Spatially isolating salt crystallisation from water evaporsteam generation and salt harvesting

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Citation Report

#	Article	IF	CITATIONS
1	Harnessing Solarâ€Driven Photothermal Effect toward the Water–Energy Nexus. Advanced Science, 2019, 6, 1900883.	5.6	188
2	Self-Healing Hydrogel toward Metal Ion Rapid Removal via Available Solar-Driven Fashion. Industrial & Lamp; Engineering Chemistry Research, 2019, 58, 17067-17074.	1.8	16
3	Quasimetallic Molybdenum Carbide–Based Flexible Polyvinyl Alcohol Hydrogels for Enhancing Solar Water Evaporation. Advanced Materials Interfaces, 2019, 6, 1901168.	1.9	47
4	Advances in solar evaporator materials for freshwater generation. Journal of Materials Chemistry A, 2019, 7, 24092-24123.	5.2	190
5	Flexible Anti-Biofouling MXene/Cellulose Fibrous Membrane for Sustainable Solar-Driven Water Purification. ACS Applied Materials & Samp; Interfaces, 2019, 11, 36589-36597.	4.0	216
6	Mushroom-Like rGO/PAM Hybrid Cryogels with Efficient Solar-Heating Water Evaporation. ACS Applied Energy Materials, 2019, 2, 7554-7563.	2.5	52
7	Scalable porous Al foil/reduced graphene oxide/Mn3O4 composites for efficient fresh water generation. Materials Today Energy, 2020, 15, 100371.	2.5	18
8	Overcoming Salt Crystallization During Solar Desalination Based on Diatomite-Regulated Water Supply. ACS Sustainable Chemistry and Engineering, 2020, 8, 1548-1554.	3.2	31
9	Recent advances and challenges for solar-driven water evaporation system toward applications. Nano Energy, 2020, 68, 104324.	8.2	268
10	Accelerating solar desalination in brine through ion activated hierarchically porous polyion complex hydrogels. Materials Horizons, 2020, 7, 3187-3195.	6.4	99
11	Heterostructure design of Cu <sub>2</sub> O/Cu <sub>2</sub> S core/shell nanowires for solar-driven photothermal water vaporization towards desalination. Sustainable Energy and Fuels, 2020, 4, 6023-6029.	2.5	19
12	Guaranteeing Complete Salt Rejection by Channeling Saline Water through Fluidic Photothermal Structure toward Synergistic Zero Energy Clean Water Production and <i>In Situ</i> Energy Generation. ACS Energy Letters, 2020, 5, 3397-3404.	8.8	129
13	Electrospun reduced graphene oxide/polyacrylonitrile membrane for high-performance solar evaporation. Solar Energy, 2020, 209, 325-333.	2.9	54
14	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
15	Plasma-Made Graphene Nanostructures with Molecularly Dispersed F and Na Sites for Solar Desalination of Oil-Contaminated Seawater with Complete In-Water and In-Air Oil Rejection. ACS Applied Materials & Discrete Representation of Materials & Discrete Representation of Complete Representatio	4.0	32
16	Controlled heterogeneous water distribution and evaporation towards enhanced photothermal water-electricity-hydrogen production. Nano Energy, 2020, 77, 105102.	8.2	148
17	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
18	Management of concentrate and waste streams for membrane-based algal separation in water treatment: A review. Water Research, 2020, 183, 115969.	5.3	20

#	Article	IF	CITATIONS
19	A general method for selectively coating photothermal materials on 3D porous substrate surfaces towards cost-effective and highly efficient solar steam generation. Journal of Materials Chemistry A, 2020, 8, 24703-24709.	5.2	65
20	Recent advances in solar-driven evaporation systems. Journal of Materials Chemistry A, 2020, 8, 25571-25600.	5.2	77
21	Rational 3D Coiled Morphology for Efficient Solar-Driven Desalination. Environmental Science & Emp; Technology, 2020, 54, 16240-16248.	4.6	35
22	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
23	Towards highly efficient solar-driven interfacial evaporation for desalination. Journal of Materials Chemistry A, 2020, 8, 17907-17937.	5.2	115
24	Reversing heat conduction loss: Extracting energy from bulk water to enhance solar steam generation. Nano Energy, 2020, 78, 105269.	8.2	215
25	A MXeneâ€Based Hierarchical Design Enabling Highly Efficient and Stable Solarâ€Water Desalination with Good Salt Resistance. Advanced Functional Materials, 2020, 30, 2007110.	7.8	215
26	Artificial Trees Inspired by <i>Monstera</i> for Highly Efficient Solar Steam Generation in Both Normal and Weak Light Environments. Advanced Functional Materials, 2020, 30, 2005513.	7.8	95
27	Manipulating unidirectional fluid transportation to drive sustainable solar water extraction and brine-drenching induced energy generation. Energy and Environmental Science, 2020, 13, 4891-4902.	15.6	162
28	Solar passive distiller with high productivity and Marangoni effect-driven salt rejection. Energy and Environmental Science, 2020, 13, 3646-3655.	15.6	101
29	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
30	Biomass-Derived Bilayer Solar Evaporator with Enhanced Energy Utilization for High-Efficiency Water Generation. ACS Applied Materials & Samp; Interfaces, 2020, 12, 57155-57164.	4.0	47
31	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
32	Cellulose Nanomaterials in Interfacial Evaporators for Desalination: A "Natural―Choice. Advanced Materials, 2021, 33, e2000922.	11.1	132
33	Carbon-based absorbers for solar evaporation: Steam generation and beyond. Sustainable Materials and Technologies, 2020, 25, e00182.	1.7	35
34	Graphene and Rice-Straw-Fiber-Based 3D Photothermal Aerogels for Highly Efficient Solar Evaporation. ACS Applied Materials & Amp; Interfaces, 2020, 12, 15279-15287.	4.0	284
35	Building Polyoxometalate "Nanoâ€Walls―on 3D Porous Carbon Paper: A Solar Steam Generation System for Water Purification. Chemistry - A European Journal, 2020, 26, 7923-7929.	1.7	15
36	Solar-driven interfacial desalination for simultaneous freshwater and salt generation. Desalination, 2020, 484, 114423.	4.0	121

