

CITATION REPORT

List of articles citing

Self-assembly of highly efficient, broadband plasmonic absorbers for solar steam generation

DOI: 10.1126/sciadv.1501227
Science Advances, 2016, 2, e1501227.

Source: <https://exaly.com/paper-pdf/64737217/citation-report.pdf>

Version: 2024-04-25

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
890	Hybrid integration of III-V semiconductor lasers on silicon waveguides using optofluidic microbubble manipulation. 2016 , 6, 29841		7
889	Enhanced solar evaporation of water from porous media, through capillary mediated forces and surface treatment. 2016 , 6, 085218		23
888	Fine-tuning the metallic core-shell nanostructures for plasmonic perovskite solar cells. 2016 , 109, 183901		28
887	Shape-Controlled Synthesis of High-Quality Cu S Nanocrystals for Efficient Light-Induced Water Evaporation. 2016 , 12, 5320-5328		108
886	Graphene oxide-based efficient and scalable solar desalination under one sun with a confined 2D water path. 2016 , 113, 13953-13958		724
885	Steam generation under one sun enabled by a floating structure with thermal concentration. 2016 , 1,		650
884	Constructing Black Titania with Unique Nanocage Structure for Solar Desalination. 2016 , 8, 31716-31721		210
883	Plasmonic absorbers with optical cavity for the enhancement of photothermal/opto-calorimetric infrared spectroscopy. 2017 , 110, 011901		4
882	High-Performance Large-Scale Solar Steam Generation with Nanolayers of Reusable Biomimetic Nanoparticles. 2017 , 1, 1600013		109
881	Extremely Cost-Effective and Efficient Solar Vapor Generation under Nonconcentrated Illumination Using Thermally Isolated Black Paper. 2017 , 1, 1600003		249
880	Plasmon hybridisation of self-assembled 3d multiphase nano-titanium oxide towards broadband photon absorption. 2017 , 164, 165-174		5
879	Broadband optical absorption based on single-sized metal-dielectric-metal plasmonic nanostructures with high- μ ? metals. 2017 , 110, 101101		100
878	Robust and Low-Cost Flame-Treated Wood for High-Performance Solar Steam Generation. 2017 , 9, 15052-15057		359
877	Engineering the Complex-Valued Constitutive Parameters of Metamaterials for Perfect Absorption. 2017 , 12, 276		5
876	Paper-based membranes on silicone floaters for efficient and fast solar-driven interfacial evaporation under one sun. 2017 , 5, 16359-16368		127
875	Functionalized Graphene Enables Highly Efficient Solar Thermal Steam Generation. 2017 , 11, 5510-5518		270
874	3D-Printed, All-in-One Evaporator for High-Efficiency Solar Steam Generation under 1 Sun Illumination. 2017 , 29, 1700981		387

873	Two-Dimensional Arrays of Au Halfshells with Different Sizes for Plasmon-Induced Charge Separation. 2017 , 2, 3744-3749	5
872	Mushrooms as Efficient Solar Steam-Generation Devices. 2017 , 29, 1606762	654
871	Non-stoichiometric MoO quantum dots as a light-harvesting material for interfacial water evaporation. 2017 , 53, 6744-6747	107
870	A Plant-Transpiration-Process-Inspired Strategy for Highly Efficient Solar Evaporation. 2017 , 1, 1700046	138
869	Highly Flexible and Efficient Solar Steam Generation Device. 2017 , 29, 1701756	424
868	The emergence of solar thermal utilization: solar-driven steam generation. 2017 , 5, 7691-7709	188
867	Morphology Control of Ag Polyhedron Nanoparticles for Cost-Effective and Fast Solar Steam Generation. 2017 , 1, 1600023	54
866	MXene TiC: An Effective 2D Light-to-Heat Conversion Material. 2017 , 11, 3752-3759	752
865	Broadband light absorber based on porous alumina structure covered with ultrathin iridium film. 2017 , 110, 141103	17
864	Microporous cokes formed in zeolite catalysts enable efficient solar evaporation. 2017 , 5, 6860-6865	41
863	Reusable reduced graphene oxide based double-layer system modified by polyethylenimine for solar steam generation. 2017 , 114, 117-124	170
862	Alloying-assisted phonon engineering of layered BiInSe@nickel foam for efficient solar-enabled water evaporation. 2017 , 9, 16396-16403	49
861	Scalable and low-cost synthesis of black amorphous Al-Ti-O nanostructure for high-efficient photothermal desalination. 2017 , 41, 600-608	107
860	Solar water evaporation by black photothermal sheets. 2017 , 41, 269-284	283
859	Plasmonically-assisted nanoarchitectures for solar water splitting: Obstacles and breakthroughs. 2017 , 16, 61-81	44
858	Tree-Inspired Design for High-Efficiency Water Extraction. 2017 , 29, 1704107	346
857	Panchromatic thin perovskite solar cells with broadband plasmonic absorption enhancement and efficient light scattering management by Au@Ag core-shell nanocuboids. 2017 , 41, 654-664	49
856	High Solar Desalination Efficiency Achieved with 3D Cu ₂ ZnSnS ₄ Nanosheet-Assembled Membranes. 2017 , 1, 1700064	17

855	Engineering Light at the Nanoscale: Structural Color Filters and Broadband Perfect Absorbers. 2017 , 5, 1700368	113
854	Recycled waste black polyurethane sponges for solar vapor generation and distillation. 2017 , 206, 63-69	89
853	Plasmonic Photovoltaic Cells with Dual-Functional Gold, Silver, and Copper Half-Shell Arrays. 2017 , 33, 8976-8981	13
852	All-Ceramic Microfibrous Solar Steam Generator: TiN Plasmonic Nanoparticle-Loaded Transparent Microfibers. 2017 , 5, 8523-8528	68
851	Efficient steam generation by inexpensive narrow gap evaporation device for solar applications. 2017 , 7, 11970	29
850	Synthetic Graphene Oxide Leaf for Solar Desalination with Zero Liquid Discharge. 2017 , 51, 11701-11709	179
849	Large-Area Ultrabroadband Absorber for Solar Thermophotovoltaics Based on 3D Titanium Nitride Nanopillars. 2017 , 5, 1700552	73
848	Graphene oxide-based evaporator with one-dimensional water transport enabling high-efficiency solar desalination. 2017 , 41, 201-209	226
847	Flexible broadband plasmonic absorber on moth-eye substrate. 2017 , 5, 181-186	20
846	Plasmonic heating from indium nanoparticles on a floating microporous membrane for enhanced solar seawater desalination. 2017 , 9, 12843-12849	61
845	A flexible thin-film membrane with broadband Ag@TiO ₂ nanoparticle for high-efficiency solar evaporation enhancement. 2017 , 139, 210-219	33
844	Solar evaporation enhancement by a compound film based on Au@TiO ₂ core-shell nanoparticles. 2017 , 155, 1225-1232	26
843	Solar-driven simultaneous steam production and electricity generation from salinity. 2017 , 10, 1923-1927	268
842	Hierarchical Graphene Foam for Efficient Omnidirectional Solar-Thermal Energy Conversion. 2017 , 29, 1702590	480
841	Extremely Black Vertically Aligned Carbon Nanotube Arrays for Solar Steam Generation. 2017 , 9, 28596-28603	192
840	Polydopamine-filled bacterial nanocellulose as a biodegradable interfacial photothermal evaporator for highly efficient solar steam generation. 2017 , 5, 18397-18402	173
839	Plasmonic metamaterial based unified broadband absorber/near infrared emitter for thermophotovoltaic system based on hexagonally packed tungsten doughnuts. 2017 , 122, 193104	13
838	Rich Mesostructures Derived from Natural Woods for Solar Steam Generation. 2017 , 1, 588-599	242

837	Floating rGO-based black membranes for solar driven sterilization. 2017 , 9, 19384-19389	68
836	Ultra-antireflective synthetic brochosomes. 2017 , 8, 1285	65
835	Photothermal Membrane Distillation for Seawater Desalination. 2017 , 29, 1603504	268
834	Tailoring Graphene Oxide-Based Aerogels for Efficient Solar Steam Generation under One Sun. 2017 , 29, 1604031	537
833	Large-scale broadband absorber based on metallic tungsten nanocone structure. 2017 , 111, 251102	20
832	Tungsten based anisotropic metamaterial as an ultra-broadband absorber. 2017 , 7, 606	51
831	Numerical Study of an Efficient Solar Absorber Consisting of Metal Nanoparticles. 2017 , 12, 601	7
830	Plasmonic Graphene Polyurethane Nanocomposites for Efficient Solar Water Desalination. 2018 , 1, 976-985	53
829	Black titania/graphene oxide nanocomposite films with excellent photothermal property for solar steam generation. 2018 , 33, 674-684	53
828	Commercially Available Activated Carbon Fiber Felt Enables Efficient Solar Steam Generation. 2018 , 10, 9362-9368	121
827	Scalable and Highly Efficient Mesoporous Wood-Based Solar Steam Generation Device: Localized Heat, Rapid Water Transport. 2018 , 28, 1707134	254
826	Synthesis and Photo-Thermal Conversion Properties of Hierarchical Titanium Nitride Nanotube Mesh for Solar Water Evaporation. 2018 , 2, 1700233	29
825	Plasmonic nanoparticle-embedded poly(p-phenylene benzobisoxazole) nanofibrous composite films for solar steam generation. 2018 , 10, 6186-6193	103
824	High Rate Production of Clean Water Based on the Combined Photo-Electro-Thermal Effect of Graphene Architecture. 2018 , 30, e1706805	159
823	Two-Dimensional Flexible Bilayer Janus Membrane for Advanced Photothermal Water Desalination. 2018 , 3, 1165-1171	128
822	Mesoporous Three-Dimensional Graphene Networks for Highly Efficient Solar Desalination under 1 sun Illumination. 2018 , 10, 15602-15608	81
821	A 3D Photothermal Structure toward Improved Energy Efficiency in Solar Steam Generation. 2018 , 2, 1171-1186	321
820	Emerging investigator series: the rise of nano-enabled photothermal materials for water evaporation and clean water production by sunlight. 2018 , 5, 1078-1089	203

819	An efficient solar-enabled 2D layered alloy material evaporator for seawater desalination. 2018 , 6, 3869-3876	57
818	Compact Plasmonic Blackbody for Cancer Theranosis in the Near-Infrared II Window. 2018 , 12, 2643-2651	209
817	Self-Contained Monolithic Carbon Sponges for Solar-Driven Interfacial Water Evaporation Distillation and Electricity Generation. 2018 , 8, 1702149	312
816	Thermally Absorptive Blankets for Highly Efficient Snowbank Melting. 2018 , 34, 2606-2609	2
815	Solar-driven photothermal nanostructured materials designs and prerequisites for evaporation and catalysis applications. 2018 , 5, 323-343	304
814	Three-dimensional TiO ₂ /Au nanoparticles for plasmon enhanced photocatalysis. 2018 , 20, 034005	4
813	Flexible and Salt Resistant Janus Absorbers by Electrospinning for Stable and Efficient Solar Desalination. 2018 , 8, 1702884	423
812	Colloidal Plasmonic Nanocomposites: From Fabrication to Optical Function. 2018 , 118, 3100-3120	80
811	Carbon-Based Sunlight Absorbers in Solar-Driven Steam Generation Devices. 2018 , 2, 1700094	148
810	Ultra-Broadband Perfect Absorption with Stacked Asymmetric Hyperbolic Metamaterial Slabs. 2018 , 22, 114-123	12
809	A Robust CuCr ₂ O ₄ /SiO ₂ Composite Photothermal Material with Underwater Black Property and Extremely High Thermal Stability for Solar-Driven Water Evaporation. 2018 , 2, 1700145	31
808	Nanochannels Photoelectrochemical Biosensor. 2018 , 90, 2341-2347	56
807	Integrative solar absorbers for highly efficient solar steam generation. 2018 , 6, 4642-4648	96
806	Ultra-broadband perfect solar absorber by an ultra-thin refractory titanium nitride meta-surface. 2018 , 179, 346-352	97
805	Bifunctional plasmonic colloidosome/graphene oxide-based floating membranes for recyclable high-efficiency solar-driven clean water generation. 2018 , 11, 3854-3863	25
804	Layered tin monoselenide as advanced photothermal conversion materials for efficient solar energy-driven water evaporation. 2018 , 10, 2876-2886	70
803	Graphene-Based Standalone Solar Energy Converter for Water Desalination and Purification. 2018 , 12, 829-835	387
802	Bioinspired smart asymmetric nanochannel membranes. 2018 , 47, 322-356	250

801	Cold Vapor Generation beyond the Input Solar Energy Limit. 2018 , 5, 1800222	150
800	Carbon nanocomposites with high photothermal conversion efficiency. 2018 , 61, 905-914	66
799	Enhancement of Interfacial Solar Vapor Generation by Environmental Energy. 2018 , 2, 1331-1338	301
798	Highly efficient solar vapour generation via hierarchically nanostructured gels. 2018 , 13, 489-495	825
797	A salt-rejecting floating solar still for low-cost desalination. 2018 , 11, 1510-1519	409
796	Improved light-harvesting and thermal management for efficient solar-driven water evaporation using 3D photothermal cones. 2018 , 6, 9874-9881	185
795	Three-dimensional artificial transpiration for efficient solar waste-water treatment. 2018 , 5, 70-77	275
794	A durable monolithic polymer foam for efficient solar steam generation. 2018 , 9, 623-628	164
793	Plasmonic Wood for High-Efficiency Solar Steam Generation. 2018 , 8, 1701028	472
792	Lightweight, Mesoporous, and Highly Absorptive All-Nanofiber Aerogel for Efficient Solar Steam Generation. 2018 , 10, 1104-1112	227
791	Bio-Inspired Photonic Materials: Prototypes and Structural Effect Designs for Applications in Solar Energy Manipulation. 2018 , 28, 1705309	82
790	Tuning Transpiration by Interfacial Solar Absorber-Leaf Engineering. 2018 , 5, 1700497	57
789	Wood-Based Nanotechnologies toward Sustainability. 2018 , 30, 1703453	229
788	High-Performance Solar Steam Device with Layered Channels: Artificial Tree with a Reversed Design. 2018 , 8, 1701616	174
787	Hot Electron Harvesting via Photoelectric Ejection and Photothermal Heat Relaxation in Hotspots-Enriched Plasmonic/Photonic Disordered Nanocomposites. 2018 , 5, 581-591	41
786	An Ultrathin Flexible 2D Membrane Based on Single-Walled Nanotube/MoS ₂ Hybrid Film for High-Performance Solar Steam Generation. 2018 , 28, 1704505	196
785	A perfect absorber design using a natural hyperbolic material for harvesting solar energy. 2018 , 159, 329-336	46
784	Optical absorption of carbon-gold core-shell nanoparticles. 2018 , 205, 291-298	31

