt resistance and stable freshwater generation. Separation and Purification Technology, 2022, 286, 120412.	3.9	13
246	A biomimetic interfacial solar evaporator for heavy metal soil remediation. Chemical Engineering Journal, 2022, 435, 134793.	6.6	31
247	A lotus-inspired 3D biomimetic design toward an advanced solar steam evaporator with ultrahigh efficiency and remarkable stability. Materials Horizons, 2022, 9, 1232-1242.	6.4	36
248	Janus Fibrous Mats Based Suspended Type Evaporator for Salt Resistant Solar Desalination and Salt Recovery. Small, 2022, 18, e2107156.	5.2	48
249	Chitosan aerogel-carbon nanotubes double layer solar evaporator for efficient desalination. Chemical Engineering Journal Advances, 2022, 10, 100260.	2.4	13
250	Chitosan Aerogel-Carbon Nanotubes Double Layer Solar Evaporator for Efficient Desalination. SSRN Electronic Journal, 0, , .	0.4	0
251	Migration of Inorganic Salt lons During Salt Water Freezing and Melting. SSRN Electronic Journal, 0, ,	0.4	0
252	Natural wood-derived free-standing films as efficient and stable separators for high-performance lithium ion batteries. Nanoscale Advances, 2022, 4, 1718-1726.	2.2	5
253	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
254	Over 11 kg m <sup>–2</sup> h <sup>–1</sup> Evaporation Rate Achieved by Cooling Metal–Organic Framework Foam with Pine Needle-Like Hierarchical Structures to Subambient Temperature. ACS Applied Materials & Interfaces, 2022, 14, 10257-10266.	4.0	48
255	Facile fabrication of polydopamine nanosphere-decorated fabric for solar steam generation. Textile Reseach Journal, 2022, 92, 3451-3461.	1.1	2
256	Highly efficient and salt rejecting solar evaporation via a wick-free confined water layer. Nature	5.8	101

#	Article	IF	CITATIONS
257	Biomimetic Design of Macroporous 3D Truss Materials for Efficient Interfacial Solar Steam Generation. ACS Nano, 2022, 16, 3554-3562.	7.3	67
258	Ion transport property, structural features, and applications of cellulose-based nanofluidic platforms — A review. Carbohydrate Polymers, 2022, 289, 119406.	5.1	3
259	Rapid Pressureless Sintering of Glasses. Small, 2022, 18, e2107951.	5.2	20
260	Modeling the formation of efflorescence and subflorescence caused by salt solution evaporation from porous media. International Journal of Heat and Mass Transfer, 2022, 189, 122645.	2.5	6
261	Ultralight electrospun fiber foam with tunable lamellar macropores for efficient interfacial evaporation. Journal of Environmental Chemical Engineering, 2022, 10, 107522.	3.3	11
262	Sustainable cellulose nanomaterials for environmental remediation - Achieving clean air, water, and energy: A review. Carbohydrate Polymers, 2022, 285, 119251.	5.1	23
263	Constructing a Solar Evaporator with Salt-Collecting Paper by Stacking Hydrophilic Sponges for Freshwater Production and Salt Collection. ACS Applied Materials & Interfaces, 2022, 14, 668-676.	4.0	15
264	Fe2O3 Nanoparticles Deposited over Self-Floating Facial Sponge for Facile Interfacial Seawater Solar Desalination. Crystals, 2021, 11, 1509.	1.0	6
265	Advances and challenges of broadband solar absorbers for efficient solar steam generation. Environmental Science: Nano, 2022, 9, 2264-2296.	2.2	20
266	Engineering a superhydrophilic TiC/C absorber with multiscale pore network for stable and efficient solar evaporation of high-salinity brine. Materials Today Energy, 2022, 26, 101009.	2.5	4
267	Chitosan assisted MXene decoration onto polymer fabric for high efficiency solar driven interfacial evaporation of oil contaminated seawater. Journal of Colloid and Interface Science, 2022, 622, 169-180.	5.0	25