#	Article	IF	CITATIONS
37	Solar heat localization: concept and emerging applications. Journal of Materials Chemistry A, 2020, 8, 7035-7065.	5.2	79
38	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
39	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
40	Solar-thermal conversion and steam generation: a review. Applied Thermal Engineering, 2020, 179, 115691.	3.0	95
41	Volatile-Organic-Compound-Intercepting Solar Distillation Enabled by a Photothermal/Photocatalytic Nanofibrous Membrane with Dual-Scale Pores. Environmental Science & Environmental Science & 2020, 54, 9025-9033.	4.6	108
42	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
43	Designing a bioinspired synthetic tree by unidirectional freezing for simultaneous solar steam generation and salt collection. EcoMat, 2020, 2, e12018.	6.8	65
44	Overcoming salt crystallization with ionic hydrogel for accelerating solar evaporation.  Desalination, 2020, 482, 114385.	4.0	87
45	Wettable photothermal hollow fibers arrays for efficient solar-driven desalination under omnidirectional illumination without salt precipitation. Materials Today Energy, 2020, 16, 100391.	2.5	22
46	Resonant energy transfer enhances solar thermal desalination. Energy and Environmental Science, 2020, 13, 968-976.	15.6	33
47	Ultrahigh-efficiency desalination <i>via</i> a thermally-localized multistage solar still. Energy and Environmental Science, 2020, 13, 830-839.	15.6	317
48	GO/CNT-silica Janus nanofibrous membrane for solar-driven interfacial steam generation and desalination. Journal of the Taiwan Institute of Chemical Engineers, 2020, 111, 191-197.	2.7	52
49	Tunable Graphene Systems for Water Desalination. ChemNanoMat, 2020, 6, 1028-1048.	1.5	34
50	Over 10Âkg mâ^'2 hâ^'1 Evaporation Rate Enabled by a 3D Interconnected Porous Carbon Foam. Joule, 2020, 4, 928-937.	11.7	263
51	Latest development in salt removal from solar-driven interfacial saline water evaporators: Advanced strategies and challenges. Water Research, 2020, 177, 115770.	5.3	131
52	Sustainable Solar Evaporation from Solute Surface via Energy Downconversion. Global Challenges, 2021, 5, 2000077.	1.8	7
53	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
54	Salt Mitigation Strategies of Solarâ€Driven Interfacial Desalination. Advanced Functional Materials, 2021, 31, 2007855.	7.8	149

#	Article	IF	CITATIONS
55	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
56	Strategies for breaking theoretical evaporation limitation in direct solar steam generation. Solar Energy Materials and Solar Cells, 2021, 220, 110842.	3.0	47
57	Same materials, bigger output: A reversibly transformable 2D–3D photothermal evaporator for highly efficient solar steam generation. Nano Energy, 2021, 79, 105477.	8.2	228
58	Nanoenabled Photothermal Materials for Clean Water Production. Global Challenges, 2021, 5, 2000055.	1.8	58
59	Hybrid solar-driven interfacial evaporation systems: Beyond water production towards high solar energy utilization. Materials Today, 2021, 42, 178-191.	8.3	274
60	Porous evaporators with special wettability for low-grade heat-driven water desalination. Journal of Materials Chemistry A, 2021, 9, 702-726.	5.2	60
61	A janus solar evaporator with 2D water path for highly efficient salt-resisting solar steam generation. Solar Energy Materials and Solar Cells, 2021, 221, 110910.	3.0	62
62	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
63	Semiconductor photothermal materials enabling efficient solar steam generation toward desalination and wastewater treatment. Desalination, 2021, 500, 114853.	4.0	179
64	Capillary flow-driven efficient nanomaterials for seawater desalination: Review of classifications, challenges, and future perspectives. Renewable and Sustainable Energy Reviews, 2021, 138, 110547.	8.2	18
65	Ultrastable Plasmonic Cu-Based Core–Shell Nanoparticles. Chemistry of Materials, 2021, 33, 695-705.	3.2	29
66	Solar-driven evaporators for water treatment: challenges and opportunities. Environmental Science: Water Research and Technology, 2021, 7, 24-39.	1.2	94
67	A solution to break the salt barrier for high-rate sustainable solar desalination. Energy and Environmental Science, 2021, 14, 2451-2459.	15.6	87
68	Carbon nanotubes@silicone solar evaporators with controllable salt-tolerance for efficient water evaporation in a closed system. Journal of Materials Chemistry A, 2021, 9, 17502-17511.	5.2	35
69	Sustainable Solar Evaporation while Salt Accumulation. ACS Applied Materials & Samp; Interfaces, 2021, 13, 4935-4942.	4.0	46
70	An environmental pollutant to an efficient solar vapor generator: an eco-friendly method for freshwater production. Materials Advances, 2021, 2, 3856-3861.	2.6	10
71	Bioinspired structural and functional designs towards interfacial solar steam generation for clean water production. Materials Chemistry Frontiers, 2021, 5, 1510-1524.	3.2	42
72	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