783	Nanomodel visualization of fluid injections in tight formations. 2018 , 10, 21994-22002	32
782	Materials and design of nanostructured broadband light absorbers for advanced light-to-heat conversion. 2018 , 10, 21555-21574	65
781	Omnidirectional and effective salt-rejecting absorber with rationally designed nanoarchitecture for efficient and durable solar vapour generation. 2018 , 6, 22976-22986	35
780	Passive solar high-yield seawater desalination by modular and low-cost distillation. 2018 , 1, 763-772	147
779	Commercial Fiber Products Derived Free-Standing Porous Carbonized-Membranes for Highly Efficient Solar Steam Generation. 2018 , 5,	10
778	Contactless steam generation and superheating under one sun illumination. 2018 , 9, 5086	112
777	Synergistic High-Rate Solar Steaming and Mercury Removal with MoS ₂ /C @ Polyurethane Composite Sponges. 2018 , 8, 1802108	68
776	Evolutionary Photonics for Renewable Energy, Nanomedicine, and Advanced Material Engineering. 2018 , 12, 1700028	7
775	Electronic transport in a two-dimensional superlattice engineered via self-assembled nanostructures. 2018 , 2,	17
774	Interfacial Solar Steam Generation Enables Fast-Responsive, Energy-Efficient, and Low-Cost Off-Grid Sterilization. 2018 , 30, e1805159	146
773	Solar-driven interfacial evaporation. 2018 , 3, 1031-1041	715
772	Flexible Fire-Resistant Photothermal Paper Comprising Ultralong Hydroxyapatite Nanowires and Carbon Nanotubes for Solar Energy-Driven Water Purification. 2018 , 14, e1803387	99
771	Strong Light-Matter Interaction in Lithography-Free Planar Metamaterial Perfect Absorbers. 2018 , 5, 4203-4221	65
770	Hierarchical Porous Carbonized Lotus Seedpods for Highly Efficient Solar Steam Generation. 2018 , 30, 6217-6221	126
769	Solar Evaporator with Controlled Salt Precipitation for Zero Liquid Discharge Desalination. 2018 , 52, 11822-11830	136
768	Narrow bandgap semiconductor decorated wood membrane for high-efficiency solar-assisted water purification. 2018 , 6, 18839-18846	121
767	Highly efficient solar steam generation by hybrid plasmonic structured TiN/mesoporous anodized alumina membrane. 2018 , 33, 3857-3869	13
766	Robust aerogels based on conjugated microporous polymer nanotubes with exceptional mechanical strength for efficient solar steam generation. 2018 , 6, 18183-18190	90

765	A general salt-resistant hydrophilic/hydrophobic nanoporous double layer design for efficient and stable solar water evaporation distillation. 2018 , 5, 1143-1150	150
764	Copper nanodot-embedded graphene urchins of nearly full-spectrum solar absorption and extraordinary solar desalination. 2018 , 53, 425-431	62
763	Hydrophobic W18O49 mesocrystal on hydrophilic PTFE membrane as an efficient solar steam generation device under one sun. 2018 , 6, 10939-10946	64
762	Multiband and Broadband Absorption Enhancement of Monolayer Graphene at Optical Frequencies from Multiple Magnetic Dipole Resonances in Metamaterials. 2018 , 13, 153	36
761	Efficient, Scalable, and High-Temperature Selective Solar Absorbers Based on Hybrid-Strategy Plasmonic Metamaterials. 2018 , 2, 1800057	30
760	Plasmonic Biomimetic Nanocomposite with Spontaneous Subwavelength Structuring as Broadband Absorbers. 2018 , 3, 1578-1583	20
759	Photothermal Cellulose-Patch with Gold-Spiked Silica Microrods Based on. 2018 , 3, 5244-5251	16
758	Optomechanical Cavities for All-Optical Photothermal Sensing. 2018 , 5, 3214-3221	6
757	CuS nanoflowers/semipermeable collodion membrane composite for high-efficiency solar vapor generation. 2018 , 9, 285-294	41
756	Dual functional asymmetric plasmonic structures for solar water purification and pollution detection. 2018 , 51, 451-456	108
755	Pt/Alumina Hyperbolic Metafilms with High-Temperature Stability, Wide Wavelength Tunability, and Omnidirectional Absorption. 2018 , 215, 1800287	7
754	Large-area, low-cost, ultra-broadband, infrared perfect absorbers by coupled plasmonic-photonic micro-cavities. 2018 , 186, 142-148	29
753	Self-Cleaning Porous Surfaces for Dry Condensation. 2018 , 10, 26759-26764	17
752	Tuning the metal filling fraction in metal-insulator-metal ultra-broadband perfect absorbers to maximize the absorption bandwidth. 2018 , 6, 168	60
751	Functional Two- and Three-Dimensional Architectures of Immobilized Metal Nanoparticles. 2018 , 4, 2301-2328 ¹¹	
750	Plasmonic Black Metasurface by Transfer Printing. 2018 , 3, 1800124	6
749	Research progress on novel solar steam generation system based on black nanomaterials. 2018 , 96, 2086-2099 ⁷	
748	Synchronous steam generation and photodegradation for clean water generation based on localized solar energy harvesting. 2018 , 173, 158-166	58

747	Broadband Perfect Absorber Based on TiN-Nanocone Metasurface. 2018 , 8,	25
746	Visible to near-infrared thermal radiation from nanostructured tungsten antennas. 2018 , 20, 09LT01	7
745	Novel Receiver-Enhanced Solar Vapor Generation: Review and Perspectives. 2018 , 11, 253	43
744	High-performance solar steam generation of a paper-based carbon particle system. 2018 , 142, 566-572	53
743	Thermoplasmonic and Photothermal Metamaterials for Solar Energy Applications. 2018 , 6, 1800317	27
742	Floating, highly efficient, and scalable graphene membranes for seawater desalination using solar energy. 2018 , 20, 3689-3695	70
741	Solar Absorber Gel: Localized Macro-Nano Heat Channeling for Efficient Plasmonic Au Nanoflowers Photothermal Vaporization and Triboelectric Generation. 2018 , 8, 1800711	176
740	Patternable fabrication of hyper-hierarchical metal surface structures for ultrabroadband antireflection and self-cleaning. 2018 , 457, 991-999	19
739	A mimetic transpiration system for record high conversion efficiency in solar steam generator under one-sun. 2018 , 8, 166-173	106
738	Nature-Inspired, 3D Origami Solar Steam Generator toward Near Full Utilization of Solar Energy. 2018 , 10, 28517-28524	150
737	Silk-based systems for highly efficient photothermal conversion under one sun: portability, flexibility, and durability. 2018 , 6, 17212-17219	90
736	The optical duality of tellurium nanoparticles for broadband solar energy harvesting and efficient photothermal conversion. <i>Science Advances</i> , 2018 , 4, eaas9894	14-3 114
735	Efficient solar water vapor generation enabled by water-absorbing polypyrrole coated cotton fabric with enhanced heat localization. 2018 , 141, 406-412	70
734	Evaporation above a bulk water surface using an oil lamp inspired highly efficient solar-steam generation strategy. 2018 , 6, 12267-12274	125
733	Solar thermal-driven capacitance enhancement of supercapacitors. 2018 , 11, 2016-2024	54
732	Numerical study of a wide-angle polarization-independent ultra-broadband efficient selective metamaterial absorber for near-ideal solar thermal energy conversion.. 2018 , 8, 21054-21064	19
731	A Novel Ink-Stained Paper for Solar Heavy Metal Treatment and Desalination. 2018 , 2, 1800073	37
730	All Natural, High Efficient Groundwater Extraction via Solar Steam/Vapor Generation. 2019 , 3, 1800055	56

729	Solar absorber material and system designs for photothermal water vaporization towards clean water and energy production. 2019 , 12, 841-864	709
728	A 3D-Structured Sustainable Solar-Driven Steam Generator Using Super-Black Nylon Flocking Materials. 2019 , 15, e1902070	44
727	Prospects of artificial tree for solar desalination. 2019 , 25, 18-25	9
726	Solar thermal utilizations revived by advanced solar evaporation. 2019 , 25, 26-34	11
725	Harnessing Solar-Driven Photothermal Effect toward the Water-Energy Nexus. 2019 , 6, 1900883	104
724	Continuously Producing Watersteam and Concentrated Brine from Seawater by Hanging Photothermal Fabrics under Sunlight. 2019 , 29, 1905485	84
723	Recent progress of nanostructured interfacial solar vapor generators. 2019 , 17, 45-84	35
722	Molten salts promoting the controlled carbonization of waste polyesters into hierarchically porous carbon for high-performance solar steam evaporation. 2019 , 7, 22912-22923	69
721	Porous reduced graphene oxide/nickel foam for highly efficient solar steam generation. 2019 , 30, 425403	42
720	Sugarcane-Based Photothermal Materials for Efficient Solar Steam Generation. 2019 , 4, 7891-7895	17
719	Simultaneous production of fresh water and electricity via multistage solar photovoltaic membrane distillation. 2019 , 10, 3012	129
718	Mussel-Inspired Surface Engineering for Water-Remediation Materials. 2019 , 1, 115-155	183
717	Carbon nanofiber stringed hierarchical porous carbon polyhedrons flexible thin films for solar vapor generation. 2019 , 125, 1	5
716	Large-Area, Broadband, Wide-Angle Plasmonic Metasurface Absorber for Midwavelength Infrared Atmospheric Transparency Window. 2019 , 7, 1900841	31
715	Nanofluids-based and porous media-based solar evaporation: A comparative study. 2019 ,	0
714	Pathways and challenges for efficient solar-thermal desalination. <i>Science Advances</i> , 2019 , 5, eaax0763	14.3 172
713	High-temperature stable plasmonic and cavity resonances in metal nanoparticle-decorated silicon nanopillars for strong broadband absorption in photothermal applications. 2019 , 11, 14777-14784	11
712	Biomimetic MXene Textures with Enhanced Light-to-Heat Conversion for Solar Steam Generation and Wearable Thermal Management. 2019 , 9, 1901687	128

711	Synergistic Energy Nanoconfinement and Water Activation in Hydrogels for Efficient Solar Water Desalination. 2019 , 13, 7913-7919	187
710	Graphene oxide foam fabricated with surfactant foaming method for efficient solar vapor generation. 2019 , 54, 12782-12793	15
709	A Novel Flake-like Cu ₇ S ₄ Solar Absorber for High-Performance Large-Scale Water Evaporation. 2019 , 2, 5154-5161	17
708	Deep Eutectic Solvent-Assisted In Situ Wood Delignification: A Promising Strategy To Enhance the Efficiency of Wood-Based Solar Steam Generation Devices. 2019 , 11, 26032-26037	57
707	Enhancing solar steam generation through manipulating the heterostructure of PVDF membranes with reduced reflection and conduction. 2019 , 7, 17505-17515	33
706	Plasmonic Nanoparticles and Island Films for Solar Energy Harvesting: A Comparative Study of Cu, Al, Ag and Au Performance. 2019 , 9, 382	8
705	Bioinspired functions. 2019 , 147-246	1
704	Development and Evolution of the System Structure for Highly Efficient Solar Steam Generation from Zero to Three Dimensions. 2019 , 29, 1903255	137
703	Photonic Metamaterial Absorbers: Morphology Engineering and Interdisciplinary Applications. 2020 , 32, e1903787	48
702	Vertically Aligned Janus MXene-Based Aerogels for Solar Desalination with High Efficiency and Salt Resistance. 2019 , 13, 13196-13207	138
701	Devices for promising applications. 2019 , 247-314	
700	Frequency-region quantitatively adjustable Si perfect absorbers. 2019 , 12, 102001	1
699	Photothermal materials for efficient solar powered steam generation. 2019 , 13, 636-653	20
698	Cluster-Nuclei Coassembled into Two-Dimensional Hybrid CuO-PMA Sub-1 nm Nanosheets. 2019 , 141, 18754-18758	35
697	Constructing Metastructures with Broadband Electromagnetic Functionality. 2020 , 32, e1904646	31
696	Flexible and Washable CNT-Embedded PAN Nonwoven Fabrics for Solar-Enabled Evaporation and Desalination of Seawater. 2019 , 11, 35005-35014	96
695	Osmotic Pumping and Salt Rejection by Polyelectrolyte Hydrogel for Continuous Solar Desalination. 2019 , 9, 1900552	61
694	Solar vapor generation under concentration illumination using carbon black. 2019 , 1279, 012001	

693	Multipole Resonance in Arrays of Diamond Dielectric: A Metamaterial Perfect Absorber in the Visible Regime. 2019 , 9,	10
692	Advances in solar evaporator materials for freshwater generation. 2019 , 7, 24092-24123	96
691	Mass production of superhydrophilic sponges for efficient and stable solar-driven highly corrosive water evaporation. 2019 , 5, 2041-2047	5
690	Titanium nanoholes meta-surface for ultra-broadband infrared absorption. 2019 , 15, 102578	4
689	A High-Efficiency and Low-Cost Interfacial Evaporation System Based on Graphene-Loaded Pyramid Polyurethane Sponge for Wastewater and Seawater Treatments. 2019 , 2, 7223-7232	36
688	Portable Trilayer Photothermal Structure for Hybrid Energy Harvesting and Synergic Water Purification. 2019 , 11, 38674-38682	25
687	Electrically Driven Interfacial Evaporation for High-Efficiency Steam Generation and Sterilization. 2019 , 4, 16603-16611	11
686	A photothermal reservoir for highly efficient solar steam generation without bulk water. 2019 , 64, 1625-1633	114
685	Constructing hierarchical carbon framework and quantifying water transfer for novel solar evaporation configuration. 2019 , 155, 25-33	28
684	Enhancing efficiency of carbonized wood based solar steam generator for wastewater treatment by optimizing the thickness. 2019 , 193, 434-441	28
683	Mushroom-Like rGO/PAM Hybrid Cryogels with Efficient Solar-Heating Water Evaporation. 2019 , 2, 7554-7563	27
682	Broadband polarization-insensitive absorption by metasurface with metallic pieces for energy harvesting application. 2019 , 249, 114419	2
681	An ultra-flexible plasmonic metamaterial film for efficient omnidirectional and broadband optical absorption. 2019 , 11, 437-443	22
680	Facile preparation of a robust porous photothermal membrane with antibacterial activity for efficient solar-driven interfacial water evaporation. 2019 , 7, 704-710	57
679	A high-absorption and self-driven salt-resistant black gold nanoparticle-deposited sponge for highly efficient, salt-free, and long-term durable solar desalination. 2019 , 7, 2581-2588	65
678	Nickel nanoparticles individually encapsulated in densified ceramic shells for thermally stable solar energy absorption. 2019 , 7, 3039-3045	7
677	Patterned Surfaces for Solar-Driven Interfacial Evaporation. 2019 , 11, 7584-7590	36
676	Ice-Templated W-Cu Composites with High Anisotropy. 2019 , 9, 476	9