268	Chemical treatment of biomass wastes as carbon dot carriers for solar-driven water purification. Journal of Colloid and Interface Science, 2022, 621, 33-40.	5.0	18
269	A carbonized carbon dot-modified starch aerogel for efficient solar-powered water evaporation. Journal of Materials Chemistry A, 2022, 10, 11712-11720.	5.2	19
270	Hierarchical Poreâ€Gradient Silica Aerogel Balancing Heat and Water Management for Efficient Solarâ€Driven Water Evaporation. Advanced Sustainable Systems, 2022, 6, .	2.7	4
271	Avantâ€Garde Solar–Thermal Nanostructures: Nascent Strategy into Effective Photothermal Desalination. Solar Rrl, 2022, 6, .	3.1	13
272	A hydrovoltaic power generation system based on solar thermal conversion. Nano Energy, 2022, 99, 107356.	8.2	19
273	Alkali treatment combined with surface carbonized wood for high-efficiency solar interfacial evaporation. Applied Thermal Engineering, 2022, 213, 118646.	3.0	11
274	An upcycled wood sponge adsorbent for drinking water purification by solar steam generation. Environmental Science: Nano, 2022, 9, 2559-2571.	2.2	5

#	Article	IF	CITATIONS
275	Design of Mos2/Mmt Bi-Layered Aerogels Integrated with Phase Change Materials for Sustained and Efficient Solar Desalination. SSRN Electronic Journal, 0, , .	0.4	0
276	Graphite/Snse Hybrid-Embedded Monolithic Foams with Bimodal Pores for High Performance Solar Desalination with Spontaneous Salt Rejection. SSRN Electronic Journal, 0, , .	0.4	0
277	Hierarchical cactus-like microsphere network membranes engineered <i>via</i> multiple polyphenol-mediated complexation for efficient solar-powered water purification. Journal of Materials Chemistry A, 2022, 10, 13895-13906.	5.2	13
278	Cuttleboneâ€Derived Interfacial Solar Evaporators for Longâ€Term Desalination and Water Harvesting. Advanced Sustainable Systems, 2022, 6, .	2.7	4
279	Polypyrrole-coated nanocellulose for solar steam generation: A multi-surface photothermal ink with antibacterial and antifouling properties. Carbohydrate Polymers, 2022, 292, 119701.	5.1	12
280	Drivers, challenges, and emerging technologies for desalination of high-salinity brines: A critical review. Desalination, 2022, 538, 115827.	4.0	67
281	Theoretical evaluation of the evaporation rate of 2D solar-driven interfacial evaporation and of its large-scale application potential. Desalination, 2022, 537, 115891.	4.0	9
282	A self-regenerating 3D sponge evaporator with a tunable porous structure for efficient solar desalination. Journal of Materials Chemistry A, 2022, 10, 15743-15751.	5.2	17
283	Bio-Inspired Salt-Fouling Resistant Graphene Evaporators for Solar Desalination of Hypersaline Brines. SSRN Electronic Journal, 0, , .	0.4	0
284	Ion Migration During Freeze-Thaw Process: A Cryo-Desalination Experiment of Saltwater from Southern Xinjiang, China. SSRN Electronic Journal, 0, , .	0.4	0
285	Advanced solar desalination on superwetting surfaces. Journal of Materials Chemistry A, 2022, 10, 19348-19366.	5.2	9
286	Enhanced Contactless Salt-Collecting Solar Desalination. ACS Applied Materials & amp; Interfaces, 2022, 14, 34151-34158.	4.0	13
287	3D Hydrogel Evaporator with Vertical Radiant Vessels Breaking the Tradeâ€Off between Thermal Localization and Salt Resistance for Solar Desalination of Highâ€Salinity. Advanced Materials, 2022, 34, .	11.1	73
288	Study on the performance of solar interfacial evaporation for high-efficiency liquid desiccant regeneration. Energy, 2022, 257, 124721.	4.5	13