#	Article	IF	CITATIONS
73	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
74	A versatile platform of poly(acrylic acid) cryogel for highly efficient photothermal water evaporation. Materials Advances, 2021, 2, 3088-3098.	2.6	16
75	Nano/microstructured materials for solar-driven interfacial evaporators towards water purification. Journal of Materials Chemistry A, 2021, 9, 13746-13769.	5.2	31
76	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
77	A Nature-Inspired Monolithic Integrated Cellulose Aerogel-Based Evaporator for Efficient Solar Desalination. ACS Applied Materials & Samp; Interfaces, 2021, 13, 10612-10622.	4.0	61
78	Allâ€Cold Evaporation under One Sun with Zero Energy Loss by Using a Heatsink Inspired Solar Evaporator. Advanced Science, 2021, 8, 2002501.	5.6	225
79	Review of interface solar-driven steam generation systems: High-efficiency strategies, applications and challenges. Applied Energy, 2021, 283, 116361.	5.1	55
81	Scalable NiCo <i><sub>x</sub></i> >S <i><sub>y</sub></i> -PANI@GF Membranes with Broadband Light Absorption and High Salt-Resistance for Efficient Solar-Driven Interfacial Evaporation. ACS Applied Energy Materials, 2021, 4, 3563-3572.	2.5	24
82	A high-efficiency salt-rejecting solar evaporator with optimized porous structure for continuous solar desalination. Applied Thermal Engineering, 2021, 187, 116515.	3.0	36
83	Simultaneous solar-driven seawater desalination and spontaneous power generation using polyvalent crosslinked polypyrrole/alginate hydrogels. Desalination, 2021, 500, 114900.	4.0	45
84	Interfacial Solar Distillation for Freshwater Production: Fate of Volatile and Semivolatile Organic Contaminants. Environmental Science & Environmenta	4.6	37
85	Polysulfide nanoparticles-reduced graphene oxide composite aerogel for efficient solar-driven water purification. Green Energy and Environment, 2023, 8, 267-274.	4.7	15
86	Continuous solar desalination based on restricted salt crystallization zone. Desalination, 2021, 501, 114911.	4.0	25
87	A scalable fish-school inspired self-assembled particle system for solar-powered water-solute separation. National Science Review, 2021, 8, nwab065.	4.6	58
88	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
89	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
90	Anisotropic Evaporator with a Tâ€Shape Design for Highâ€Performance Solarâ€Driven Zeroâ€Liquid Discharge. Small, 2021, 17, e2100969.	5 <b>.</b> 2	39
91	Versatile Janus Composite Nonwoven Solar Absorbers with Salt Resistance for Efficient Wastewater Purification and Desalination. ACS Applied Materials & Samp; Interfaces, 2021, 13, 24945-24956.	4.0	49

#	Article	IF	CITATIONS
92	Janus Photothermal Membrane as an Energy Generator and a Mass-Transfer Accelerator for High-Efficiency Solar-Driven Membrane Distillation. ACS Applied Materials & Distillation. ACS App	4.0	37
93	Harvesting Solar Energy by Flowerlike Carbon Cloth Nanocomposites for Simultaneous Generation of Clean Water and Electricity. ACS Applied Materials & Samp; Interfaces, 2021, 13, 27129-27139.	4.0	71
94	Aligned Millineedle Arrays for Solar Power Seawater Desalination with Siteâ€Specific Salt Formation. Small, 2021, 17, e2101487.	5.2	36
95	Reed Leaves Inspired Silica Nanofibrous Aerogels with Parallel-Arranged Vessels for Salt-Resistant Solar Desalination. ACS Nano, 2021, 15, 12256-12266.	7.3	121
96	Potentially scalable fabrication of salt-rejection evaporator based on electrogenerated polypyrrole-coated nickel foam for efficient solar steam generation. Desalination, 2021, 505, 114982.	4.0	103
97	Carbon Materials for Solar Water Evaporation and Desalination. Small, 2021, 17, e2007176.	5.2	186
98	Dualâ€Zone Photothermal Evaporator for Antisalt Accumulation and Highly Efficient Solar Steam Generation. Advanced Functional Materials, 2021, 31, 2102618.	7.8	226
99	Interfacial solar vapor generation for desalination and brine treatment: Evaluating current strategies of solving scaling. Water Research, 2021, 198, 117135.	5.3	57
100	Solar Water Evaporation Toward Water Purification and Beyond. , 2021, 3, 1112-1129.		107
101	Recent advances and challenges for water evaporation-induced electricity toward applications. Nano Energy, 2021, 85, 105979.	8.2	88
102	Simulationâ€Guided Design of Bamboo Leafâ€Derived Carbonâ€Based Highâ€Efficiency Evaporator for Solarâ€Driven Interface Water Evaporation. Energy and Environmental Materials, 2022, 5, 1323-1331.	7.3	35
103	Sustainable self-cleaning evaporator for long-term solar desalination using gradient structure tailored hydrogel. Chemical Engineering Journal, 2021, 415, 128893.	6.6	80
104	Design and Utilization of Infrared Light for Interfacial Solar Water Purification. ACS Energy Letters, 2021, 6, 2645-2657.	8.8	29
105	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
106	Tailoring Photophysical Properties of Diketopyrrolopyrrole Small Molecules with Electron-Withdrawing Moieties for Efficient Solar Steam Generation. ACS Applied Materials & Samp; Interfaces, 2021, 13, 38365-38374.	4.0	12
107	Salt-Resistive Photothermal Materials and Microstructures for Interfacial Solar Desalination. Frontiers in Energy Research, 2021, 9, .	1.2	6
108	Solar-driven high-efficiency remediation of wastewater containing small dye molecules. Science China Technological Sciences, 2021, 64, 2237-2245.	2.0	11
109	Vertically symmetrical evaporator based on photothermal fabrics for efficient continuous desalination through inversion strategy. Desalination, 2021, 509, 115072.	4.0	34