675	Novel onion-like graphene aerogel beads for efficient solar vapor generation under non-concentrated illumination. 2019 , 7, 4400-4407	49
674	Biomass-derived solar-to-thermal materials: promising energy absorbers to convert light to mechanical motion. 2019 , 7, 4002-4008	19
673	Incorporation of gold nanocages into electrospun nanofibers for efficient water evaporation through photothermal heating. 2019 , 12, 129-135	35
672	Plasmon Based Double-Layer Hydrogel Device for a Highly Efficient Solar Vapor Generation. 2019 , 29, 1901312	88
671	A Monte Carlo model for self-assembly of polytetrafluoroethylene nanoparticle films via repulsive electrostatic interactions. 2019 , 21, 12477-12484	3
670	Enhancements of absorption and photothermal conversion of solar energy enabled by surface plasmon resonances in nanoparticles and metamaterials. 2019 , 140, 453-482	12
669	Solar thermal desalination as a nonlinear optical process. 2019 , 116, 13182-13187	48
668	Damage-Free Solar Dewatering of Micro-Algal Concentrates via Multifunctional Hierarchical Porous Graphene. 2019 , 3, 1900045	3
667	Multifunctional Solar Waterways: Plasma-Enabled Self-Cleaning Nanoarchitectures for Energy-Efficient Desalination. 2019 , 9, 1901286	66
666	Multifunctional molybdenum oxide for solar-driven water evaporation and charged dyes adsorption. 2019 , 491, 328-334	23
665	Efficient Water Transport and Solar Steam Generation Radially, Hierarchically Structured Aerogels. 2019 , 13, 7930-7938	149
664	Heterostructured Sn/SnO ₂ nanotube peapods with a strong plasmonic effect for photoelectrochemical water oxidation. 2019 , 7, 16883-16891	19
663	Harnessing Heat Beyond 200 °C from Unconcentrated Sunlight with Nonevacuated Transparent Aerogels. 2019 , 13, 7508-7516	51
662	Portable Low-Pressure Solar Steaming-Collection Unisystem with Polypyrrole Origamis. 2019 , 31, e1900720	120
661	CoS-Based Photothermal Membrane with High Mechanical Properties for Efficient Solar Water Evaporation and Photothermal Antibacterial Applications. 2019 , 11, 20820-20827	36
660	A Janus evaporator with low tortuosity for long-term solar desalination. 2019 , 7, 15333-15340	95
659	Nature-inspired salt resistant polypyrrole wood for highly efficient solar steam generation. 2019 , 3, 3000-3008	52
658	Plasmon-enhanced solar vapor generation. 2019 , 8, 771-786	42

657	Anti-biofouling double-layered unidirectional scaffold for long-term solar-driven water evaporation. 2019 , 7, 16696-16703	31
656	Membrane assembled from anti-fouling copper-zinc-tin-selenide nanocarambolas for solar-driven interfacial water evaporation. 2019 , 373, 955-962	54
655	Photothermal Membrane Water Treatment for Two Worlds. 2019 , 52, 1215-1225	72
654	Shape Conformal and Thermal Insulative Organic Solar Absorber Sponge for Photothermal Water Evaporation and Thermoelectric Power Generation. 2019 , 9, 1900250	179
653	Interfacial Solar-to-Heat Conversion for Desalination. 2019 , 9, 1900310	114
652	Reduced Graphene Oxide Coated Hollow Polyester Fibers for Efficient Solar Steam Generation. 2019 , 7, 1900265	18
651	Self-assembly carbon dots for powerful solar water evaporation. 2019 , 149, 556-563	64
650	Perfect blackbody sheets from nano-precision microtextured elastomers for light and thermal radiation management. 2019 , 7, 5418-5425	22
649	Porphyrin Covalent Organic Framework (POF)-Based Interface Engineering for Solar Steam Generation. 2019 , 6, 1900254	59
648	High-Efficiency Superheated Steam Generation for Portable Sterilization under Ambient Pressure and Low Solar Flux. 2019 , 11, 18466-18474	48
647	Nanoparticle-based solar vapor generation: An experimental and numerical study. 2019 , 178, 447-459	14
646	A High-Performance Self-Regenerating Solar Evaporator for Continuous Water Desalination. 2019 , 31, e1900498	336
645	Highly efficient solar steam generation of supported metal-organic framework membranes by a photoinduced electron transfer process. 2019 , 11, 11121-11127	11
644	The revival of thermal utilization from the Sun: interfacial solar vapor generation. 2019 , 6, 562-578	134
643	Ultra-thin Semiconductor/Metal Resonant Superabsorbers. 2019 , 14, 1427-1433	1
642	Truncated titanium/semiconductor cones for wide-band solar absorbers. 2019 , 30, 305203	71
641	Simultaneously achieving thermal insulation and rapid water transport in sugarcane stems for efficient solar steam generation. 2019 , 7, 9034-9039	102
640	High-temperature stable refractory nanoneedles with over 99% solar absorptance. 2019 , 7, 031101	7

- 639 Tailoring Nanoscale Surface Topography of Hydrogel for Efficient Solar Vapor Generation. **2019**, 19, 2530-2536¹⁴⁷
- 638 Extraordinary optical fields in nanostructures: from sub-diffraction-limited optics to sensing and energy conversion. **2019**, 48, 2458-2494 67
- 637 Biomimetic Superstructures Assembled from Au Nanostars and Nanospheres for Efficient Solar Evaporation. **2019**, 3, 1900003 23
- 636 Self-floating nanostructured Ni₃NiOx/Ni foam for solar thermal water evaporation. **2019**, 7, 8485-8490 44
- 635 Large-Area Low-Cost Dielectric Perfect Absorber by One-Step Sputtering. **2019**, 7, 1801596 15
- 634 Multilayer Polypyrrole Nanosheets with Self-Organized Surface Structures for Flexible and Efficient Solar-Thermal Energy Conversion. **2019**, 31, e1807716 204
- 633 Femtosecond laser induced robust Ti foam based evaporator for efficient solar desalination. **2019**, 7, 8361-8367 29
- 632 Hierarchical Porous SWCNT Stringed Carbon Polyhedrons and PSS Threaded MOF Bilayer Membrane for Efficient Solar Vapor Generation. **2019**, 15, e1900354 53
- 631 Fabrication Strategies of 3D Plasmonic Structures for SERS. **2019**, 13, 30-42 19
- 630 Bismuth-based metamaterials: from narrowband reflective color filter to extremely broadband near perfect absorber. **2019**, 8, 823-832 39
- 629 Conductive hollow kapok fiber-PPy monolithic aerogels with excellent mechanical robustness for efficient solar steam generation. **2019**, 7, 9673-9679 99
- 628 Recyclable CNT-coupled cotton fabrics for low-cost and efficient desalination of seawater under sunlight. **2019**, 462, 29-38 71
- 627 Superelastic Graphene Nanocomposite for High Cycle-Stability Water Capture-Release under Sunlight. **2019**, 11, 15616-15622 23
- 626 Macroporous three-dimensional MXene architectures for highly efficient solar steam generation. **2019**, 7, 10446-10455 138
- 625 Insulating plasmonic photothermal heat of Ag nanoparticles by a thin carbon shell. **2019**, 791, 380-384 6
- 624 Metal-organic framework derived porous carbon of light trapping structures for efficient solar steam generation. **2019**, 196, 36-42 54
- 623 Porous three-dimensional carbon foams with interconnected microchannels for high-efficiency solar-to-vapor conversion and desalination. **2019**, 7, 13036-13042 70
- 622 Full Biomass-Derived Solar Stills for Robust and Stable Evaporation To Collect Clean Water from Various Water-Bearing Media. **2019**, 11, 10672-10679 110

621	Challenges and Opportunities for Solar Evaporation. 2019 , 3, 683-718	420
620	A perspective on bio-inspired interfacial systems for solar clean-water generation. 2019 , 9, 3-13	6
619	Visible Light Plasmonic Heating-Enhanced Electrochemical Current in Nanoporous Gold Cathodes. 2019 , 166, H146-H150	7
618	Capillary-Flow-Optimized Heat Localization Induced by an Air-Enclosed Three-Dimensional Hierarchical Network for Elevated Solar Evaporation. 2019 , 11, 9974-9983	32
617	Three-Dimensional Porous Solar-Driven Interfacial Evaporator for High-Efficiency Steam Generation under Low Solar Flux. 2019 , 4, 3546-3555	39
616	An open thermo-electrochemical cell enabled by interfacial evaporation. 2019 , 7, 6514-6521	27
615	Bioinspired Soot-Deposited Janus Fabrics for Sustainable Solar Steam Generation with Salt-Rejection. 2019 , 3, 1800117	42
614	Macroporous 3D MXene architecture for solar-driven interfacial water evaporation. 2019 , 09, 1950047	7
613	Sustainable desalination using portable devices: A concise review. 2019 , 194, 815-839	20
612	Carrot-inspired solar thermal evaporator. 2019 , 7, 26911-26916	44
611	Pt nanoparticles embedded in flowerlike NH ₂ -UiO-68 for enhanced photocatalytic carbon dioxide reduction. 2019 , 7, 26490-26495	31
610	A nanopump for low-temperature and efficient solar water evaporation. 2019 , 7, 24311-24319	25
609	Solar-to-Steam Generation via Porous Black Membranes with Tailored Pore Structures. 2019 , 11, 48300-48308	14
608	Full Spectrum Solar Thermal Energy Harvesting and Storage by a Molecular and Phase-Change Hybrid Material. 2019 , 3, 3100-3111	45
607	Functionalized biomass-derived composites for solar vapor generation. 2019 , 6, 125613	8
606	Bifunctional Cu _{2-x} Se-decorated hierarchical TiO ₂ nanotube mesh with solar water evaporation and photodegradation effects for clean water generation. 2019 , 19, 2001-2008	4
605	Janus Poly(ionic liquid) Monolithic Photothermal Materials with Superior Salt-Rejection for Efficient Solar Steam Generation. 2019 , 2, 8862-8870	33
604	Architecting a Floatable, Durable, and Scalable Steam Generator: Hydrophobic/Hydrophilic Bifunctional Structure for Solar Evaporation Enhancement. 2019 , 3, 1800176	54

603	Highly-dispersed nickel nanoparticles decorated titanium dioxide nanotube array for enhanced solar light absorption. 2019 , 464, 716-724	9
602	Chinese Ink: A Powerful Photothermal Material for Solar Steam Generation. 2019 , 6, 1801252	74
601	Space-Confined Seeded Growth of Black Silver Nanostructures for Solar Steam Generation. 2019 , 19, 400-407	110
600	Recent progress in solar-driven interfacial water evaporation: Advanced designs and applications. 2019 , 57, 507-518	335
599	Facile and Scalable Fabrication of Surface-Modified Sponge for Efficient Solar Steam Generation. 2019 , 12, 426-433	82
598	Applications of 2D MXenes in energy conversion and storage systems. 2019 , 48, 72-133	878
597	A Flexible, Self-Floating Composite for Efficient Water Evaporation. 2019 , 3, 1800085	7
596	All-Ceramic Solar-Driven Water Purifier Based on Anodized Aluminum Oxide and Plasmonic Titanium Nitride. 2019 , 3, 1800112	38
595	Superwetting Monolithic Hollow-Carbon-Nanotubes Aerogels with Hierarchically Nanoporous Structure for Efficient Solar Steam Generation. 2019 , 9, 1802158	231
594	Carbonized daikon for high efficient solar steam generation. 2019 , 191, 83-90	106
593	A review of three-dimensional graphene-based materials: Synthesis and applications to energy conversion/storage and environment. 2019 , 143, 610-640	124
592	Nanomaterials for the water-energy nexus. 2019 , 44, 59-66	22
591	Fast-Growing Field of Interfacial Solar Steam Generation: Evolutional Materials, Engineered Architectures, and Synergistic Applications. 2019 , 3, 1800206	76
590	Plasmonic Pt Nanocrystals by Using a Sacrificial In Component via the Enhanced Dewetting on Sapphire (0001): Improvement on Morphological and Localized Surface Plasmon Resonance Properties. 2019 , 123, 2410-2420	3
589	Black Diatom Colloids toward Efficient Photothermal Converters for Solar-to-Steam Generation. 2019 , 11, 4531-4540	19
588	Large-Area Broadband Near-Perfect Absorption from a Thin Chalcogenide Film Coupled to Gold Nanoparticles. 2019 , 11, 5176-5182	15
587	Self-Floating Carbonized Tissue Membrane Derived from Commercial Facial Tissue for Highly Efficient Solar Steam Generation. 2019 , 7, 2911-2915	59
586	Extremely high water-production created by a nanoink-stained PVA evaporator with embossment structure. 2019 , 55, 368-376	63

585	Near-unity, full-spectrum, nanoscale solar absorbers and near-perfect blackbody emitters. 2019 , 190, 20-29	83
584	Direct solar steam generation system for clean water production. 2019 , 18, 429-446	151
583	Highly efficient solar steam generation of low cost TiN/bio-carbon foam. 2019 , 62, 711-718	37
582	A flexible photothermal cotton-CuS nanocage-agarose aerogel towards portable solar steam generation. 2019 , 56, 708-715	210
581	Carbonized Bamboos as Excellent 3D Solar Vapor-Generation Devices. 2019 , 4, 1800593	68
580	Oxygen-Defected Molybdenum Oxides Hierarchical Nanostructure Constructed by Atomic-Level Thickness Nanosheets as an Efficient Absorber for Solar Steam Generation. 2019 , 3, 1800277	39
579	Copper nanoparticles with near-unity, omnidirectional, and broadband optical absorption for highly efficient solar steam generation. 2019 , 30, 015402	39
578	N-doped graphene /carbon hybrid aerogels for efficient solar steam generation. 2019 , 142, 13-19	98
577	Functional photothermal sponges for efficient solar steam generation and accelerated cleaning of viscous crude-oil spill. 2020 , 204, 110203	39
576	Spectrally Tailored Light-Matter Interaction in Lithography-Free Functional Nanomaterials. 2020 , 217, 1900677	2
575	Performance investigation of a solar water distiller integrated with a parabolic collector using fuzzy technique. 2020 , 49, 120-134	1
574	A robust asymmetric porous SWCNT/Gelatin thin membrane with salt-resistant for efficient solar vapor generation. 2020 , 18, 100459	14
573	Novel advances in metal-based solar absorber for photothermal vapor generation. 2020 , 31, 2159-2166	20
572	Laser-induced plasmonic heating in copper nanowire fabric as a photothermal catalytic reactor. 2020 , 379, 122285	15
571	Photothermal-assisted photocatalytic degradation with ultrahigh solar utilization: Towards practical application. 2020 , 379, 122382	34
570	Broadband-absorbing WO ₃ -x nanorod-decorated wood evaporator for highly efficient solar-driven interfacial steam generation. 2020 , 205, 110254	37
569	Superhydrophilic and mechanically robust phenolic resin as double layered photothermal materials for efficient solar steam generation. 2020 , 16, 100375	23
568	Ultra-Broadband and Omnidirectional Perfect Absorber Based on Copper Nanowire/Carbon Nanotube Hierarchical Structure. 2020 , 7, 366-374	5