289	Graphite/Snse Hybrid-Embedded Monolithic Foams with Hierarchical and Bimodal Pores for High Performance Solar Desalination Membranes with Spontaneous Salt Rejection. SSRN Electronic Journal, 0, , .	0.4	0
290	Aerogels in passive solar thermal desalination: a review. Journal of Materials Chemistry A, 2022, 10, 17857-17877.	5.2	30
291	Efficient Solarâ€Powered Interfacial Evaporation, Water Remediation, and Waste Conversion Based on a Tumblerâ€Inspired, Allâ€Cellulose, and Monolithic Design. Advanced Sustainable Systems, 2022, 6, .	2.7	6
292	In situ polymerization of pyrrole on elastic wood for high efficiency seawater desalination and oily water purification. Journal of Materials Science, 2022, 57, 16317-16332.	1.7	9

ARTICLE IF CITATIONS Simple Design of a Porous Solar Evaporator for Salt-Free Desalination and Rapid Evaporation. 293 4.6 43 Environmental Science & amp; Technology, 2022, 56, 11818-11826. Stacked Laser-Induced Graphene Joule Heaters for Desalination and Water Recycling. ACS Applied Nano 294 2.4 Materials, 2022, 5, 10991-11002. Biomassâ€based biomimeticâ€oriented Janus nanoarchitecture for efficient heavyâ€metal enrichment and 295 21 interfacial solar water sanitation., 2022, 1, 537-547. A Multiscale Porous 3Dâ€Fabric Evaporator with Vertically Aligned Yarns Enables Ultraâ€Efficient and Continuous Water Desalination. Advanced Functional Materials, 2022, 32, . Hierarchical unidirectional fluidic solar-electro-thermal evaporator for all-day efficient water 297 1.9 3 purification. Materials Today Sustainability, 2022, 19, 100223. 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. 298 4.0 Mixed temperature gradient evaporator for solar steam generation. Cell Reports Physical Science, 299 2.8 4 2022, 3, 101014. Bilayer Wood Membrane with Aligned Ion Nanochannels for Spontaneous Moist-Electric Generation. 300 4.5 Nano Letters, 2022, 22, 6476-6483. Reviewing wood-based solar-driven interfacial evaporators for desalination. Water Research, 2022, 301 5.3 68 223, 119ŏ11. An electrospun transporter-assisted evaporator with antifouling water channels for solar-driven desalination and water purification. Journal of the Taiwan Institute of Chemical Engineers, 2022, 138, 2.7 104493. Design of MoS2/MMT bi-layered aerogels integrated with phase change materials for sustained and 303 19 4.0efficient solar desalination. Desalination, 2022, 541, 116028. A highly efficient and durable solar evaporator based on hierarchical ionâ€selective nanostructures. 6.8 EcoMat, 2023, 5, . Potato-based microporous carbon cake: Solar radiation induced water treatment. Journal of 305 3.3 11 Environmental Chemical Engineering, 2022, 10, 108502. Assembling graphene aerogel hollow fibres for solar steam generation. Composites Communications, 2022, 35, 101302. 306 3.3 Tunable all-in-one bimodal porous membrane of ultrahigh molecular weight polyethylene for solar 307 3.9 6 driven interfacial evaporation. Separation and Purification Technology, 2022, 302, 122071. Graphite/SnSe hybrid-embedded monolithic foams with hierarchical and bimodal pores for high performance solar desalination membranes with spontaneous salt rejection. Separation and 308 3.9 . Purification Technology, 2022, 302, 122166. Heat-transfer analysis of interfacial solar evaporation and effect of surface wettability on water 309 2.6 5 condensation and collection. International Journal of Thermal Sciences, 2023, 184, 107911. Tunable All-in-One Bimodal Porous Membrane of Ultrahigh Molecular Weight Polyethylene for Highly Efficient Solar-to-Vapor Generation. SSRN Electronic Journal, 0, , .