#	Article	IF	CITATIONS
110	Highly Saltâ€Resistant 3D Hydrogel Evaporator for Continuous Solar Desalination via Localized Crystallization. Advanced Functional Materials, 2021, 31, 2104380.	7.8	122
111	Life cycle assessment for algae-based desalination system. Desalination, 2021, 512, 115148.	4.0	16
112	Programmable Asymmetric Nanofluidic Photothermal Textile Umbrella for Concurrent Salt Management and In Situ Power Generation During Long-Time Solar Steam Generation. ACS Applied Materials & Samp; Interfaces, 2021, 13, 47549-47559.	4.0	20
113	A scalable, cost-effective and salt-rejecting MoS2/SA@melamine foam for continuous solar steam generation. Nano Energy, 2021, 87, 106213.	8.2	99
114	Scalable carbon black deposited fabric/hydrogel composites for affordable solar-driven water purification. Journal of Materials Science and Technology, 2022, 106, 10-18.	5.6	22
115	Photovoltaic-multistage desalination of hypersaline waters for simultaneous electricity, water and salt harvesting via automatic rinsing. Nano Energy, 2021, 87, 106163.	8.2	30
116	Solar absorber with tunable porosity to control the water supply velocity to accelerate water evaporation. Desalination, 2021, 511, 115113.	4.0	43
117	Enhancing solar steam generation using a highly thermally conductive evaporator support. Science Bulletin, 2021, 66, 2479-2488.	4.3	159
118	Highâ€performance water purification and desalination by solarâ€driven interfacial evaporation and photocatalytic <scp>VOC</scp> decomposition enabled by hierarchical <scp> TiO <sub>2</sub>  uO </scp> nanoarchitecture. International Journal of Energy Research, 2022, 46, 1313-1326.	2.2	21
119	Biomass-based photothermal materials for interfacial solar steam generation: a review. Materials Today Energy, 2021, 21, 100716.	2.5	48
120	A self-floating electrospun nanofiber mat for continuously high-efficiency solar desalination. Chemosphere, 2021, 280, 130719.	4.2	29
121	A nature-inspired suspended solar evaporator for water desalination of high-salinity brines. Chemical Engineering Journal, 2021, 421, 129824.	6.6	47
122	Interfacial solar evaporator for clean water production and beyond: From design to application. Applied Energy, 2021, 299, 117317.	5.1	33
123	Phase change material enhanced sustained and energy-efficient solar-thermal water desalination. Applied Energy, 2021, 301, 117463.	5.1	35
124	Synergistic adjustment of water channels and light absorption pathways to co-generate salt collection and clean water production. Science of the Total Environment, 2021, 797, 148912.	3.9	9
125	Recent advanced self-propelling salt-blocking technologies for passive solar-driven interfacial evaporation desalination systems. Nano Energy, 2021, 89, 106468.	8.2	106
126	Artificial transpiration with asymmetric photothermal textile for continuous solar-driven evaporation, spatial salt harvesting and electrokinetic power generation. Chemical Engineering Journal, 2021, 426, 131818.	6.6	42
127	Flower-inspired bionic sodium alginate hydrogel evaporator enhancing solar desalination performance. Carbohydrate Polymers, 2021, 273, 118536.	5.1	34

#	Article	IF	CITATIONS
128	Carbon black and polydopamine modified non-woven fabric enabling efficient solar steam generation towards seawater desalination and wastewater purification. Separation and Purification Technology, 2021, 278, 119621.	3.9	46
129	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
130	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
131	Efficient solar domestic and industrial sewage purification via polymer wastewater collector. Chemical Engineering Journal, 2022, 428, 131199.	6.6	16
132	Cotton cloth supported tungsten carbide/carbon nanocomposites as a Janus film for solar driven interfacial water evaporation. Journal of Materials Chemistry A, 2021, 9, 23140-23148.	5.2	26
133	Sustainable off-grid desalination of hypersaline waters using Janus wood evaporators. Energy and Environmental Science, 2021, 14, 5347-5357.	15.6	133
134	Synergistic solar-powered water-electricity generation <i>via</i> rational integration of semitransparent photovoltaics and interfacial steam generators. Journal of Materials Chemistry A, 2021, 9, 21197-21208.	5.2	28
135	Directional solution transfer of a 3D solar evaporator inhibiting salt crystallization. Journal of Materials Chemistry A, 2021, 9, 22472-22480.	5.2	24
136	Innovative salt-blocking technologies of photothermal materials in solar-driven interfacial desalination. Journal of Materials Chemistry A, 2021, 9, 16233-16254.	5.2	107
137	Salt-Rejecting Solar Interfacial Evaporation. Cell Reports Physical Science, 2021, 2, 100310.	2.8	76
138	Passive, high-efficiency thermally-localized solar desalination. Energy and Environmental Science, 2021, 14, 1771-1793.	15.6	142
139	Ultraâ€Black Pinecone for Efficient Solar Steam Generation under Omnidirectional Illumination. Advanced Sustainable Systems, 2021, 5, 2000244.	2.7	16
140	Highly efficient three-dimensional solar evaporator for high salinity desalination by localized crystallization. Nature Communications, 2020, 11, 521.	5.8	348
141	Solarâ€driven brine desalination and concentration by controlled salt excretion. EcoMat, 2021, 3, .	6.8	14
142	Self-floating Ti3C2 MXene-coated polyurethane sponge with excellent photothermal conversion performance for peroxydisulfate activation and clean water production. Separation and Purification Technology, 2022, 282, 119990.	3.9	15
143	Perspective for removing volatile organic compounds during <scp>solarâ€driven</scp> water evaporation toward water production. EcoMat, 2021, 3, e12147.	6.8	22
144	Fertiliser recovery from source-separated urine via membrane bioreactor and heat localized solar evaporation. Water Research, 2021, 207, 117810.	5.3	16
145	Orientational seawater transportation through Cu(TCNQ) nanorod arrays for efficient solar desalination and salt production. Desalination, 2022, 522, 115399.	4.0	18