567	A novel floatable composite hydrogel for solar evaporation enhancement. 2020 , 6, 221-230	5
566	Solar evaporation for simultaneous steam and power generation. 2020 , 8, 513-531	65
565	Gel-Emulsion-Templated Polymeric Aerogels for Water Treatment by Organic Liquid Removal and Solar Vapor Generation. 2020 , 13, 749-755	14
564	Specific phase modulation and infrared photon confinement in solar selective absorbers. 2020 , 18, 100533	6
563	3D-Structured Carbonized Sunflower Heads for Improved Energy Efficiency in Solar Steam Generation. 2020 , 12, 2171-2179	85
562	Broadband Plasmonic Enhancement of High-Efficiency Dye-Sensitized Solar Cells by Incorporating Au@Ag@SiO Core-Shell Nanocuboids. 2020 , 12, 538-545	11
561	Self-Assembly of Carbon Black/AAO Templates on Nanoporous Si for Broadband Infrared Absorption. 2020 , 12, 4081-4087	9
560	Solar steam generation enabled by bubbly flow nanofluids. 2020 , 206, 110292	9
559	Tree-like structures of InN nanoparticles on agminated anodic aluminum oxide by plasma-assisted reactive evaporation. 2020 , 503, 144309	2
558	Graphene-Based Stand-Alone Networks for Efficient Solar Steam Generation. 2020 , 59, 1135-1141	16
557	Ferric tannate photothermal material for efficient water distillation. 2020 , 6, 911-915	20
556	Solar Thermal Water Evaporation: A Review. 2020 , 5, 437-456	117
555	Highly Efficient Solar Steam Generation by Glassy Carbon Foam Coated with Two-Dimensional Metal Chalcogenides. 2020 , 12, 2490-2496	22
554	Ultralight Biomass Porous Foam with Aligned Hierarchical Channels as Salt-Resistant Solar Steam Generators. 2020 , 12, 798-806	68
553	Biomass Carbon Materials for Efficient Solar Steam Generation Prepared from Carbonized Enteromorpha Prolifera. 2020 , 8, 1901215	17
552	Enhanced water yield of solar desalination by thermal concentrated multistage distiller. 2020 , 477, 114260	33
551	Carbonized rice husk foam constructed by surfactant foaming method for solar steam generation. 2020 , 151, 1067-1075	32
550	Hot Plasmonics: Temperature-Related Concepts and Applications of Metal Nanostructures. 2020 , 8, 1901166	43

549	Superhydrophilic and Oleophobic Porous Architectures Based on Basalt Fibers as Oil-Repellent Photothermal Materials for Solar Steam Generation. 2020 , 13, 493-500	37
548	Bamboo decorated with plasmonic nanoparticles for efficient solar steam generation. 2020 , 167, 114712	45
547	Recent advances and challenges for solar-driven water evaporation system toward applications. 2020 , 68, 104324	135
546	Solar Steam Generation and Desalination Using Ultra-Broadband Absorption in Plasmonic Alumina Nanowire Haze Structure-Graphene Oxide-Gold Nanoparticle Composite. 2020 , 36, 12494-12503	13
545	Optimization strategies of composite phase change materials for thermal energy storage, transfer, conversion and utilization. 2020 , 13, 4498-4535	64
544	Modulating Solar Energy Harvesting on TiO ₂ Nanochannel Membranes by Plasmonic Nanoparticle Assembly for Desalination of Contaminated Seawater. 2020 , 3, 10895-10904	12
543	Large-detecting-area and high-withstanding-voltage UV detectors with tunable responsivity enhancement by mediation of density of Ag nanoparticles. 2020 , 130, 58003	
542	A yolk@shell superhydrophobic/superhydrophilic solar evaporator for efficient and stable desalination. 2020 , 8, 14736-14745	33
541	Super black iron nanostructures with broadband ultralow reflectance for efficient photothermal conversion. 2020 , 521, 146388	6
540	Cellular Structured CNTs@SiO Nanofibrous Aerogels with Vertically Aligned Vessels for Salt-Resistant Solar Desalination. 2020 , 32, e1908269	94
539	An all-day solar-driven vapor generator via photothermal and Joule-heating effects. 2020 , 8, 25178-25186	13
538	Integration of daytime radiative cooling and solar heating for year-round energy saving in buildings. 2020 , 11, 6101	60
537	Recent advances in solar-driven evaporation systems. 2020 , 8, 25571-25600	28
536	Plasmonic metal nitrides for solar-driven water evaporation. 2020 , 6, 3169-3177	5
535	Rational 3D Coiled Morphology for Efficient Solar-Driven Desalination. 2020 , 54, 16240-16248	8
534	Highly Efficient Solar Evaporator Based On a Hydrophobic Association Hydrogel. 2020 , 8, 18114-18125	9
533	Salt-Resistant Photothermal Materials Based on Monolithic Porous Ionic Polymers for Efficient Solar Steam Generation. 2020 , 3, 8746-8754	12
532	Tillandsia-Inspired Hygroscopic Photothermal Organogels for Efficient Atmospheric Water Harvesting. 2020 , 132, 19399-19408	3

531	Surface-Carbonized Bamboos with Multilevel Functional Biostructures Deliver High Photothermal Water Evaporation Performance. 2020 , 4, 2000126	22
530	Tillandsia-Inspired Hygroscopic Photothermal Organogels for Efficient Atmospheric Water Harvesting. 2020 , 59, 19237-19246	37
529	Energy Matching for Boosting Water Evaporation in Direct Solar Steam Generation. 2020 , 4, 2000341	25
528	Towards highly efficient solar-driven interfacial evaporation for desalination. 2020 , 8, 17907-17937	40
527	Reduced Graphene Oxide/Carbon Fiber Composite Membrane for Self-floating Solar-thermal Steam Production. 2020 , 36, 699-702	5
526	Enhanced solar desalination by delignified wood coated with bimetallic Fe/Pd nanoparticles. 2020 , 493, 114657	21
525	Superwetting B4C bilayer foam for high cost-performance solar water purification. 2020 , 18, 100498	8
524	All-Solution-Processed Ultrahigh Broadband and Wide-Angle Perfect Absorber Based on Mxene-Gold Nanoparticles. 2020 , 8, 2000447	11
523	Proper Adhesive Choice Increases Photothermal Float Durability in Mine Water Disposal Applications. 2020 , 39, 724-734	1
522	Efficient Broadband Truncated-Pyramid-Based Metamaterial Absorber in the Visible and Near-Infrared Regions. 2020 , 10, 784	8
521	A MXene-Based Hierarchical Design Enabling Highly Efficient and Stable Solar-Water Desalination with Good Salt Resistance. 2020 , 30, 2007110	81
520	Omnidirectional, Broadband Light Absorption in a Hierarchical Nanoturf Membrane for an Advanced Solar-Vapor Generator. 2020 , 30, 2003862	18
519	Blackbody-Inspired Array Structural Polypyrrole-Sunflower Disc with Extremely High Light Absorption for Efficient Photothermal Evaporation. 2020 , 12, 46653-46660	31
518	Ultrabroadband Absorption Enhancement via Hybridization of Localized and Propagating Surface Plasmons. 2020 , 10,	7
517	Porous Graphene/Polyimide Membrane with a Three-Dimensional Architecture for Rapid and Efficient Solar Desalination via Interfacial Evaporation. 2020 , 8, 13850-13858	14
516	Gas Foaming Guided Fabrication of 3D Porous Plasmonic Nanoplatfom with Broadband Absorption, Tunable Shape, Excellent Stability, and High Photothermal Efficiency for Solar Water Purification. 2020 , 30, 2003995	44
515	A low-cost lotus leaf-based carbon film for solar-driven steam generation. 2020 , 35, 436-443	12
514	Nickel-Infused Nanoporous Alumina as Tunable Solar Absorber. 2020 , 5, 2575-2583	3

513	Nanoconfined Water-Molecule Channels for High-Yield Solar Vapor Generation under Weaker Sunlight. 2020 , 32, e2001544	50
512	Design of Transparent Metasurfaces Based on Asymmetric Nanostructures for Directional and Selective Absorption. 2020 , 13,	5
511	MoS ₂ Nanosheet@Carbon Foam Composites for Solar Steam Generation. 2020 , 3, 9706-9714	15
510	Applications and challenges of thermoplasmonics. 2020 , 19, 946-958	102
509	Vertically aligned reduced graphene oxide/Ti ₃ C ₂ T _x MXene hybrid hydrogel for highly efficient solar steam generation. 2020 , 13, 3048-3056	59
508	Wood nanotechnology: a more promising solution toward energy issues: a mini-review. 2020 , 27, 8513-8526	7
507	Sponge-templating synthesis of sandwich-like reduced graphene oxide nanoplates with confined gold nanoparticles and their enhanced stability for solar evaporation. 2020 , 63, 1957-1965	9
506	Liquid Transport in Fibrillar Channels of Ion-Associated Cellular Nanowood Foams. 2020 , 12, 58212-58222	4
505	Solar Thermoradiative-Photovoltaic Energy Conversion. 2020 , 1, 100258	4
504	Cheap, facile, and upscalable activated carbon-based photothermal layers for solar steam generation. 2020 , 10, 42432-42440	9
503	CoWO ₃ -Based Photothermal Membranes for Solar-Driven Water Evaporation and Eutrophic Lake Water Purification. 2020 , 5, 31598-31607	14
502	Polymeric Membranes with Selective Solution-Diffusion for Intercepting Volatile Organic Compounds during Solar-Driven Water Remediation. 2020 , 32, e2004401	54
501	Cobalt Plasmonic Superstructures Enable Almost 100% Broadband Photon Efficient CO Photocatalysis. 2020 , 32, e2000014	55
500	Photothermal conversion of Bi ₂ Se ₃ nanosheets and efficient steam generation by capillary siphoning. 2020 , 6, 1304-1311	4
499	Stackable nickel@cobalt@polydopamine nanosheet based photothermal sponges for highly efficient solar steam generation. 2020 , 8, 11665-11673	91
498	An Antifouling@porous loofah sponge with internal microchannels as solar absorbers and water pumpers for thermal desalination. 2020 , 8, 12323-12333	49
497	Versatile coating with multifunctional performance for solar steam generation. 2020 , 74, 104886	56
496	A salt-rejecting anisotropic structure for efficient solar desalination via heat@mass flux decoupling. 2020 , 8, 12089-12096	16

495	Manipulating metals for adaptive thermal camouflage. <i>Science Advances</i> , 2020 , 6, eaba3494	14.3	44
494	Modeling and experimental investigation on a direct steam generation solar collector with flat plate thermal concentration. 2020 , 38, 1879-1892		1
493	Lotus-Inspired Evaporator with Janus Wettability and Bimodal Pores for Solar Steam Generation. 2020 , 1, 100074		23
492	Cellulose Nanomaterials in Interfacial Evaporators for Desalination: A "Natural" Choice. 2021 , 33, e2000922		48
491	Engineering trace AuNPs on monodispersed carbonized organosilica microspheres drives highly efficient and low-cost solar water purification. 2020 , 8, 13311-13319		20
490	Constructing 3D optical absorption holes by stacking macroporous membrane for highly efficient solar steam generation. 2020 , 159, 944-953		8
489	Plasmonic wooden flower for highly efficient solar vapor generation. 2020 , 76, 104998		51
488	Plasmonic and Superhydrophobic Self-Decontaminating N95 Respirators. 2020 , 14, 8846-8854		46
487	Carbonized Bark by Laser Treatment for Efficient Solar-Driven Interface Evaporation. 2020 , 5, 13482-13488		5
486	Scalable, Flexible, Durable, and Salt-Tolerant CuS/Bacterial Cellulose Gel Membranes for Efficient Interfacial Solar Evaporation. 2020 , 8, 9017-9026		14
485	Carbon-based absorbers for solar evaporation: Steam generation and beyond. 2020 , 25, e00182		16
484	Biradical-Featured Stable Organic-Small-Molecule Photothermal Materials for Highly Efficient Solar-Driven Water Evaporation. 2020 , 32, e1908537		53
483	Carbonized tofu as photothermal material for highly efficient solar steam generation. 2020 , 44, 9213-9221		18
482	Enhanced performance of a direct contact membrane distillation (DCMD) system with a Ti/MgF ₂ solar absorber under actual weather environments. 2020 , 491, 114580		0
481	Photothermal response of plasmonic nanofillers for membrane distillation. 2020 , 152, 114102		6
480	Highly Thermally Insulated and Superhydrophilic Corn Straw for Efficient Solar Vapor Generation. 2020 , 12, 16503-16511		52
479	Graphene and Rice-Straw-Fiber-Based 3D Photothermal Aerogels for Highly Efficient Solar Evaporation. 2020 , 12, 15279-15287		146
478	Materials for solar-powered water evaporation. 2020 , 5, 388-401		318

477	A Scalable Nickel-Cellulose Hybrid Metamaterial with Broadband Light Absorption for Efficient Solar Distillation. 2020 , 32, e1907975	36
476	A Hydrogenated Metal Oxide with Full Solar Spectrum Absorption for Highly Efficient Photothermal Water Evaporation. 2020 , 11, 2502-2509	22
475	High-performance solar vapor generation of Ni/carbon nanomaterials by controlled carbonization of waste polypropylene. 2020 , 63, 779-793	30
474	Tunable Isotropic Absorber With Phase Change Material VO ₂ . 2020 , 19, 197-200	11
473	A broadband aggregation-independent plasmonic absorber for highly efficient solar steam generation. 2020 , 8, 10742-10746	52
472	Solar heat localization: concept and emerging applications. 2020 , 8, 7035-7065	40
471	Structure Architecting for Salt-Rejecting Solar Interfacial Desalination to Achieve High-Performance Evaporation With In Situ Energy Generation. 2020 , 7, 1903478	111
470	Processing Natural Wood into an Efficient and Durable Solar Steam Generation Device. 2020 , 12, 18165-18173	28
469	A Near-Infrared Multi-Band Perfect Absorber Based on 1D Gold Grating Fabry-Perot Structure. 2020 , 8, 72742-72748	8
468	The relative insignificance of advanced materials in enhancing the energy efficiency of desalination technologies. 2020 , 13, 1694-1710	105
467	Porous architectures based on halloysite nanotubes as photothermal materials for efficient solar steam generation. 2020 , 189, 105523	8
466	Low-cost and reusable carbon black based solar evaporator for effective water desalination. 2020 , 483, 114412	23
465	Precipitation of Pt Nanoparticles inside Ion-Track-Etched Capillaries. 2020 , 4, 8	1
464	Broadband Nickel Sulfide/Nickel Foam-Based Solar Evaporator for Highly Efficient Water Purification and Electricity Generation. 2020 ,	4
463	Electrically Conductive Carbon Aerogels with High Salt-Resistance for Efficient Solar-Driven Interfacial Evaporation. 2020 , 12, 32143-32153	45
462	Hydrogels and Hydrogel-Derived Materials for Energy and Water Sustainability. 2020 , 120, 7642-7707	266
461	Sustainable Wood-Based Hierarchical Solar Steam Generator: A Biomimetic Design with Reduced Vaporization Enthalpy of Water. 2020 , 20, 5699-5704	84
460	Economical Salt-Resistant Superhydrophobic Photothermal Membrane for Highly Efficient and Stable Solar Desalination. 2020 , 12, 35142-35151	37