#	Article	IF	Citations
311	Recent advances in structural regulation and optimization of high-performance solar-driven interfacial evaporation systems. Journal of Materials Chemistry A, 2022, 10, 18509-18541.	5.2	29
312	A three-dimensional arched solar evaporator based on hydrophilic photothermal fibers inspired by hair for eliminating salt accumulation with desalination application. Journal of Materials Chemistry A, 2022, 10, 21004-21012.	5.2	12
313	Stable and Salt-Resistant Janus Evaporator Based on Cellulose Composite Aerogels from Waste Cotton Fabric. ACS Applied Materials & amp; Interfaces, 2022, 14, 41114-41121.	4.0	17
314	Naturally Derived Janus Cellulose Nanomaterials: Anisotropic Cellulose Nanomaterial Building Blocks and Their Assembly into Asymmetric Structures. ACS Nano, 2022, 16, 13468-13491.	7.3	19
315	Interfacial Photothermal Heat Accumulation for Simultaneous Salt Rejection and Freshwater Generation; an Efficient Solar Energy Harvester. Nanomaterials, 2022, 12, 3206.	1.9	9
316	High-efficiency wood-based evaporators for solar-driven interfacial evaporation. Solar Energy, 2022, 244, 322-330.	2.9	16
317	Activated carbon-cement composite coated polyurethane foam as a cost-efficient solar steam generator. Journal of Cleaner Production, 2022, 379, 134302.	4.6	6
318	Strong tough hydrogel solar evaporator with wood skeleton construction enabling ultraâ€durable brine desalination. EcoMat, 2023, 5, .	6.8	23
319	Polar Bear Hair Inspired Supra-Photothermal Promoted Water Splitting. , 2022, 4, 1912-1920.		2
320	Interfacial solar steam generation by wood-based devices to produce drinking water: a review. Environmental Chemistry Letters, 2023, 21, 285-318.	8.3	28
321	Janus Carbon Nanotube@poly(butylene adipate-co-terephthalate) Fabric for Stable and Efficient Solar-Driven Interfacial Evaporation. ACS Applied Materials & Interfaces, 2022, 14, 46010-46022.	4.0	16
322	Ion migration during freeze-thaw process: A cryo-desalination experiment of saltwater from southern Xinjiang, China. Desalination, 2022, 544, 116118.	4.0	3
323	Tannic acid-based functional coating: surface engineering of membranes for oil-in-water emulsion separation. Chemical Communications, 2022, 58, 12629-12641.	2.2	13
324	An integrated solar evaporator with multilevel hierarchy and multifunctional properties for efficient and salt fouling-resistant desalination. Journal of Materials Chemistry A, 2022, 10, 24373-24380.	5.2	8
325	A Universal Clâ€₽EDOT Coating Strategy Based on Oxidative Chemical Vapor Deposition toward Solarâ€Đriven Multifunctional Energy Management. Advanced Functional Materials, 2022, 32, .	7.8	11
326	Nickel Foam@Reduced Graphene Oxide–Carbon Nanotube Composite as an Efficient Solar Evaporator for Water Purification and Electricity Generation. Industrial & Engineering Chemistry Research, 2022, 61, 16565-16576.	1.8	9
327	Freshwater Production Towards Microgrid Integration: Physics, Progress, and Prospects of Solar-Thermal Evaporation. , 2022, , 100037.		1
328	Nanocellulose for Water Treatment Applications. Nanoscience and Technology, 2023, , 301-333.	1.5	0

#	Article	IF	CITATIONS
329	3D-printed solar evaporator with seashell ornamentation-inspired structure for zero liquid discharge desalination. Water Research, 2022, 226, 119279.	5.3	15
330	Plant transpiration-inspired environmental energy-enhanced solar evaporator fabricated by polypyrrole decorated polyester fiber bundles for efficient water purification. Journal of Cleaner Production, 2022, 379, 134683.	4.6	14
331	Bio-inspired salt-fouling resistant graphene evaporators for solar desalination of hypersaline brines. Desalination, 2023, 546, 116197.	4.0	10
332	Superelastic 3D Assembled Clay/Graphene Aerogels for Continuous Solar Desalination and Oil/Organic Solvent Absorption. Advanced Science, 2022, 9, .	5.6	21