#	Article	IF	Citations
146	A passive evaporative cooling heat sink method for enhancing low-grade waste heat recovery capacity of thermoelectric generators. Energy Conversion and Management, 2022, 251, 114931.	4.4	30
147	A floating vapor condensation structure in a heat-localized solar evaporation system for facile solar desalination. Applied Thermal Engineering, 2022, 201, 117834.	3.0	31
148	Cobalt nanoparticle–carbon nanoplate as the solar absorber of a wood aerogel evaporator for continuously efficient desalination. Environmental Science: Water Research and Technology, 2021, 8, 151-161.	1.2	14
149	Enhancing stability of interfacial solar evaporator in high-salinity solutions by managing salt precipitation with Janus-based directional salt transfer structure. Desalination, 2022, 524, 115470.	4.0	19
150	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
151	Nature Inspired MXene-Decorated 3D Honeycomb-Fabric Architectures Toward Efficient Water Desalination and Salt Harvesting. Nano-Micro Letters, 2022, 14, 10.	14.4	104
152	Atmospheric water harvester-assisted solar steam generation for highly efficient collection of distilled water. Journal of Materials Chemistry A, 2022, 10, 1885-1890.	5.2	33
153	High-temperature solar steam generation by MWCNT-HfTe2 van der Waals heterostructure for low-cost sterilization. Nano Energy, 2022, 94, 106916.	8.2	46
154	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
155	A photothermal system for wastewater disposal and co-generation of clean water and electricity. Journal of Environmental Chemical Engineering, 2022, 10, 107124.	3.3	8
156	High efficient 3D solar interfacial evaporator: Achieved by the synergy of simple material and structure. Desalination, 2022, 525, 115495.	4.0	22
157	Recent advances and challenges of emerging solar-driven steam and the contribution of photocatalytic effect. Chemical Engineering Journal, 2022, 431, 134024.	6.6	85
158	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
159	Narrow-Bandgap LaMO3 (MÂ=ÂNi, Co) nanomaterials for efficient interfacial solar steam generation. Journal of Colloid and Interface Science, 2022, 612, 203-212.	5.0	30
160	Tailoring the Salt Transport Flux of Solar Evaporators for a Highly Effective Salt-Resistant Desalination with High Productivity. ACS Nano, 2022, 16, 2511-2520.	7.3	64
161	Enhanced Interfacial Solar Evaporation through Formation of Microâ€Meniscuses and Microdroplets to Reduce Evaporation Enthalpy. Advanced Functional Materials, 2022, 32, .	7.8	99
162	A selfâ€saltâ€eleaning architecture in cold vapor generation system for hypersaline brines. EcoMat, 2022, 4, .	6.8	12
163	A bibliometric analysis of green technologies applied to water and wastewater treatment. Environmental Science and Pollution Research, 2023, 30, 71849-71863.	2.7	11

#	Article	IF	CITATIONS
164	Hyperstable and compressible plant fibers/chitosan aerogel as portable solar evaporator. Solar Energy, 2022, 231, 828-836.	2.9	17
165	Solar Selective Absorber for Emerging Sustainable Applications. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	34
166	Towards sustainable saline agriculture: Interfacial solar evaporation for simultaneous seawater desalination and saline soil remediation. Water Research, 2022, 212, 118099.	5.3	110
167	Biomass eggplant-derived photothermal aerogels with Janus wettability for cost-effective seawater desalination. Desalination, 2022, 527, 115585.	4.0	57
168	Janus Fibrous Mats Based Suspended Type Evaporator for Salt Resistant Solar Desalination and Salt Recovery. Small, 2022, 18, e2107156.	5.2	48
169	Characterisation and modelling of water wicking and evaporation in capillary porous media for passive and energy-efficient applications. Applied Thermal Engineering, 2022, 208, 118159.	3.0	11
170	Three dimensional hydrogel evaporator made of nano level antireflection particles for high-efficiency solar steam generation. Sustainable Energy Technologies and Assessments, 2022, 52, 102074.	1.7	3
171	Three Dimensional Hydrogel Evaporator Made of Nano Level Antireflection Particles for High-Efficiency Solar Steam Generation. SSRN Electronic Journal, 0, , .	0.4	0
172	Localized interfacial activation effect within interconnected porous photothermal matrix to promote solar-driven water evaporation. Journal of Materials Chemistry A, 2022, 10, 10548-10556.	5.2	13
173	A Novel Approach to Simultaneously Obtain Well-Hydrophobic and Photothermal Materials for Organic Contaminant Removal and Solar Steam Generation. SSRN Electronic Journal, 0, , .	0.4	0
174	Solar-Driven Desalination Using Salt-Rejecting Plasmonic Cellulose Nanofiber Membrane. SSRN Electronic Journal, 0, , .	0.4	0
175	Highly efficient and salt rejecting solar evaporation via a wick-free confined water layer. Nature Communications, 2022, 13, 849.	5.8	101
176	Mushroom-like Graphene Nanosheets/Copper Sulfide Nanowires Foam with Janus-Type Wettability for Solar Steam Generation. ACS Applied Nano Materials, 2022, 5, 4931-4937.	2.4	10
177	Spontaneous Salt-Preventing Solar–Thermal Water Evaporator with a High Evaporation Efficiency through Dual-Mode Water Transfer. ACS Applied Materials & Samp; Interfaces, 2022, 14, 15549-15557.	4.0	10
178	An Asymmetric Hygroscopic Structure for Moistureâ€Driven Hygroâ€Ionic Electricity Generation and Storage. Advanced Materials, 2022, 34, e2201228.	11.1	55
179	Porous polyvinyl alcohol/biochar hydrogel induced high yield solar steam generation and sustainable desalination. Journal of Environmental Chemical Engineering, 2022, 10, 107690.	3.3	18
180	Exploring the agricultural reutilisation of desalination reject brine from reverse osmosis technology. Desalination, 2022, 529, 115644.	4.0	5
181	A review of nanofiber membranes for solar interface evaporation. Desalination, 2022, 531, 115686.	4.0	38