459	Plasmon-Assisted Broadband All-Optical Control of Highly Intense Femtosecond Laser by Weak Continuous-Wave Laser. 2020 , 8, 2000560	1
458	3D Interconnected Gyroid Au-CuS Materials for Efficient Solar Steam Generation. 2020 , 12, 34837-34847	29
457	Metamaterial and nanomaterial electromagnetic wave absorbers: structures, properties and applications. 2020 , 8, 12768-12794	25
456	Structural reconstruction strategies for the design of cellulose nanomaterials and aligned wood cellulose-based functional materials - A review. 2020 , 247, 116722	13
455	Highly compact nanochannel thin films with exceptional thermal conductivity and water pumping for efficient solar steam generation. 2020 , 8, 13927-13934	16
454	Band Gap Engineering in an Efficient Solar-Driven Interfacial Evaporation System. 2020 , 12, 32880-32887	23
453	A high efficiency solar steam generation system with using residual heat to enhance steam escape. 2020 , 491, 114382	17
452	Temperature-difference-induced electricity during solar desalination with bilayer MXene-based monoliths. 2020 , 76, 105060	19
451	Migration Crystallization Device Based on Biomass Photothermal Materials for Efficient Salt-Rejection Solar Steam Generation. 2020 , 3, 3024-3032	37
450	Nanoplasmonic On-Chip PCR for Rapid Precision Molecular Diagnostics. 2020 , 12, 12533-12540	33
449	Porous Carbon Nanofoam Derived From Pitch as Solar Receiver for Efficient Solar Steam Generation. 2020 , 4, 1900098	10
448	In situ generation of carbonized polyaniline nanowires on thermally-treated and electrochemically-etched carbon fiber cloth for high efficient solar seawater desalination. 2020 , 481, 114303	25
447	Wettable photothermal hollow fibers arrays for efficient solar-driven desalination under omnidirectional illumination without salt precipitation. 2020 , 16, 100391	13
446	Tungsten-Coated Silicon Nanopillars as Ultra-Broadband and Thermally Robust Solar Harvesting Materials. 2020 , 3, 2430-2437	3
445	Silicon multi-resonant metasurface for full-spectrum perfect solar energy absorption. 2020 , 199, 360-365	9
444	Flame Synthesis of Superhydrophilic Carbon Nanotubes/Ni Foam Decorated with FeO Nanoparticles for Water Purification via Solar Steam Generation. 2020 , 12, 13229-13238	42
443	A simple, mild and versatile method for preparation of photothermal woods toward highly efficient solar steam generation. 2020 , 71, 104650	78
442	Ultra-narrowband dielectric metamaterial absorber with ultra-sparse nanowire grids for sensing applications. 2020 , 10, 1480	21

441	TiN, ZrN, and HfN Nanoparticles on Nanoporous Aluminum Oxide Membranes for Solar-Driven Water Evaporation and Desalination. 2020 , 3, 2787-2794	26
440	Flexible and Robust Polyaniline Composites for Highly Efficient and Durable Solar Desalination. 2020 , 3, 2634-2642	37
439	Resonant energy transfer enhances solar thermal desalination. 2020 , 13, 968-976	20
438	Highly efficient solar steam generation of bilayered ultralight aerogels based on N-rich conjugated microporous polymers nanotubes. 2020 , 126, 109560	26
437	Multifunctional AgPO-rGO-Coated Textiles for Clean Water Production by Solar-Driven Evaporation, Photocatalysis, and Disinfection. 2020 , 12, 6343-6350	62
436	Biopolymeric photonic structures: design, fabrication, and emerging applications. 2020 , 49, 983-1031	65
435	Large-scale, low-cost, broadband and tunable perfect optical absorber based on phase-change material. 2020 , 12, 5374-5379	53
434	Broadband omnidirectional perfect absorber based on carbon nanotube films. 2020 , 161, 510-516	6
433	Colloid templated semiconductor meta-surface for ultra-broadband solar energy absorber. 2020 , 198, 194-201	17
432	Ultrahigh-efficiency desalination via a thermally-localized multistage solar still. 2020 , 13, 830-839	153
431	The role of Ge2Sb2Te5 in enhancing the performance of functional plasmonic devices. 2020 , 12, 100178	53
430	Multifunctional perovskite oxide for efficient solar-driven evaporation and energy-saving regeneration. 2020 , 70, 104538	13
429	Functional oil-repellent photothermal materials based on nickel foam for efficient solar steam generation. 2020 , 214, 110574	16
428	Biomimetic Difunctional Carbon-Nanotube-Based Aerogels for Efficient Steam Generation. 2020 , 3, 4690-4698	16
427	Bio-inspired Recyclable Carbon Interface for Solar Steam Generation. 2020 , 17, 315-325	3
426	Over 10 kg m ⁻² h ⁻¹ Evaporation Rate Enabled by a 3D Interconnected Porous Carbon Foam. 2020 , 4, 928-937	131
425	Direction-limited water transport and inhibited heat convection loss of gradient-structured hydrogels for highly efficient interfacial evaporation. 2020 , 201, 581-588	13
424	Latest development in salt removal from solar-driven interfacial saline water evaporators: Advanced strategies and challenges. 2020 , 177, 115770	59

423	Detailed Experiment-Theory Comparison of Mid-Infrared Metasurface Perfect Absorbers. 2020 , 11,	13
422	Distinctive Optical Properties of Hierarchically Ordered Nanostructures Self-Assembled from Multiblock Copolymer/Nanoparticle Mixtures. 2020 , 41, e2000131	4
421	Cellulose paper support with dual-layered nanostructures for enhanced plasmonic photothermal heating and solar vapor generation. 2020 , 2, 2339-2346	3
420	Cellulose-Conducting Polymer Aerogels for Efficient Solar Steam Generation. 2020 , 4, 2000004	38
419	Facile and low-cost ceramic fiber-based carbon-carbon composite for solar evaporation. 2021 , 759, 143546	12
418	Recent progress on nanostructure-based broadband absorbers and their solar energy thermal utilization. 2021 , 15, 35-48	1
417	Stable Self-Floating Reduced Graphene Oxide Hydrogel Membrane for High Rate of Solar Vapor Evaporation under 1 sun. 2021 , 5, 2000053	6
416	Strategies for breaking theoretical evaporation limitation in direct solar steam generation. 2021 , 220, 110842	23
415	Enhanced wood-derived photothermal evaporation system by in-situ incorporated lignin carbon quantum dots. 2021 , 405, 126703	20
414	Ni-based Plasmonic/Magnetic Nanostructures as Efficient Light Absorbers for Steam Generation. 2021 , 31, 2006294	23
413	Renewable energy-driven desalination for more water and less carbon. 2021 , 333-372	0
412	Nanoenabled Photothermal Materials for Clean Water Production. 2021 , 5, 2000055	23
411	Hybrid solar-driven interfacial evaporation systems: Beyond water production towards high solar energy utilization. 2021 , 42, 178-191	94
410	Mass fabrication of hierarchical nanostructures based on plasmonic nanochemistry for ultra-sensitive optical sensing. 2021 , 329, 129220	4
409	Engineered two-dimensional nanomaterials: an emerging paradigm for water purification and monitoring. 2021 , 8, 758-802	42
408	Solution-Processed All-Ceramic Plasmonic Metamaterials for Efficient Solar-Thermal Conversion over 100-727°C. 2021 , 33, e2005074	26
407	Salt-Rejection Solar Absorbers Based on Porous Ionic Polymers Nanowires for Desalination. 2021 , 42, e2000536	18
406	Poly(p-phenylene benzobisoxazole) nanofiber/reduced graphene oxide composite aerogels toward high-efficiency solar steam generation. 2021 , 612, 125997	9

405	From prevention to diagnosis and treatment: Biomedical applications of metal nanoparticle-hydrogel composites. 2021 , 122, 1-25	21
404	Three-Dimensional Metamaterial for Plasmon-Enhanced Raman Scattering at any Excitation Wavelengths from the Visible to Near-Infrared Range. 2021 , 93, 1409-1415	3
403	The design of phase change materials with carbon aerogel composites for multi-responsive thermal energy capture and storage. 2021 , 9, 1213-1220	31
402	The toolbox of porous anodic aluminum oxideBased nanocomposites: from preparation to application. 2021 , 299, 325-341	6
401	Tuning the wettability of solar absorbers towards high-efficiency solar vapor generation. 2021 , 183, 116224	4
400	Spectrally Selective Absorbers/Emitters for Solar Steam Generation and Radiative Cooling-Enabled Atmospheric Water Harvesting. 2021 , 5, 2000058	16
399	Solar-driven evaporators for water treatment: challenges and opportunities. 2021 , 7, 24-39	47
398	Recent advances and rational design strategies of carbon dots towards highly efficient solar evaporation. 2021 , 13, 7523-7532	12
397	Reduced graphene oxide-based calcium alginate hydrogel as highly efficient solar steam generation membrane for desalination. 2021 , 15, 138-146	5
396	Broadband Meta-Absorber with Au/Ni CoreShell Nanowires for Solar Vapor Generator. 2021 , 5, 2000217	2
395	Influencing Factors and Research Progress of Local Surface Plasmon Resonance. 2021 , 11, 182-199	
394	A structural polymer for highly efficient all-day passive radiative cooling. 2021 , 12, 365	77
393	Refractory Materials and Plasmonics Based Perfect Absorbers. 2020 ,	7
392	Plasmonic Nanostructures for Photothermal Conversion. 2021 , 1, 2000055	26
391	Optimization of the perfect absorber for solar energy harvesting based on the cone-like nanostructures. 2021 , 9, 714-726	2
390	Low-cost and scalable carbon bread used as an efficient solar steam generator with high performance for water desalination and purification.. 2021 , 11, 8674-8681	4
389	Carbon nanotubes@silicone solar evaporators with controllable salt-tolerance for efficient water evaporation in a closed system. 2021 , 9, 17502-17511	8
388	3D Bacterial flagella as both synthetic biotemplates and ultrathin spacers for enhanced inter-particle coupling and solar energy harvesting. 2021 , 8, 2097-2105	4

- 387 Recent progresses on metamaterials for optical absorption and sensing: a review. **2021**, 54, 113002 19
- 386 Flexible fabrication of new-type porous anodic alumina membranes with tunable geometric features by low-cost nanoimprint lithography. **2021**, 3, 2918-2923 2
- 385 Sandwich hydrogel with confined plasmonic Cu/carbon cells for efficient solar water purification. **2021**, 9, 15462-15471 9
- 384 Bioinspired structural and functional designs towards interfacial solar steam generation for clean water production. **2021**, 5, 1510-1524 14
- 383 Integrated and spectrally selective thermal emitters enabled by layered metamaterials. **2021**, 10, 1285-1293 3
- 382 Bio-inspired vertically aligned polyaniline nanofiber layers enabling extremely high-efficiency solar membrane distillation for water purification. **2021**, 9, 10678-10684 13
- 381 Rational designs of interfacial-heating solar-thermal desalination devices: recent progress and remaining challenges. **2021**, 9, 6612-6633 12
- 380 Water management by hierarchical structures for highly efficient solar water evaporation. **2021**, 9, 7122-7128 8
- 379 Applications of optical coatings on spectral selective structures. **2021**, 269-319
- 378 Scattering-mediated photothermal heating in plasmonic PES/Au membranes for heterogeneous catalysis. **2021**, 5, 2425-2433 1
- 377 Graphene Oxide Reduced Graphene Oxide Janus Membrane for Efficient Solar Generation of Water Vapor. **2021**, 4, 1916-1923 8
- 376 A Nature-Inspired Monolithic Integrated Cellulose Aerogel-Based Evaporator for Efficient Solar Desalination. **2021**, 13, 10612-10622 20
- 375 Photothermal Membrane Distillation toward Solar Water Production.. **2021**, 5, e2001200 35
- 374 Broadening Bandwidths of Few-Layer Absorbers by Superimposing Two High-Loss Resonators. **2021**, 16, 26 0
- 373 Ultrafast Synthesis of Defective Black TiO₂ via One-Step Na₃N₃ Deflagration for High-efficiency Solar Water Evaporation. **2021**, 22, 100901 0
- 372 All-Cold Evaporation under One Sun with Zero Energy Loss by Using a Heatsink Inspired Solar Evaporator. **2021**, 8, 2002501 97
- 371 Review of interface solar-driven steam generation systems: High-efficiency strategies, applications and challenges. **2021**, 283, 116361 13
- 370 Efficient and antifouling interfacial solar desalination guided by a transient salt capacitance model. **2021**, 2, 100330 1

369	An inclusive study on new conceptual designs of passive solar desalting systems. 2021 , 7, e05793	13
368	Semiconductive, Flexible MnO ₂ NWs/Chitosan Hydrogels for Efficient Solar Steam Generation. 2021 , 9, 3887-3900	35
367	Visualizing thermal distribution through hydrogel confined ionic system. 2021 , 24, 102085	2
366	Omnidirectional, Broadband, and Polarization-Independent Near-Perfect Light Absorption from Surface Plasmonic Excitation of a Corrugated AuBiO ₂ Au Structure Fabricated with a Self-Assembled Silica Opal Template. 2021 , 2, 2000131	1
365	Enhanced Steam Temperature Enabled by a Simple Three-Tier Solar Evaporation Device. 2021 , 5, 2000092	5
364	Magnetically Driven 3D Cellulose Film for Improved Energy Efficiency in Solar Evaporation. 2021 , 13, 7756-7765	10
363	Ultrathin, broadband, omnidirectional, and polarization-independent infrared absorber using all-dielectric refractory materials. 2021 , 10, 1683-1690	5
362	Interfacial Solar Vapor Generation: Materials and Structural Design. 2021 , 2, 198-209	15
361	Boosting solar steam generation by photothermal enhanced polydopamine/wood composites. 2021 , 217, 123464	46
360	Enhanced solar steam generation of hydrogel composite with aligned channel and shape memory behavior. 2021 , 204, 108633	44
359	Investigation of zeolitic imidazolate frameworks-derived carbon nanotubes thin film in solar vapor generation. 2021 , 28, 1105	1
358	Fabrication and application of nanoporous anodic aluminum oxide: a review. 2021 , 32,	28
357	Shape-Programmable Interfacial Solar Evaporator with Salt-Precipitation Monitoring Function. 2021 , 15, 5752-5761	18
356	Biomass-Derived Carbonaceous Materials with Multichannel Waterways for Solar-Driven Clean Water and Thermoelectric Power Generation. 2021 , 9, 4571-4582	15
355	Ultrabroadband metal-black absorbers and the performance simulations based on a three-dimensional cluster-structure model. 2021 , 29, 8510-8522	7
354	CuBiS/MXenes with Excellent Solar-Thermal Conversion for Continuous and Efficient Seawater Desalination. 2021 , 13, 16246-16258	16
353	Coupled-Dipole Modeling and Experimental Characterization of Geometry-Dependent Trochoidal Dichroism in Nanorod Trimers. 2021 , 8, 1159-1168	0
352	Scalable High-Efficiency Bi-Facial Solar Evaporator with a Dendritic Copper Oxide Wick. 2021 , 13, 11869-11878	3