333	Hofmeister Effectâ€Enhanced Hydration Chemistry of Hydrogel for Highâ€Efficiency Solarâ€Driven Interfacial Desalination. Advanced Materials, 2023, 35, .	11.1	57
334	Three-dimensional open architecture enabling salt-rejection solar evaporators with boosted water production efficiency. Nature Communications, 2022, 13, .	5.8	41
335	A customized kinetic energy harvesting system with multilayer piezoelectric membrane for solar interfacial vapor generation. Nano Energy, 2022, 104, 107996.	8.2	5
336	Highly efficient solar driven cogeneration of freshwater and electricity. Journal of Materials Chemistry A, 2023, 11, 1866-1876.	5.2	9
337	A loofah-based photothermal biomass material with high salt-resistance for efficient solar water evaporation. Composites Communications, 2023, 37, 101430.	3.3	9
338	Marangoni-driven biomimetic salt secretion evaporator. Desalination, 2023, 548, 116287.	4.0	19
339	Heat-localized solar evaporation: Transport processes and applications. Nano Energy, 2023, 107, 108086.	8.2	27
340	Emerging Materials for Interfacial Solarâ€Driven Water Purification. Angewandte Chemie, 2023, 135, .	1.6	3
341	Emerging Materials for Interfacial Solarâ€Driven Water Purification. Angewandte Chemie - International Edition, 2023, 62, .	7.2	19
342	Solar-driven interfacial evaporation: Design and application progress of structural evaporators and functional distillers. Nano Energy, 2023, 108, 108115.	8.2	28
343	Architecting the Water State of Polypyrrole/Polyvinyl Alocholâ€Wood Evaporator to Enhance Water Yield in Multistage Solar Stiller. Solar Rrl, 2023, 7, .	3.1	8
344	Water bridge solar evaporator with salt-resistance and heat localization for efficient desalination. Journal of Materials Chemistry A, 2023, 11, 3118-3125.	5.2	12
345	Reduced graphene oxide composite nanowood for solar-driven interfacial evaporation and electricity generation. Applied Thermal Engineering, 2023, 223, 119985.	3.0	11
347	Porous functional materials with excellent solar-thermal and electro-thermal properties for desalination of saline water. Separation and Purification Technology, 2023, 310, 123184.	3.9	7

# 348	ARTICLE A wood-inspired bimodal solar-driven evaporator for highly efficient and durable purification of high-salinity wastewater. Journal of Materials Chemistry A, 2023, 11, 2349-2359.	IF 5.2	CITATIONS 8
349	MXene-decorated magnetic phase-change microcapsules for solar-driven continuous seawater desalination with easy salt accumulation elimination. Chemical Engineering Journal, 2023, 458, 141395.	6.6	22
350	Carbonized waste polyphenylene sulfide non-woven decorated wood evaporator for clean water production from solar photothermal desalination. Desalination, 2023, 550, 116362.	4.0	11
351	Hydrophilic candle wastes microcapsules as a thermal energy storage material for all-day steam and electricity cogeneration. Desalination, 2023, 550, 116377.	4.0	20
352	Low-cost, scalable, and durable coal-based composite aerogel beads solar evaporator for efficient seawater desalination and wastewater purification. Desalination, 2023, 550, 116401.	4.0	5
353	Heterostructure-induced enhanced oxygen catalysis behavior based on metal cobalt coupled with compound anchored on N-doped carbon nanofiber for microbial fuel cell. Journal of Colloid and Interface Science, 2023, 636, 305-316.	5.0	9
354	Designing a solar interfacial evaporator based on tree structures for great coordination of water transport and salt rejection. Materials Horizons, 2023, 10, 1737-1744.	6.4	14
355	Palladium Nanoparticle-Loaded Mesostructural Natural Woods for Efficient Water Treatment. Polymers, 2023, 15, 658.	2.0	1
356	A 3D Corncob-based interfacial solar evaporator enhanced by environment energy with salt-rejecting and anti-corrosion for seawater distillation. Solar Energy, 2023, 252, 39-49.	2.9	19
357	Bilayer bamboo for photothermal trap and large-scale anti-icing. Industrial Crops and Products, 2023, 194, 116290.	2.5	3