#	ARTICLE	IF	CITATIONS
182	Honeycomb-structured fabric with enhanced photothermal management and site-specific salt crystallization enables sustainable solar steam generation. Journal of Colloid and Interface Science, 2022, 619, 322-330.	5.0	17
183	Melamine/Silicone Hybrid Sponges with Controllable Microstructure and Wettability for Efficient Solar-Driven Interfacial Desalination. ACS Applied Materials & Solar-Driven Interfaces, 2022, 14, 2360-2368.	4.0	35
184	Gradient Titanium Oxide Nanowire Film: a Multifunctional Solar Energy Utilization Platform for High-Salinity Organic Sewage Treatment. ACS Applied Materials & Samp; Interfaces, 2022, 14, 19652-19658.	4.0	6
185	Integrating a Self-Floating Janus TPC@CB Sponge for Efficient Solar-Driven Interfacial Water Evaporation. ACS Applied Materials & Samp; Interfaces, 2022, 14, 19409-19418.	4.0	37
186	Pbat/Mxene Monolithic Solar Vapor Generator with High Efficiency on Seawater Evaporation and Swage Purification. SSRN Electronic Journal, 0, , .	0.4	0
187	Flexible Solar Absorber Using Hydrophile/Hydrophobe Amphipathic Janus Nanofiber as Building Unit for Efficient Vapor Generation. SSRN Electronic Journal, 0, , .	0.4	0
188	Bioinspired hierarchical evaporator via cell wall engineering for highly efficient and sustainable solar desalination. EcoMat, 2022, 4, .	6.8	24
189	Hierarchical Poreâ€Gradient Silica Aerogel Balancing Heat and Water Management for Efficient Solarâ€Driven Water Evaporation. Advanced Sustainable Systems, 2022, 6, .	2.7	4
190	Multipurpose Solar-Thermal Hydrogel Platform for Desalination of Seawater and Subsequent Collection of Atmospheric Water. ACS ES&T Water, 2023, 3, 1740-1746.	2.3	8
191	Edge-enhanced ultrafast water evaporation from graphene nanopores. Cell Reports Physical Science, 2022, 3, 100900.	2.8	3
192	Avantâ€Garde Solar–Thermal Nanostructures: Nascent Strategy into Effective Photothermal Desalination. Solar Rrl, 2022, 6, .	3.1	13
193	Study on the photothermal performance of polytetrafluoroethylene-based evaporation interface with solar-driven enhanced by graphite-clay. Materials Chemistry and Physics, 2022, 285, 126192.	2.0	3
194	A hydrovoltaic power generation system based on solar thermal conversion. Nano Energy, 2022, 99, 107356.	8.2	19
195	Tubular polypyrrole enhanced elastomeric biomass foam as a portable interfacial evaporator for efficient self-desalination. Chemical Engineering Journal, 2022, 445, 136701.	6.6	20
196	Metal–Organic Framework Composite Photothermal Membrane for Removal of High-Concentration Volatile Organic Compounds from Water via Molecular Sieving. ACS Nano, 2022, 16, 8329-8337.	7.3	58
197	Dimensionally controlled graphene-based surfaces for photothermal membrane crystallization. Journal of Colloid and Interface Science, 2022, 623, 607-616.	5.0	11
198	A vasculatural hydrogel combined with Prussian blue for solar-driven vapor generation. Journal of Materials Chemistry A, 2022, 10, 12608-12615.	5.2	12
199	Janus 3D solar crystallizer enabling an eco-friendly zero liquid discharge of high-salinity concentrated seawater with antiscalant. Desalination, 2022, 537, 115862.	4.0	15

#	Article	IF	CITATIONS
200	Revealing interfacial heating effects on water evaporation during surface distillation. Desalination, 2022, 537, 115867.	4.0	0
201	Superwetting Photothermal Membranes Enabled by Polyphenol-Mediated Nanostructured Coating with Raspberry-Like Architectures for Solar-Driven Interfacial Evaporation. SSRN Electronic Journal, 0, , .	0.4	0
202	Cicada wing-inspired solar transmittance enhancement and hydrophobicity design for graphene-based solar steam generation: A novel gas phase deposition approach. Applied Energy, 2022, 320, 119322.	5.1	24
203	Salt isolation from waste brine enabled by interfacial solar evaporation with zero liquid discharge. Journal of Materials Chemistry A, 2022, 10, 14470-14478.	5.2	57
204	Marangoni Effect Drives Salt Crystallization Away from the Distillation Zone for Large-Scale Continuous Solar Passive Desalination. ACS Applied Materials & Solar Passive Desalination. ACS Applied Materials & Solar Passive Desalination.	4.0	19
205	A Light-Permeable Solar Evaporator with Three-Dimensional Photocatalytic Sites to Boost Volatile-Organic-Compound Rejection for Water Purification. Environmental Science & Emp; Technology, 2022, 56, 9797-9805.	4.6	25
206	Highâ€Performance Integrated Solar Steam Generator for Synergetic Freshwater Production, Salt Harvesting, and Electricity Generation. Solar Rrl, 2022, 6, .	3.1	14
207	Umbrella evaporator for continuous solar vapor generation and salt harvesting from seawater. Cell Reports Physical Science, 2022, 3, 100940.	2.8	8
208	Cuttleboneâ€Derived Interfacial Solar Evaporators for Longâ€Term Desalination and Water Harvesting. Advanced Sustainable Systems, 2022, 6, .	2.7	4
209	MXene-based flexible and washable photothermal fabrics for efficiently continuous solar-driven evaporation and desalination of seawater. Renewable Energy, 2022, 195, 407-415.	4.3	36
210	Flexible solar absorber using hydrophile/hydrophobe amphipathic Janus nanofiber as building unit for efficient vapor generation. Separation and Purification Technology, 2022, 297, 121526.	3.9	11
211	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
212	Advanced solar desalination on superwetting surfaces. Journal of Materials Chemistry A, 2022, 10, 19348-19366.	5.2	9
213	Breathâ€Figure Selfâ€Assembled Lowâ€Cost Janus Fabrics for Highly Efficient and Stable Solar Desalination. Advanced Functional Materials, 2022, 32, .	7.8	80
214	Carboxymethyl cellulose modified reduced graphene oxide coated melamine sponge for efficient seawater evaporation. Journal of Porous Materials, 2022, 29, 1807-1816.	1.3	3
215	Towards highly salt-rejecting solar interfacial evaporation: Photothermal materials selection, structural designs, and energy management., 2022, 1, e9120014.		49
216	More from less: improving solar steam generation by selectively removing a portion of evaporation surface. Science Bulletin, 2022, 67, 1572-1580.	4.3	122
217	Materials design and system structures of solar steam evaporators. Environmental Progress and Sustainable Energy, 2023, 42, .	1.3	5