351	High-Efficiency Photothermal Water Evaporation using Broadband Solar Energy Harvesting by Ultrablack Silicon Structures. 2021 , 2, 2000083	7
350	Cylindrical Magnetic Nanowires Applications. 2021 , 57, 1-17	9
349	Visible-infrared (0.4–0.7 μm) ultra-broadband absorber based on cascade film stacks. 2021 , 118, 143501	5
348	A scalable fish-school inspired self-assembled particle system for solar-powered water-solute separation. 2021 , 8, nwab065	10
347	Two Birds One Stone: Facile and Controllable Synthesis of the Ag Quantum Dots/Reduced Graphene Oxide Composite with Significantly Improved Solar Evaporation Efficiency and Bactericidal Performance. 2021 , 13, 17649-17657	6
346	Hierarchically Designed Salt-Resistant Solar Evaporator Based on Donnan Effect for Stable and High-Performance Brine Treatment. 2021 , 31, 2100025	13
345	An efficient light-to-heat conversion coupling photothermal effect and exothermic chemical reaction in Au NRs/V2C MXene membranes for high-performance laser ignition. 2021 ,	1
344	Bifunctional plasmonic metamaterial absorber for narrowband sensing detection and broadband optical absorption. 2021 , 137, 106807	5
343	Ion Selective Nanochannels: From Critical Principles to Sensing and Biosensing Applications. 2021 , 6, 2000765	15
342	Ultra-narrowband near-infrared tunable two-dimensional perfect absorber for refractive index sensing. 2021 , 60, 4113-4119	1
341	Solar steam generation on scalable ultrathin thermoplasmonic TiN nanocavity arrays. 2021 , 83, 105828	18
340	Plasmonic silver nanoparticle-decorated electrospun nanofiber membrane for interfacial solar vapor generation. 004051752110149	5
339	All-day fresh water harvesting by microstructured hydrogel membranes. 2021 , 12, 2797	34
338	Coating of Wood with FeO-Decorated Carbon Nanotubes by One-Step Combustion for Efficient Solar Steam Generation. 2021 , 13, 22845-22854	31
337	Photonic crystals for perovskite-based optoelectronic applications.	0
336	Anisotropic Evaporator with a T-Shape Design for High-Performance Solar-Driven Zero-Liquid Discharge. 2021 , 17, e2100969	11
335	A review of spectral controlling for renewable energy harvesting and conserving. 2021 , 18, 100388	13
334	Metallic Plasmonic Array Structures: Principles, Fabrications, Properties, and Applications. 2021 , e2007988	21

333	Interfacial Solar Evaporator - Physical Principles and Fabrication Methods. 2021 , 8, 1347-1367	1
332	Biowaste-Derived Carbonized Bone for Solar Steam Generation and Seawater Desalination. 2021 , 5, 2100031	3
331	Versatile Janus Composite Nonwoven Solar Absorbers with Salt Resistance for Efficient Wastewater Purification and Desalination. 2021 , 13, 24945-24956	9
330	Ultra-thin dark amorphous TiO _x hollow nanotubes for full spectrum solar energy harvesting and conversion 2021 , 84, 105872	12
329	High-Efficiency Solar Vapor Generation Boosted by a Solar-Induced Updraft with Biomimetic 3D Structures. 2021 , 13, 29602-29611	3
328	Rational Design of High-Performance Bilayer Solar Evaporator by Using Waste Polyester-Derived Porous Carbon-Coated Wood.	30
327	Untangling Thermal and Nonthermal Effects in Plasmonic Photocatalysis. 2021 , 191-230	
326	A scalable broadband plasmonic cuprous telluride nanowire-based hybrid photothermal membrane for efficient solar vapor generation. 2021 , 84, 105868	13
325	Fast Water Evaporation from Nanopores. 2021 , 8, 2100660	1
324	Harvesting Solar Energy by Flowerlike Carbon Cloth Nanocomposites for Simultaneous Generation of Clean Water and Electricity. 2021 , 13, 27129-27139	16
323	Reed Leaves Inspired Silica Nanofibrous Aerogels with Parallel-Arranged Vessels for Salt-Resistant Solar Desalination. 2021 ,	28
322	Ultra-broadband high solar absorption in checkerboard-shaped titanium nitride plasmonic metastructures. 2021 , 116, 111117	2
321	Broadband long-wave infrared metamaterial absorber based on single-sized cut-wire resonators. 2021 , 29, 20275-20285	8
320	Synthesis of a Co-Sn Alloy-Deposited PTFE Film for Enhanced Solar-Driven Water Evaporation via a Super-Absorbent Polymer-Based "Water Pump" Design. 2021 , 13, 26879-26890	5
319	Novel oil-repellent photothermal materials based on copper foam for efficient solar steam generation. 2021 , 225, 111058	5
318	Broadband visible to mid-infrared aluminum-black absorbers and the aging behavior. 2021 , 115, 103735	3
317	Synthetic trees for enhanced solar evaporation and water harvesting. 2021 , 118, 251601	3
316	Hollow Carbon Fiber Decorated by Nano Structure Surface for High-Efficiency Water Steam Generation. 2021 , 5, 2100122	4

3 ¹⁵	Cobalt-Sputtered Anodic Aluminum Oxide Membrane for Efficient Photothermal CO ₂ Hydrogenation. 2021 , 7, 1008-1012	2
3 ¹⁴	Dual-Zone Photothermal Evaporator for Antisalt Accumulation and Highly Efficient Solar Steam Generation. 2021 , 31, 2102618	69
3 ¹³	A high-performing single-stage invert-structured solar water purifier through enhanced absorption and condensation. 2021 , 5, 1602-1612	20
3 ¹²	Solar-Powered Sustainable Water Production: State-of-the-Art Technologies for Sunlight-Energy-Water Nexus. 2021 ,	48
3 ¹¹	3D Printing a Biomimetic Bridge-Arch Solar Evaporator for Eliminating Salt Accumulation with Desalination and Agricultural Applications. 2021 , 33, e2102443	32
3 ¹⁰	Experimental Investigations on Steam Generation in Nanofluids under Concentrated Solar Radiation. 2021 , 14, 3985	0
3 ⁰⁹	Carbon materials for solar-powered seawater desalination. 2021 , 36, 683-701	1
3 ⁰⁸	Highly Efficient Solar Steam Generation under Low Solar Flux via Carbon-Nanotube-Modified Sugarcane. 2021 , 9, 2100588	3
3 ⁰⁷	Combining carbonized sawdust beds with preheating water design for efficient solar steam generation. 2021 , 195, 117238	5
3 ⁰⁶	Rational Design of a High Performance and Robust Solar Evaporator via 3D-Printing Technology. 2021 , 33, e2102649	10
3 ⁰⁵	A self-floating, salt-resistant 3D Janus radish-based evaporator for highly efficient solar desalination. 2021 , 510, 115093	15
3 ⁰⁴	Clean water production by non-noble metal/reduced graphene oxide nanocomposite coated on wood: Scalable interfacial solar steam generation and heavy metal sorption. 2021 , 224, 440-454	25
3 ⁰³	Multifunctional Au/Ti ₃ C ₂ Photothermal Membrane with Antibacterial Ability for Stable and Efficient Solar Water Purification under the Full Spectrum. 2021 , 9, 11372-11387	7
3 ⁰²	Potential and challenges of improving solar still by micro/nano-particles and porous materials - A review. 2021 , 311, 127432	23
3 ⁰¹	Optimization configuration of selective solar absorber using multi-island genetic algorithm. 2021 , 224, 947-955	9
3 ⁰⁰	Design of Persistent and Stable Porous Radical Polymers by Electronic Isolation Strategy. 2021 , 133, 24629	0
2 ⁹⁹	Materials and structures engineering of sun-light absorbers for efficient direct solar steam generation. 2021 , 225, 747-772	6
2 ⁹⁸	Programmable Asymmetric Nanofluidic Photothermal Textile Umbrella for Concurrent Salt Management and In Situ Power Generation During Long-Time Solar Steam Generation. 2021 , 13, 47549-47559	2

297	A scalable, cost-effective and salt-rejecting MoS ₂ /SA@melamine foam for continuous solar steam generation. 2021 , 87, 106213	14
296	Biomimetic 3D Membranes with MXene Heterostructures for Superior Solar Steam Generation, Water Treatment, and Electricity Generation. 2100593	6
295	Photogated Coordination Switching of Silver Nanoparticles for Reversible Coloration/Discoloration of Hydrogel. 2101505	0
294	Ordered nanostructures arrays fabricated by anodic aluminum oxide (AAO) template-directed methods for energy conversion. 2021 , 32,	3
293	Programmed design of selectively-functionalized wood aerogel: Affordable and mildew-resistant solar-driven evaporator. 2021 , 87, 106146	19
292	Aligned Attapulgite-based aerogels with excellent mechanical property for the highly efficient solar steam generation. 2021 , 271, 118869	9
291	Self-Floating Efficient Solar Steam Generators Constructed Using Super-Hydrophilic N,O Dual-Doped Carbon Foams from Waste Polyester.	12
290	Interfacial Engineering of Attractive Pickering Emulsion Gel-Templated Porous Materials for Enhanced Solar Vapor Generation. 2021 , 14, 6077	1
289	Heat-concentrating solar steam generation and salt extraction based on water-repellent germanium nanoparticles-coated oxidized copper foams. 2021 , 230, 111191	2
288	Flexible graphene aerogel-based phase change film for solar-thermal energy conversion and storage in personal thermal management applications. 2021 , 419, 129637	29
287	Recycling Polymeric Solid Wastes for Energy-Efficient Water Purification, Organic Distillation, and Oil Spill Cleanup. 2021 , 17, e2102459	2
286	Laser-Induced Porous Graphene on a Polyimide Membrane with a Melamine Sponge Framework (PI@MS) for Long-Term Stable Steam Generation. 2021 , 4, 9766-9774	2
285	Porous Polydimethylsiloxane/Au Composites as Solar-Light Absorbers for Light-Driven Thermoelectric Applications. 2100351	1
284	Design of Persistent and Stable Porous Radical Polymers by Electronic Isolation Strategy. 2021 , 60, 24424-24429	4
283	High-performance bilayer solar evaporators constructed by candle-derived carbon nanoparticle/wood hybrid. 2021 , 28, 102636	4
282	The emerging role of 3D printing in water desalination. 2021 , 790, 148238	9
281	Interfacial solar evaporator for clean water production and beyond: From design to application. 2021 , 299, 117317	7
280	An overview of solar still enhancement approaches for increased freshwater production rates from a thermal process perspective. 2021 , 150, 111458	4

279	Ultralong polypyrrole nanotubes aerogels with excellent elasticity for efficient solar steam generation. 2021 , 127, 157-165	0
278	The energy efficiency of interfacial solar desalination. 2021 , 302, 117581	9
277	Controllable synthesis of sea urchin-like carbon from metal-organic frameworks for advanced solar vapor generators. 2021 , 423, 130268	32
276	Highly efficient solar evaporator based on Graphene/MoO _{3-x} coated porous nickel for water purification. 2021 , 275, 119139	9
275	Enhancement of pollutant degradation and solar-driven water evaporation by architecting hierarchical 1D/2D TiO ₂ @ MoS ₂ core-shell networks. 2021 , 570, 151143	2
274	Preparation and photothermal conversion performance of carbon-silica nanocomposite films for spectrally selective solar absorbers. 2021 , 233, 111391	3
273	Metal-ceramic carbide integrated solar-driven evaporation device based on ZrC nanoparticles for water evaporation and desalination. 2022 , 429, 132014	0
272	Evaporation rate far beyond the input solar energy limit enabled by introducing convective flow. 2022 , 429, 132335	3
271	Planar Dual-Layer System for Ultra-Broadband Absorption and Hot-Carrier Photodetection in Longwave Near-Infrared Band. 2022 , 28, 1-9	
270	Coupling solar-driven photothermal effect into photocatalysis for sustainable water treatment. 2022 , 423, 127128	16
269	Towards an understanding of the localized surface plasmon resonance decay pathways in bimetallic core-shell nanoparticles. 2022 , 146, 107565	1
268	Photothermal Devices for Sustainable Uses Beyond Desalination. 2021 , 2, 2000056	17
267	Applications of Metamaterials. 2021 ,	0
266	Cotton cloth supported tungsten carbide/carbon nanocomposites as a Janus film for solar driven interfacial water evaporation.	5
265	In situ Reduction of Silver Nanoparticles on Chitosan Hybrid Copper Phosphate Nanoflowers for Highly Efficient Plasmonic Solar-driven Interfacial Water Evaporation. 2021 , 18, 30-39	4
264	Sustainable off-grid desalination of hypersaline waters using Janus wood evaporators.	21
263	Templating synthesis of natural cotton-based hierarchically structured carbon hollow microfibers for high-performance solar vapor generation. 2021 , 9, 15346-15354	2
262	A reconfigurable hyperbolic metamaterial perfect absorber. 2021 , 3, 1758-1766	8

261	Passive, high-efficiency thermally-localized solar desalination. 2021 , 14, 1771-1793	32
260	Advances in Solar-Driven Hygroscopic Water Harvesting. 2021 , 5, 2000085	7
259	Effect of folding on 3D photothermal cones with efficient solar-driven water evaporation. 2020 , 178, 115636	11
258	Solar evaporation and electricity generation of porous carbonaceous membrane prepared by electrospinning and carbonization. 2020 , 215, 110591	14
257	Highly efficient three-dimensional solar evaporator for high salinity desalination by localized crystallization. 2020 , 11, 521	157
256	Graphene-based reversible metal electrodeposition for dynamic infrared modulation. 2020 , 8, 8538-8545	12
255	Multi-resonant refractory prismoid for full-spectrum solar energy perfect absorbers. 2020 , 28, 31763-31774	7
254	Enhanced nanoplasmonic heating in standoff sensing of explosive residues with infrared reflection-absorption spectroscopy. 2020 , 45, 2144-2147	2
253	Bismuth plasmonics for extraordinary light absorption in deep sub-wavelength geometries. 2020 , 45, 686-689	6
252	Broadband metamaterials and metasurfaces: a review from the perspectives of materials and devices. 2020 , 9, 3165-3196	18
251	Research progress of surface plasmons mediated photothermal effects. 2019 , 68, 144401	4
250	Towards developing novel and sustainable molecular light-to-heat converters.. 2021 , 12, 15239-15252	2
249	High-Entropy-Alloy Nanoparticles with Enhanced Interband Transitions for Efficient Photothermal Conversion. 2021 , 60, 27113	4
248	Salt-rejecting rGO-coated melamine foams for high-efficiency solar desalination. 1	1
247	Design of Broadband Infrared Photodetectors Enhanced by Dual-Mode Plasmonic Resonant Cavities. 1	
246	High-Entropy-Alloy Nanoparticles with Enhanced Interband Transitions for Efficient Photothermal Conversion. 2021 , 133, 27319	1
245	Interfacial Solar Steam Generations: Materials, Structures and Applications. 2018 ,	
244	Ultra-broadband perfect absorber based on successive nano-Cr-film. 2018 ,	1

- 243 Solar Energy Harvesting by Perfect Absorbers Made of Natural Hyperbolic Material. **2019**, 89-110
- 242 Ultrawideband midinfrared refractory absorbers. **2019**, 58, 1 2
- 241 Highly Efficient Photothermal Conversion and Water Transport during Solar Evaporation Enabled by Amorphous Hollow Multishelled Nanocomposites. **2021**, e2107400 16
- 240 Optical Brewster Metasurfaces Exhibiting Ultrabroadband Reflectionless Absorption and Extreme Angular Asymmetry. **2021**, 16, 7
- 239 Floating Absorber Integrated with Compound Parabolic Concentrator for Effective Solar Water Desalination. **2020**, 141-147
- 238 Energy storage enhancement of paraffin with a solar-absorptive rGO@Ni film in a controllable magnetic field. **2022**, 251, 114938 4
- 237 Robust seawater desalination and sewage purification enabled by the solar-thermal conversion of the Janus-type graphene oxide evaporator. **2022**, 522, 115406 2
- 236 Black TiO₂ on nanoporous substrates for improved solar vapor generation. **2020**,
- 235 Multistep immersion casting of plasmonic nanoparticle assemblage for efficient solar shortwave radiation absorption. **2020**,
- 234 Heat generation and light transmission in porous plasmonic nanostructures. **2020**, 14, 1 1
- 233 Deep Subwavelength Laser-Induced Periodic Surface Structures on Silicon as a Novel Multifunctional Biosensing Platform. **2021**, 13, 54551-54560 4
- 232 Colloidal Self-Assembly Approaches to Smart Nanostructured Materials. **2021**, 28
- 231 Flexible MCNTs cross-linked polyimide membranes with high light absorbance and hierarchical pore distribution for photo-thermal conversion in solar water evaporation. **2021**, 3
- 230 Introduction. **2021**, 1-14
- 229 Extreme field confinement in zigzag plasmonic crystals. **2020**, 31, 495206
- 228 Metal-free plasmonic refractory core-shell nanowires for tunable all-dielectric broadband perfect absorbers. **2020**, 28, 37049-37057 1
- 227 Environmentally safe and renewable solar vapor generation device based on Prussian blue nanoparticles immobilized on cellulose nanofibers. **2022**, 524, 115477 0
- 226 Hierarchical, Highly Open Microtubes and Columnar Liquid Crystals Self-Assembled from Symmetrical and Asymmetrical Colloidal Rings. **2021**, 2