358	Recent advances in wood-derived monolithic carbon materials: Synthesis approaches, modification methods and environmental applications. Chemical Engineering Journal, 2023, 463, 142332.	6.6	40
359	Water strider inspired floating solar evaporator with high salt-resistant ability for desalination of contaminated seawater. Journal of Environmental Chemical Engineering, 2023, 11, 109800.	3.3	5
360	All-in-one solar-driven evaporator for high-performance water desalination and synchronous volatile organic compound degradation. Desalination, 2023, 555, 116536.	4.0	10
361	Three-dimensional multimodal porous graphene-carbonized wood for highly efficient solar steam generation. Sustainable Energy Technologies and Assessments, 2023, 57, 103199.	1.7	1
362	Wood-inspired anisotropic PU/chitosan/MXene aerogel used as an enhanced solar evaporator with superior salt-resistance. Desalination, 2023, 555, 116462.	4.0	14
363	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
364	An exclusion distance controls the efflorescence pattern distribution on porous media during salt solution evaporation. International Journal of Heat and Mass Transfer, 2023, 209, 124104.	2.5	0
365	Salt-resistant wood-based solar steam generator with top-down water supply for high-yield and long-term desalination of seawater and brine water. Chemical Engineering Journal, 2023, 460, 141622.	6.6	25

#	Article	IF	CITATIONS
366	Multifunctional Photoabsorber for Highly Efficient Interfacial Solar Steam Generation and Wastewater Treatment. ChemistrySelect, 2023, 8, .	0.7	22
367	Recent advances in interfacial solar vapor generation: clean water production and beyond. Journal of Materials Chemistry A, 2023, 11, 5978-6015.	5.2	19
368	Ionâ€Transfer Engineering via Janus Hydrogels Enables Ultrahigh Performance and Saltâ€Resistant Solar Desalination. Advanced Materials, 2023, 35, .	11.1	30
369	A dual-functional device based on CB/PVDF@BFP for solar-driven water purification and water-induced electricity generation. Journal of Materials Chemistry A, 2023, 11, 8110-8118.	5.2	6
370	Backswimmer-inspired intelligent diving devices for water and wave-energy exploitation in the ocean. Matter, 2023, 6, 1249-1264.	5.0	5
371	Dual-Effect Salt-Tolerant Slope-Suspended Solar Evaporators: High Evaporation Efficiency and Industrialized Implementation. , 2023, 1, 936-946.		1
372	Recent advances in carbonâ€based materials for solarâ€driven interfacial photothermal conversion water evaporation: Assemblies, structures, applications, and prospective. , 2023, 5, .		28
373	Nano-enabled solar driven-interfacial evaporation: Advanced design and opportunities. Nano Research, 2023, 16, 6015-6038.	5.8	24
374	Biomass-Printed Hybrid Solar Evaporator Derived from Bio-polluted Invasive Species, a Potential Step toward Carbon Neutrality. ACS Applied Materials & Interfaces, 2023, 15, 16607-16620.	4.0	8
375	Material Design Strategies for Recovery of Critical Resources from Water. Advanced Materials, 2023, 35, .	11.1	8
376	Solar steam-driven membrane filtration for high flux water purification. , 2023, 1, 391-398.		25
377	Porous silicon modified wood as a high-efficiency solar steam generator. European Journal of Wood and Wood Products, 2023, 81, 1177-1188.	1.3	1
378	Bioinspired Selfâ€5tanding, Selfâ€Floating 3D Solar Evaporators Breaking the Tradeâ€Off between Salt Cycle and Heat Localization for Continuous Seawater Desalination. Advanced Materials, 2023, 35, .	11.1	33
379	Engineered Wood: Sustainable Technologies and Applications. Annual Review of Materials Research, 2023, 53, 195-223.	4.3	3
460	Bacterially synthesized superfine tellurium nanoneedles as an antibacterial and solar-thermal still for efficient purification of polluted water. Nanoscale, 2024, 16, 3422-3429.	2.8	0
468	From seawater to hydrogen via direct photocatalytic vapor splitting: A review on device design and system integration. Frontiers in Energy, 0, , .	1.2	0