#	Article	IF	CITATIONS
218	Enhanced Contactless Salt-Collecting Solar Desalination. ACS Applied Materials & Desalination. Desalination. ACS Applied Materials & Desalination. Desalinatio	4.0	13
219	Nature-inspired pyramid-shaped 3-dimensional structure for cost-effective heat-localized solar evaporation with high efficiency and salt localization. Applied Thermal Engineering, 2022, 215, 118950.	3.0	6
220	Intensifying the co-production of vapor and salts by a one-way brine-flowing structure driven by solar irradiation or waste heat. Desalination, 2022, 539, 115942.	4.0	17
221	Turning Dielectric MoO <sub>3</sub> Nanospheres from White to Black through Doping for Efficient Solar Seawater Desalination., 2022, 4, 1584-1592.		16
222	A Multiscale Porous 3Dâ€Fabric Evaporator with Vertically Aligned Yarns Enables Ultraâ€Efficient and Continuous Water Desalination. Advanced Functional Materials, 2022, 32, .	7.8	43
223	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, 104493.	2.7	4
224	Single-shot production of Janus graphene thin film for solar steam generation with 94.5% efficiency. Carbon, 2022, 199, 469-478.	5.4	12
225	PBAT/MXene monolithic solar vapor generator with high efficiency on seawater evaporation and swage purification. Desalination, 2022, 541, 116015.	4.0	8
226	Superwetting photothermal membranes enabled by polyphenol-mediated nanostructured coating with raspberry-like architectures for solar-driven interfacial evaporation. Desalination, 2022, 542, 116046.	4.0	12
227	A highly efficient and durable solar evaporator based on hierarchical ionâ€selective nanostructures. EcoMat, 2023, 5, .	6.8	7
228	2D covalent organic framework-based core-shell structures for high-performance solar-driven steam generation. Materials Today Energy, 2022, 29, 101135.	2.5	5
229	Stable, zero liquid discharge, and highly efficient solar-driven multistage distillation device based on tree-inspired radial water transfer. Journal of Cleaner Production, 2022, 375, 134025.	4.6	10
230	Shaping droplet by semiflexible micro crystallizer for high quality crystal harvest. Journal of Colloid and Interface Science, 2023, 629, 334-345.	5.0	0
231	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
232	A multichannel photothermal rod for antigravity water transportation and high-flux solar steam generation. Journal of Materials Chemistry A, 2022, 10, 18116-18125.	5.2	10
233	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
234	Solar-driven interfacial evaporation for water treatment: advanced research progress and challenges. Journal of Materials Chemistry A, 2022, 10, 18470-18489.	5.2	41
235	Double-Sided Suspending Evaporator with Top Water Supply for Concurrent Solar Evaporation and Salt Harvesting. ACS Sustainable Chemistry and Engineering, 2022, 10, 12843-12851.	3.2	9

#	Article	IF	CITATIONS
236	From Materials to Devices: Rationally Designing Solar Steam System for Advanced Applications. Small Methods, 2022, 6, .	4.6	17
237	High-efficiency wood-based evaporators for solar-driven interfacial evaporation. Solar Energy, 2022, 244, 322-330.	2.9	16
238	Long-Term Efficient Interfacial Solar Desalination Enabled by a Biomimetic 2D Water-Transport Structure Based on Silicone Nanofilaments. ACS Applied Energy Materials, 2022, 5, 13031-13041.	2.5	8
239	Strong tough hydrogel solar evaporator with wood skeleton construction enabling ultraâ€durable brine desalination. EcoMat, 2023, 5, .	6.8	23
240	Micro- and nano-sized materials for solar evaporators:a review. EPJ Applied Physics, 0, , .	0.3	0
241	Solar Interface Evaporation System Assisted by Mirror Reflection Heat Collection Based on Sunflower Chasing the Sun. ACS Applied Materials & Sunflower Chasing the Sun Sun Sunflower Chasing the Sun	4.0	7
242	Nanoporous black silver film with high porosity for efficient solar steam generation. Nano Research, 2023, 16, 5610-5618.	5.8	20
243	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
244	Highâ€Entropyâ€Alloyâ€Nanoparticles Enabled Wood Evaporator for Efficient Photothermal Conversion and Sustainable Solar Desalination. Advanced Energy Materials, 2022, 12, .	10.2	26
245	Graphene-Based Membranes for Water Desalination: A Literature Review and Content Analysis. Polymers, 2022, 14, 4246.	2.0	11
246	Bio-Derived Photothermal Materials and Evaporators for Sustainable Solar Energy-Driven Water Process. Langmuir, 2022, 38, 13187-13194.	1.6	8
247	A bionic solar-driven interfacial evaporation system with a photothermal-photocatalytic hydrogel for VOC removal during solar distillation. Water Research, 2022, 226, 119276.	5.3	24
248	3D-printed solar evaporator with seashell ornamentation-inspired structure for zero liquid discharge desalination. Water Research, 2022, 226, 119279.	5.3	15
249	Ultra salt-resistant solar desalination system <i>via</i> large-scale easy assembly of microstructural units. Energy and Environmental Science, 2022, 15, 5405-5414.	15.6	29
250	An anti-salt accumulation 2.5D arch solar-driven evaporator based on Marangoni effect for seawater desalination. Chemical Engineering Journal, 2023, 454, 140286.	6.6	9
251	Superelastic 3D Assembled Clay/Graphene Aerogels for Continuous Solar Desalination and Oil/Organic Solvent Absorption. Advanced Science, 2022, 9, .	5.6	21
252	Three-dimensional open architecture enabling salt-rejection solar evaporators with boosted water production efficiency. Nature Communications, 2022, 13, .	5.8	41
253	A non-covalent supramolecular dual-network polyelectrolyte evaporator based on direct-ink-writing for stable solar thermal evaporation. Materials Advances, 2023, 4, 223-230.	2.6	1