225	Full bagasse bio-waste derived 3D photothermal aerogels for high efficient solar steam generation. 1	1
224	Large area and broadband gold-black absorber and the nanocone-like array model. 2021,	
223	Recent Progress of Sub-Nanometric Materials in Photothermal Energy Conversion. 2021, 9, e2104225	2
222	Magnetically Driven Tunable 3D Structured Fe O Vertical Array for High-Performance Solar Steam Generation. 2021, e2105198	4
221	Wideband mid-infrared thermal emitter based on stacked nanocavity metasurfaces.	2
220	Applications of bio-derived/bio-inspired materials in the field of interfacial solar steam generation. 1	3
219	CuS Hollow Nanospheres/Cellulose Composite Film as a Recyclable Interfacial Photothermal Evaporator for Solar Steam Generation. 2100805	3
218	Broadband titanium nitride disordered metasurface absorbers.	1
217	Design of a Separated Solar Interfacial Evaporation System for Simultaneous Water and Salt Collection. 2021,	3
216	Hierarchical, Highly Open Microtubes and Columnar Liquid Crystals Self-Assembled from Symmetrical and Asymmetrical Colloidal Rings.	
215	Solar-driven interfacial evaporation toward clean water production: burgeoning materials, concepts and technologies. 2021, 9, 27121-27139	8
214	Effect of light intensity on solar-driven interfacial steam generation. 2021,	8
213	A robust and renewable solar steam generator for high concentration dye wastewater purification.	3
212	All-weather-available electrothermal and solar thermal wood-derived porous carbon-based steam generators for highly efficient water purification.	1
211	Recent advances and challenges of emerging solar-driven steam and the contribution of photocatalytic effect. 2022, 431, 134024	12
210	Construction of model platforms to probe the confinement effect of nanocomposite-enabled water treatment. 2022, 9, 100229	2
209	Narrow-Bandgap LaMO (M= Ni, Co) nanomaterials for efficient interfacial solar steam generation.. 2021, 612, 203-212	5
208	Wide-angle and broadband solar absorber made using highly efficient large-area fabrication strategy.. 2022, 30, 4424-4433	7

207	Fabrication of high-performance graphene oxide/CuO/Cu ₂ O film-coated copper foam for interfacial solar-driven water evaporation. 2022 , 57, 3322-3336	1
206	Bioengineered solar harvesting systems for next generation applications. 2022 , 231, 857-879	2
205	Ceramic-based dielectric metamaterials. 2022 , 1, 11-27	3
204	Narrowband plasmonic absorber using gold nanoparticle arrays for refractive index sensing. 2022 , 1-1	2
203	Lithography-free metamaterial absorbers: opinion. 2022 , 12, 524	1
202	Metamaterial Electromagnetic Wave Absorbers. 2022 , 3, 1-199	
201	Vapor generation via porous nanochannel wicks. 2022 , 100738	
200	Transpiration-powered desalination water bottle.. 2022 ,	2
199	Solar Selective Absorber for Emerging Sustainable Applications. 2100195	3
198	Recent Progress in the Fabrication and Optical Properties of Nanoporous Anodic Alumina.. 2022 , 12,	1
197	Improving the performance of tubular solar still integrated with drilled carbonized wood and carbon black thin film evaporation. 2022 , 233, 504-514	8
196	Monitoring of DNA-Hg Binding Reaction within Confined Nanospace of Metamaterial Nanochannel by Plasmon-Enhanced Raman Scattering.. 2022 , 13, 1330-1336	0
195	Eco-friendly synthesis of ferric ion-polyphenol-graphene aerogel for solar steam generation. 2022 , 313, 131738	1
194	Three-Level pore structure hydrogels for solar vapor generation. 2022 , 582, 152483	1
193	Colloidal self-assembly based all-metal metasurface absorbers to achieve broadband, polarization-independent light absorption at UV λ is frequencies. 2022 , 584, 152624	3
192	A lotus-inspired 3D biomimetic design toward an advanced solar steam evaporator with ultrahigh efficiency and remarkable stability.. 2022 ,	1
191	Janus Fibrous Mats Based Suspended Type Evaporator for Salt Resistant Solar Desalination and Salt Recovery.. 2022 , e2107156	6
190	Light Absorption Enhancement and Laser-Induced Damage Ability Improvement of Aluminum Alloy 6061 with Non-Porous Alumina/CdSe@AlO/SiO Functional Gradient Films.. 2022 , 12,	

189	Waste Egg Tray and Toner-Derived Highly Efficient 3D Solar Evaporator for Freshwater Generation.. 2022,	3
188	Low cost, robust, environmentally friendly, wood supported 3D-hierarchical CuSnS for efficient solar powered steam generation.. 2022, 615, 707-715	1
187	Localized Interfacial Activation Effect within Interconnected Porous Photothermal Matrix to Promote Solar-driven Water Evaporation.	0
186	Development of a novel cellulose foam augmented with candle-soot derived carbon nanoparticles for solar-powered desalination of brackish water.	3
185	N-doped carbon@Cu core-shell nanostructure with nearly full solar spectrum absorption and enhanced solar evaporation efficiency.	1
184	Chemically-Controlled Ultrafast Photothermal Response in Plasmonic Nanostructured Assemblies.. 2022, 126, 6308-6317	0
183	Superhydrophilic 2D Covalent Organic Frameworks as Broadband Absorbers for Efficient Solar Steam Generation.. 2022,	3
182	High-entropy-alloy nanoparticles with ultra-mixed 21 elements for efficient photothermal conversion.	3
181	Thermoplasmonics in Solar Energy Conversion: Materials, Nanostructured Designs, and Applications.. 2022, e2107351	7
180	Preparation of Three-dimensional Graphene-based Sponge as Photo-thermal Conversion Material to Desalinate Seawater. 1	0
179	Oil-polluted water purification via the carbon-nanotubes-doped organohydrogel platform. 1	1
178	Superhydrophilic 2D Covalent Organic Frameworks as Broadband Absorbers for Efficient Solar Steam Generation.	0
177	Ultra-high evaporation rate 3D evaporator with vertical sheets based on full use of convection flow. 2022, 345, 131172	1
176	A 3D Porous PDMS Sponge Embedded with Carbon Nanoparticles for Solar Driven Interfacial Evaporation. 2022, 120985	2
175	Robust PEDOT:PSS-based hydrogel for highly efficient interfacial solar water purification. 2022, 136284	8
174	Polydopamine-Coated Natural Rubber Sponge for Highly Efficient Vapor Generation.. 2022, 14,	0
173	Black Silver: Three-Dimensional Ag Hybrid Plasmonic Nanostructures with Strong Photon Coupling for Scalable Photothermoelectric Power Generation.. 2022,	2
172	Hierarchically Structured Black Gold Film with Ultrahigh Porosity for Solar Steam Generation.. 2022, e2200108 12	12

171	Wood-derived monolithic carbon materials and their functional applications. 2100420	0
170	Constructing of 3D porous composite materials of NiAl/CNTs for highly efficient solar steam generation. 2022 , 240, 111722	2
169	Thermal-localized and salt-resistant polyacrylonitrile/polyvinylidene fluoride aerogel for efficient solar desalination. 2022 , 532, 115751	1
168	Flexible and Robust Ultrablack Elastomers with a Dual-Gradient Design for Broadband and Efficient Light Management. 2022 , 10, 2101854	1
167	Near Infrared Light-Driven Photothermal Effect on Homochiral Au/TiO Nanotube Arrays for Enantioselective Desorption.. 2021 ,	4
166	Experimental Research on the Selective Absorption of Solar Energy by Hybrid Nanofluids. 2021 , 14, 8186	1
165	Advances and challenges of broadband solar absorbers for efficient solar steam generation.	4
164	Proposing a Numerical Method to Calculate the Absorbed Power of Plasmonic Nanoparticles (Au, Ag, Al, and Cu) with Different Morphologies Under Solar Irradiance.	
163	Nanoporous Titanium (Oxy)nitride Films as Broadband Solar Absorbers.. 2022 ,	1
162	A green and efficient strategy facilitates continuous solar-induced steam generation based on tea-assisted synthesis of gold nanoflowers. 1	0
161	Data_Sheet_1.pdf. 2018 ,	
160	Integrating a Self-Floating Janus TPC@CB Sponge for Efficient Solar-Driven Interfacial Water Evaporation.. 2022 ,	4
159	Highly efficient and stable solar energy-driven device using lignocellulosic biomass <i>Juncus effusus</i> for recovery of ethanol-water mixture.	0
158	Multi-Angle Wide-Spectrum Highly Efficient Light-Trapping Nanofiber Membrane for Solar Desalination.	
157	Robust All-Inorganic Absorber for High-Sun Solar Steam Generation and Solvent Recovery.	
156	Design and Analysis of a Plasmonic Nanostructure in the Cladding Region of a Planar Waveguide Applicable for Heating Cycles of μ PCR.	
155	Rational Design of Photothermal and Anti-Bacterial Foam With Macroporous Structure for Efficient Desalination of Water. 2022 , 10,	
154	Multiscale Preparation of Graphene Oxide/Carbon Nanotube-Based Membrane Evaporators by a Spray Method for Efficient Solar Steam Generation.	0

- 153 Avant-Garde Solar-Thermal Nanostructures: Nascent Strategy into Effective Photothermal Desalination. 2
- 152 Tubular polypyrrole enhanced elastomeric biomass foam as a portable interfacial evaporator for efficient self-desalination. **2022**, 445, 136701 1
- 151 Facile preparation of high strength aerogel evaporator for efficient solar-driven water purification. **2022**, e00443
- 150 Metal-Organic Framework Composite Photothermal Membrane for Removal of High-Concentration Volatile Organic Compounds from Water via Molecular Sieving.. **2022**, 6
- 149 Ultra-broad Wavelength Absorption in High-temperature Solar Selective Absorber Coatings Enabled by High-entropy Nanoceramic AlTiZrHfNbN for High Performance Solar-thermal Conversion.
- 148 Utilization of Block Copolymers to Understand Water Vaporization Enthalpy Reduction in Uniform Pores. 0
- 147 Carbon fiber coated by quinoa cellulose nanosheet with outstanding scaled salt self-cleaning performance and purification of organic and antibiotic contaminated water. **2022**, 12, 0
- 146 Mildly Peeling Off and Encapsulating Large MXene Nanosheets with Rigid Biologic Fibrils for Synchronization of Solar Evaporation and Energy Harvest. 2
- 145 Solar-Driven Soil Remediation along with the Generation of Water Vapor and Electricity. **2022**, 12, 1800 0
- 144 Metal-organic framework derived magnetic phase change nanocage for fast-charging solar-thermal energy conversion. **2022**, 99, 107383 3
- 143 The preparation of transition-metal-carbides membrane and its promising application in solar steam generation. **2022**, 801, 139712
- 142 Porous Ni/CNTs composite membrane as solar absorber for highly efficient solar steam generation. **2022**, 243, 111815 2
- 141 Three-Dimensional Plasmonic Nanocluster-Driven Light-Matter Interaction for Photoluminescence Enhancement and Picomolar-Level Biosensing. 2
- 140 Challenges and prospects of plasmonic metasurfaces for photothermal catalysis. **2022**, 1
- 139 Inverse design a patternless solar energy absorber for maximizing absorption. **2022**, 244, 111822 1
- 138 The spatial and temporal mismatch phenomenon in solar space heating applications: status and solutions. **2022**, 321, 119326 0
- 137 Applications. **2022**, 157-178
- 136 Functional gradient films on aluminum alloy to improve its laser-induced damage ability and reduce pollutant particles' generation.

135	Nanoscale-Thick Silver Black Films Fabricated in He/Ar Inert Gas Conditions for Broadband Absorbers. 2022 , 5, 8612-8620	2
134	Design and analysis of a plasmonic nanostructure applicable for heating and sensing cycles of lab-on-chip.	
133	Recent Progress in Solar Photothermal Steam Technology for Water Purification and Energy Utilization. 2022 , 137603	5
132	Plasmonic Photocatalysis: Activating Chemical Bonds through Light and Plasmon. 2200463	6
131	Three-Dimensional Artificial Transpiration Structure Based on 1T/2H-MoS ₂ /Activated Carbon Fiber Cloth for Solar Steam Generation.	3
130	Titanium Oxynitride Spheres with Broad Plasmon Resonance for Solar Seawater Desalination.	1
129	Improving Comprehensive Performance of Strain Flexible Sensors by Electron Irradiation and Temperature Synergy.	1
128	Breath-Figure Self-Assembled Low-Cost Janus Fabrics for Highly Efficient and Stable Solar Desalination. 2113258	6
127	Polymer-decorated daikon-based solar evaporators for efficient interfacial water evaporation.	
126	Self-Assembled Supercrystals Enhance the Photothermal Conversion for Solar Evaporation and Water Purification. 2202867	2
125	A Review on Photothermal Conversion of Solar Energy with Nanomaterials and Nanostructures: From Fundamentals to Applications. 2200115	4
124	Design of a widely adjustable electrochromic device based on the reversible metal electrodeposition of Ag nanocylinders.	
123	Monolayer Plasmonic Nanoframes as Large-Area, Broadband Metasurface Absorbers. 2201171	1
122	Ultrahigh-efficiency solar energy harvesting via a non-concentrating evacuated aerogel flat-plate solar collector. 2022 ,	0
121	A reconfigurable and magnetically responsive assembly for dynamic solar steam generation. 2022 , 13,	8
120	Nanoporous Anodic Alumina Photonic Crystals for Sunlight Harvesting Applications: A Perspective. 2200480	
119	Perfect Solar Absorber with Extremely Low Infrared Emissivity. 2022 , 9, 574	
118	Design of multilayer planar film structures for near-perfect absorption in the visible to near-infrared.	

117	Rapid Solar Heating of Antimicrobial Ag and Cu ₂ O Nanostructured Plasmonic Textile for Clean Water Production.	0
116	Reconfiguration and self-healing integrated Janus electrospinning nanofiber membranes for durable seawater desalination.	2
115	Controlled assembly of gold nanoparticles in resonant gold nanoapertures for SERS applications.	1
114	A novel direct steam generation system based on the high-vacuum insulated flat plate solar collector. 2022 , 197, 966-977	1
113	Notched nanoring wideband absorber for total solar energy harvesting. 2022 , 243, 153-162	1
112	Single-shot production of Janus graphene thin film for solar steam generation with 94.5% efficiency. 2022 , 199, 469-478	1
111	Simultaneous solar water desalination and energy generation by high efficient graphene oxide-melanin photothermal membrane. 2022 , 10, 108424	0
110	Co-assembled hybrid of carbon nanodots and molecular fluorophores for efficient solar-driven water evaporation. 2022 , 199, 462-468	2
109	Progress in thermoplasmonics for solar energy applications. 2022 , 981, 1-50	4
108	Thermal design strategy for enhanced freshwater harvesting with interfacial evaporation. 2022 , 216, 119104	0
107	MOF-Derived Nanoarchitected Carbons in Wood Sponge Enable Solar-Driven Pumping for High-Efficiency Soil Water Extraction. 2022 , 139193	0
106	All-inorganic robust absorber for high-sun solar steam generation and solvent recovery. 2022 , 247, 111946	0
105	Confined high-entropy-alloy nanoparticles within graphitic shells for synergistically improved photothermal conversion. 2022 , 240, 118338	0
104	Zero-energy-consumption temperature swing system for ethane adsorption and release. 2022 , 301, 122045	0
103	Reduced graphene oxide/FeOOH-based asymmetric evaporator for the simultaneous generation of clean water and electrical power. 2023 , 201, 318-327	0
102	Heat-transfer analysis of interfacial solar evaporation and effect of surface wettability on water condensation and collection. 2023 , 184, 107911	0
101	Recent advances in structural regulation and optimization of high-performance solar-driven interfacial evaporation systems. 2022 , 10, 18509-18541	1
100	Effect of surface roughness on the solar evaporation of liquid marbles. 2023 , 629, 644-653	0

- 99 A Perspective on the optical spectral design for passive solar heating and radiative cooling. **2022**, 121, 090501 0
- 98 Omnidirectional Hydrogen Generation Based on a Flexible Black Gold Nanotube Array. **2022**, 16, 14963-14972 0
- 97 Scalable-Manufactured Plasmonic Metamaterial with Omnidirectional Absorption Bandwidth across Visible to Far-Infrared. 2207239 1
- 96 From Materials to Devices: Rationally Designing Solar Steam System for Advanced Applications. 2200835 1
- 95 Long-Term Efficient Interfacial Solar Desalination Enabled by a Biomimetic 2D Water-Transport Structure Based on Silicone Nanofilaments. 1
- 94 Activated carbon-cement composite coated polyurethane foam as a cost-efficient solar steam generator. **2022**, 134302 0
- 93 Interfacial solar steam generation by wood-based devices to produce drinking water: a review. 0
- 92 Ultra-broadband nanowire metamaterial absorber. 1
- 91 Multimode-Assisted Broadband Impedance-Gradient Thin Metamaterial Absorber. **2022**, 3, 2200063 2
- 90 Nanoporous black silver film with high porosity for efficient solar steam generation. 2
- 89 Non-Covalent Bond-Regulated Solar Evaporation Modulator: Facilitative Hydration Domains Originated via a Homogeneous Polymeric Network. 0
- 88 Preparation of graphitized carbon-coated glass fiber cloth materials with high mechanical strength, corrosion resistance, and solar-driven water evaporation performance. **2022**, 248, 112015 0
- 87 Research progress of non-Hermitian electromagnetic metasurfaces. **2022**, 0 1
- 86 High-Entropy-Alloy-Nanoparticles Enabled Wood Evaporator for Efficient Photothermal Conversion and Sustainable Solar Desalination. 2203057 2
- 85 Real-time and in situ monitoring of evaporation rate and salt precipitation during interfacial solar evaporation. **2022**, 107961 0
- 84 Nickel Foam@Reduced Graphene Oxide@Carbon Nanotube Composite as an Efficient Solar Evaporator for Water Purification and Electricity Generation. 0
- 83 Strong absorption in ultra-wide band by surface nano engineering of metallic glass. **2022**, 0
- 82 Superhydrophobic 3D-Assembled Metallic Nanoparticles for Trace Chemical Enrichment in SERS Sensing. 2204234 0

- 81 Freshwater Production Towards Microgrid Integration: Physics, Progress, and Prospects of Solar-Thermal Evaporation. **2022**, 100037 ○
- 80 High-Performance Solar Steam Generator Using Low-Cost Biomass Waste Photothermal Material and Engineering of the Structure. ○
- 79 An Infrared Ultra-Broadband Absorber Based on MIM Structure. **2022**, 12, 3477 ○
- 78 Magnetically recyclable 3D water evaporator for desalination and purification of oil-contaminated seawater. **2023**, 546, 116187 ○
- 77 Ti3C2Tx MXene framework materials: Preparation, properties and applications in energy and environment. **2022**, ○
- 76 Engineering Biomimetic Nanostructured Melanosome Textiles for Advanced Solar-to-Thermal Devices. 1
- 75 Hofmeister Effect-Enhanced Hydration Chemistry of Hydrogel for High-Efficiency Solar-Driven Interfacial Desalination. 2207262 1
- 74 Order recognition by Schubert polynomials generated by optical near-field statistics via nanometre-scale photochromism. **2022**, 12, ○
- 73 Elucidating thermal effects in plasmonic metal nanostructures: a tutorial review. **2022**, 137, ○
- 72 Progress on TiO₂-based materials for solar water interfacial evaporation. 4, ○
- 71 Passive freezing desalination driven by radiative cooling. **2022**, ○
- 70 Janus aramid nanofiber aerogel incorporating plasmonic nanoparticles for high-efficiency interfacial solar steam generation. **2023**, 220061-220061 ○
- 69 An easily scalable, durable, and highly efficient three-dimensional solar evaporator inspired by a rice paddy field. **2023**, 548, 116251 ○
- 68 Flexible plasmonic cellulose papers for broadband absorption and efficient solar steam generation. ○
- 67 A highly efficient bio-inspired 3D solar-driven evaporator with advanced heat management and salt fouling resistance design. **2022**, 140500 ○
- 66 Near Perfect Absorber for Long-Wave Infrared Based on Localized Surface Plasmon Resonance. **2022**, 12, 4223 ○
- 65 Interface Engineering of a Ti₄O₇ Nanofibrous Membrane for Efficient Solar-Driven Evaporation. **2022**, 14, 54855-54866 ○
- 64 Transparent sunlight-activated antifogging metamaterials. ○

- 63 Porous carbon-based thermally conductive materials: fabrication, functions and applications. **2022**, 100006 ○
- 62 High-Performance Janus Solar Evaporator for Water Purification with Broad Spectrum Absorption and Ultralow Heat Loss. 553-564 ○
- 61 Broadband absorption of electrospun scaffold-assisted self-assembled metal nanostructures for solar-powered water evaporation. **2022**, 106727 ○
- 60 Solar-driven Interfacial Evaporation: Design and Application Progress of Structural Evaporators and Functional Distillers. **2022**, 108115 ○
- 59 Actively Tunable THz Absorber for Switchable Operations Between Different Absorption Behaviors. **2022**, 14, 1-5 ○
- 58 An Expanded Perlite-Based Aerogel with Oil-Repellent Properties for Efficient Solar Evaporation in Oil-bearing Wastewater. **2022**, 7, ○
- 57 Linear and Nonlinear Optical Properties of Well-Defined and Disordered Plasmonic Systems: A Review. 2201475 ○
- 56 Experimental Study of Pulsating Heat Pipes Filled with Nanofluids under the Irradiation of Solar Simulator. **2022**, 15, 9153 ○
- 55 Coupling ultrafine plasmonic Co₃O₄ with thin-layer carbon over SiO₂ nanosphere for dual-functional PMS activation and solar interfacial water evaporation. **2023**, 168816 ○
- 54 Water Bridge Solar Evaporator with Salt-Resistance and Heat Localization for Efficient Desalination. ○
- 53 Colloidal self-assembly based ultrathin metasurface for perfect absorption across the entire visible spectrum. **2023**, ○
- 52 Rational Design of Mesoporous Chiral MOFs as Reactive Pockets in Nanochannels for Enzyme-Free Identification of Monosaccharide Enantiomers. 1
- 51 Supreme-black levels enabled by touchproof microcavity surface texture on anti-backscatter matrix. **2023**, 9, ○
- 50 Large-area, omnidirectional metasurface exhibiting unpolarized broadband absorption. **2023**, 129269 ○
- 49 Studies on Femtosecond Laser Textured Broadband Anti-reflective Hierarchical a-SiN_x:H Thin Films for Photovoltaic Applications. ○
- 48 3D carbonized grooved straw with efficient evaporation and salt resistance for solar steam generation. **2023**, 315, 137732 ○
- 47 Hydrophilic candle wastes microcapsules as a thermal energy storage material for all-day steam and electricity cogeneration. **2023**, 550, 116377 3
- 46 Solar Vapor Generation System Operating without Power Supply. **2022**, ○

- 45 Self-floating solar evaporator based on kapok fiber for high-performance solar steamgeneration. ○
- 44 Synergistic effect of Fe₃O₄ nanoparticles and Au nanolayer in enhancement of interfacial solar steam generation. **2023**, 112178 ○
- 43 Borophene Embedded Cellulose Paper for Enhanced Photothermal Water Evaporation and Prompt Bacterial Killing. 2205809 ○
- 42 Super Water-Storage Self-Adhesive Gel for Solar Vapor Generation and Collection. ○
- 41 Designing high-efficiency light-to-thermal conversion materials for solar desalination and photothermal catalysis. **2023**, ○
- 40 All-Dielectric Insulated 3D Plasmonic Nanoparticles for Enhanced Self-Floating Solar Evaporation under One Sun. 2201907 ○
- 39 Reactive Magnetron Sputtering of Large-Scale 3D Aluminum-Based Plasmonic Nanostructure for Both Light-Induced Thermal Imaging and Photo-Thermoelectric Conversion. 2202664 ○
- 38 Stable, Cost-Effective TiN-Based Plasmonic Nanocomposites with over 99% Solar Steam Generation Efficiency. 2212301 ○
- 37 Review of Broadband Metamaterial Absorbers: From Principles, Design Strategies, and Tunable Properties to Functional Applications. 2213818 ○
- 36 Multifunctional Plasmonic Ag-Cu Alloy Nanoparticles immobilized on Reduced Graphene Oxide for simultaneous solar-driven steam, wastewater purification, and electricity generation. **2023**, ○
- 35 MXenes for energy applications. **2023**, 475-502 ○
- 34 Solar Interfacial Evaporation at the Water-Energy Nexus: Bottlenecks, Approaches and Opportunities. ○
- 33 Review of the progress of solar-driven interfacial water evaporation (SIWE) toward a practical approach. ○
- 32 Easily Repairable and High-Performance Carbon Nanostructure Absorber for Solar Photothermoelectric Conversion and Photothermal Water Evaporation. **2023**, 15, 8761-8769 ○
- 31 Visible-mid infrared ultra-broadband and wide-angle metamaterial perfect absorber based on cermet films with nano-cone structure. **2023**, ○
- 30 Multilevel design strategies of high-performance interfacial solar vapor generation: A state of the art review. **2023**, 460, 141716 ○
- 29 Design, fabrication and performance analysis of a cost-effective photovoltaic interface seawater desalination hybrid system for co-production of electricity and potable water. **2023**, 336, 120811 ○
- 28 An Emerging Energy Technology: Self-Uninterrupted Electricity Power Harvesting from the Sun and Cold Space. ○

- 27 Nature-inspired wood-based solar evaporation system for efficient desalination and water purification. **2023**, 58, 6220-6236 ○
- 26 Construction of large-sized ultra-black films for efficient solar-thermal conversion under harsh environmental conditions. **2023**, 35, e00574 ○
- 25 A magnetic nanostructure PAC@Fe₃O₄ driven design toward Janus hydrogel achieves highly efficient solar water evaporation. **2023**, 465, 142944 ○
- 24 Highly integrated, breathable, metalized phase change fibrous membranes based on hierarchical coaxial fiber structure for multimodal personal thermal management. **2023**, 465, 142835 ○
- 23 Facile formation of Ag nanoworms based Janus nanofiber composites for efficient solar steam generation. **2023**, 38, 101516 ○
- 22 Flexible Graphite Nanoflake/Polydimethylsiloxane Nanocomposites with Promising Solar Thermal Conversion Performance. **2023**, 6, 2582-2593 ○
- 21 Multifunctional Photoabsorber for Highly Efficient Interfacial Solar Steam Generation and Wastewater Treatment. **2023**, 8, ○
- 20 Recent advances in interfacial solar vapor generation: clean water production and beyond. **2023**, 11, 5978-6015 ○
- 19 Smart Strategies for Light and Thermal Management in High-Efficiency Solar Steam Generation. 2201128 ○
- 18 Magnetically Assembled Ultrablack Surface with Omnidirectional and Broadband Light Absorption. **2023**, 15, 11369-11378 ○
- 17 Dual-hydrophilic Janus evaporator for Long-term and efficient Bimode solar evaporation. **2023**, 461, 141954 ○
- 16 A dual-functional device based on CB/PVDF@BFP for solar-driven water purification and water-induced electricity generation. **2023**, 11, 8110-8118 ○
- 15 Scalable selective absorber with quasiperiodic nanostructure for low-grade solar energy harvesting. **2023**, 8, 020801 ○
- 14 Spatial and frequency-selective optical field coupling absorption in an ultra-thin random metasurface. **2023**, 48, 1586 ○
- 13 Synthesis of Linear Black Gold Nanostructures Processable as Sunlight and Low-Energy Light Collecting Films for Photo-Thermoelectricity. 2207415 ○
- 12 Enhancing solar energy harvest by Cu₂S/CuCl heteroarrays with enriched sulfur vacancies for photo-rechargeable pseudocapacitors. ○
- 11 Enhanced Photothermal Steam Generation and Gold Using the Efficiency of Ultralight Gold Foam with Hierarchical Porosity. **2023**, 39, 4190-4197 ○
- 10 Dual-Functional Solar-to-Steam Generation and SERS Detection Substrate Based on Plasmonic Nanostructure. **2023**, 13, 1003 ○

- 9 Electrochemically prepared coniferous leaf-like nickel black membrane for desalination by solar-thermal energy conversion. ○
- 8 Design and optical performance investigation of all-sprayable ultrablack coating. ○
- 7 Solar steam-driven membrane filtration for high flux water purification. **2023**, 1, 391-398 ○
- 6 Self-Supporting Nanoporous Copper Film with High Porosity and Broadband Light Absorption for Efficient Solar Steam Generation. **2023**, 15, ○
- 5 Absorption properties and mechanisms of metallic moth-eye structures. **2023**, 540, 129487 ○
- 4 Electrospinning Technique Meets Solar Energy: Electrospun Nanofiber-Based Evaporation Systems for Solar Steam Generation. ○
- 3 Photothermal membranes for water treatment and anti-fouling performances: A review. **2023**, 412, 137335 ○
- 2 Ultrahigh solar vapor evaporation rate of super-hydrophilic aerogel by introducing environmental energy and convective flow. **2023**, 466, 143281 ○
- 1 Co-assembly of stearylated cellulose nanocrystals and GO (or CNTs) for the construction of superhydrophobic hierarchical structure with enhanced photothermal conversion. **2023**, 315, 120982 ○