#	Article	IF	Citations
254	Marangoni-driven biomimetic salt secretion evaporator. Desalination, 2023, 548, 116287.	4.0	19
255	Heat-localized solar evaporation: Transport processes and applications. Nano Energy, 2023, 107, 108086.	8.2	27
256	Solar-driven desalination using salt-rejecting plasmonic cellulose nanofiber membrane. Journal of Colloid and Interface Science, 2023, 634, 543-552.	5.0	12
257	A highly efficient bio-inspired 3D solar-driven evaporator with advanced heat management and salt fouling resistance design. Chemical Engineering Journal, 2023, 455, 140500.	6.6	11
258	A Diodeâ€like Scalable Asymmetric Solar Evaporator with Ultraâ€high Salt Resistance. Advanced Functional Materials, 2023, 33, .	7.8	32
259	Degradable and Recyclable Solar Desalination Membranes Based on Naturally Occurring Building Blocks. Chemistry of Materials, 2022, 34, 10399-10408.	3.2	20
260	Solar-driven interfacial evaporation: Design and application progress of structural evaporators and functional distillers. Nano Energy, 2023, 108, 108115.	8.2	28
261	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
262	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
263	Wormlike Perovskite Oxide Coupled with Phaseâ€Change Material for Allâ€Weather Solar Evaporation and Thermal Storage Applications. Advanced Energy and Sustainability Research, 2023, 4, .	2.8	30
264	Solar-thermo-radiative evaporator for continuous steam generation and salt harvesting. Solar Energy, 2023, 250, 347-354.	2.9	8
265	Advanced Material Design and Engineering for Waterâ€Based Evaporative Cooling. Advanced Materials, 2024, 36, .	11.1	10
266	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
267	Stable, Costâ€Effective TiNâ€Based Plasmonic Nanocomposites with over 99% Solar Steam Generation Efficiency. Advanced Functional Materials, 2023, 33, .	7.8	25
268	Review of the progress of solar-driven interfacial water evaporation (SIWE) toward a practical approach. Energy Advances, 2023, 2, 574-605.	1.4	3
269	A super-hydrophilic honeycomb activated carbon evaporator for simultaneous salt rejection and VOCs removal during solar-driven seawater desalination. Separation and Purification Technology, 2023, 311, 123201.	3.9	11
270	Reversed vapor generation with Janus fabric evaporator and comprehensive thermal management for efficient interfacial solar distillation. Chemical Engineering Journal, 2023, 463, 142002.	6.6	8
271	All-in-one solar-driven evaporator for high-performance water desalination and synchronous volatile organic compound degradation. Desalination, 2023, 555, 116536.	4.0	10

#	Article	IF	CITATIONS
272	Continuous vapor generation for thermal-desalination applications using a thermosyphon based heat localization strategy. Desalination, 2023, 555, 116492.	4.0	1
273	Enhanced interfacial solar driven water evaporation performance of Ti mesh through growing TiO2 nanotube and applying voltage. Separation and Purification Technology, 2023, 314, 123633.	3.9	0
274	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
275	Recent advances in interfacial solar vapor generation: clean water production and beyond. Journal of Materials Chemistry A, 2023, 11, 5978-6015.	<b>5.</b> 2	19
276	Smart Strategies for Light and Thermal Management in Highâ€Efficiency Solar Steam Generation. Solar Rrl, 2023, 7, .	3.1	11
277	lonâ€Transfer Engineering via Janus Hydrogels Enables Ultrahigh Performance and Saltâ€Resistant Solar Desalination. Advanced Materials, 2023, 35, .	11.1	30
278	Dual-hydrophilic Janus evaporator for Long-term and efficient Bimode solar evaporation. Chemical Engineering Journal, 2023, 461, 141954.	6.6	12
279	Backswimmer-inspired intelligent diving devices for water and wave-energy exploitation in the ocean. Matter, 2023, 6, 1249-1264.	5.0	5
280	Dual-Effect Salt-Tolerant Slope-Suspended Solar Evaporators: High Evaporation Efficiency and Industrialized Implementation., 2023, 1, 936-946.		1
281	Inventions, innovations, and new technologies: Solar Desalination. Solar Compass, 2023, 5, 100037.	0.5	4
282	Recent strategies for constructing efficient interfacial solar evaporation systems., 2023, 2, e9120062.		44
283	A Bionicâ€Gill 3D Hydrogel Evaporator with Multidirectional Crossflow Salt Mitigation and Aquaculture Applications. Advanced Functional Materials, 2023, 33, .	7.8	11
284	Biomass-Printed Hybrid Solar Evaporator Derived from Bio-polluted Invasive Species, a Potential Step toward Carbon Neutrality. ACS Applied Materials & Samp; Interfaces, 2023, 15, 16607-16620.	4.0	8
285	3D Printing of Solar Crystallizer with Polylactic Acid/Carbon Composites for Zero Liquid Discharge of High-Salinity Brine. Polymers, 2023, 15, 1656.	2.0	1
286	Material Design Strategies for Recovery of Critical Resources from Water. Advanced Materials, 2023, 35, .	11.1	8
287	Solar steam-driven membrane filtration for high flux water purification. , 2023, 1, 391-398.		25
288	Bioinspired Selfâ€Standing, 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
289	Electrospinning Technique Meets Solar Energy: Electrospun Nanofiber-Based Evaporation Systems for Solar Steam Generation. Advanced Fiber Materials, 2023, 5, 1318-1348.	7.9	19

#	ARTICLE	IF	CITATIONS
290	Optical-Concentrating Solar Distillation Based on Three-Dimensional Copper Foam Cubes Coated with CuS Nanoparticles and Agarose Gel. ACS Applied Materials & Samp; Interfaces, 2023, 15, 20120-20129.	4.0	2
291	Can solar energy help ZLD technologies to reduce their environmental footprint? - A Review. Solar Energy Materials and Solar Cells, 2023, 256, 112334.	3.0	1
310	Photothermal Nanomaterials: A Powerful Light-to-Heat Converter. Chemical Reviews, 2023, 123, 6891-6952.	23.0	137
334	Biomimetic surface engineering for sustainable water harvesting systems., 2023, 1, 587-601.		9
335	Advances in photothermal regulation strategies: from efficient solar heating to daytime passive cooling. Chemical Society Reviews, 2023, 52, 7389-7460.	18.7	9
380	Magnetically driven Janus conical vertical array for all-weather freshwater collection. Materials Horizons, 2024, 11, 1779-1786.	6.4	0
386	Spontaneous thermal energy transfer and anti-gravitational water pumping using Al <sub>2</sub> O <sub>3</sub> fiber-enhanced flexible nonwoven material as a high-performance and self-floating solar evaporator. Materials Horizons, 0, , .	6.4	0