Pengcheng Yao

List of Publications by Year
in descending order

29 papers	8,901 citations	236612 25 h-index	476904 29 g-index
29 all docs	29 docs citations	29 times ranked	7080 citing authors

#	Article	IF	Citations
1	3D self-assembly of aluminium nanoparticles for plasmon-enhanced solar desalination. Nature Photonics, 2016, 10, 393-398.	15.6	1,669
2	Self-assembly of highly efficient, broadband plasmonic absorbers for solar steam generation. Science Advances, 2016, 2, e1501227.	4.7	1,025
3	Graphene oxide-based efficient and scalable solar desalination under one sun with a confined 2D water path. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13953-13958.	3.3	971
4	Mushrooms as Efficient Solar Steamâ€Generation Devices. Advanced Materials, 2017, 29, 1606762.	11.1	922
5	Tailoring Graphene Oxideâ€Based Aerogels for Efficient Solar Steam Generation under One Sun. Advanced Materials, 2017, 29, 1604031.	11.1	711
6	Flexible and Salt Resistant Janus Absorbers by Electrospinning for Stable and Efficient Solar Desalination. Advanced Energy Materials, 2018, 8, 1702884.	10.2	635
7	Enhancement of Interfacial Solar Vapor Generation by Environmental Energy. Joule, 2018, 2, 1331-1338.	11.7	507
8	Poly(dimethylsiloxane) Thin Film as a Stable Interfacial Layer for Highâ€Performance Lithiumâ€Metal Battery Anodes. Advanced Materials, 2017, 29, 1603755.	11.1	454
9	A water lilyâ€“inspired hierarchical design for stable and efficient solar evaporation of high-salinity brine. Science Advances, 2019, 5, eaaw7013.	4.7	335
10	PVDF/Palygorskite Nanowire Composite Electrolyte for 4 V Rechargeable Lithium Batteries with High Energy Density. Nano Letters, 2018, 18, 6113-6120.	4.5	227
11	Interfacial Solar Steam Generation Enables Fastâ€Responsive, Energyâ€Efficient, and Lowâ€Cost Offâ€Grid Sterilization. Advanced Materials, 2018, 30, e1805159.	11.1	208
12	Towards high energy density lithium battery anodes: silicon and lithium. Chemical Science, 2019, 10, 7132-7148.	3.7	134
13	A Nanoâ€shield Design for Separators to Resist Dendrite Formation in Lithiumâ€Metal Batteries. Angewandte Chemie - International Edition, 2020, 59, 6561-6566.	7.2	128
14	Minimized lithium trapping by isovalent isomorphism for high initial Coulombic efficiency of silicon anodes. Science Advances, 2019, 5, eaax0651.	4.7	122
15	Scalable Production of Si Nanoparticles Directly from Low Grade Sources for Lithium-Ion Battery Anode. Nano Letters, 2015, 15, 5750-5754.	4.5	119
16	Precise Perforation and Scalable Production of Si Particles from Low-Grade Sources for High-Performance Lithium Ion Battery Anodes. Nano Letters, 2016, 16, 7210-7215.	4.5	105
17	Graphene oxide based materials for desalination. Carbon, 2019, 146, 320-328.	5.4	98
18	Full Dissolution of the Whole Lithium Sulfide Family (Li₂S₈ to) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (Li Chemie - International Edition, 2019, 58, 5557-5561.	7.2	93

#	Article	IF	Citations
19	Interfacial Solar Vapor Generation: Materials and Structural Design. Accounts of Materials Research, 2021, 2, 198-209.	5.9	75
20	Simultaneous Purification and Perforation of Low-Grade Si Sources for Lithium-Ion Battery Anode. Nano Letters, 2015, 15, 7742-7747.	4.5	62
21	Li⁺â€Containing, Continuous Silica Nanofibers for High Li⁺ Conductivity in Composite Polymer Electrolyte. Small, 2019, 15, e1902729.	5.2	58
22	Nanopurification of silicon from 84% to 99.999% purity with a simple and scalable process. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13473-13477.	3.3	56
23	Omnidirectional and effective salt-rejecting absorber with rationally designed nanoarchitecture for efficient and durable solar vapour generation. Journal of Materials Chemistry A, 2018, 6, 22976-22986.	5.2	48
24	Simultaneous Perforation and Doping of Si Nanoparticles for Lithium-Ion Battery Anode. ACS Applied Materials & Interfaces, 2017, 9, 44452-44457.	4.0	31
25	Greener and higher conversion of esterification via interfacial photothermal catalysis. Nature Sustainability, 2022, 5, 348-356.	11.5	29
26	In operando plasmonic monitoring of electrochemical evolution of lithium metal. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11168-11173.	3.3	28
27	3D hollow reduced graphene oxide foam as a stable host for high-capacity lithium metal anodes. Materials Chemistry Frontiers, 2019, 3, 339-343.	3.2	26
28	A Nanoâ€shield Design for Separators to Resist Dendrite Formation in Lithiumâ€Metal Batteries. Angewandte Chemie, 2020, 132, 6623-6628.	1.6	14
29	Full Dissolution of the Whole Lithium Sulfide Family (Li₂S₈ to) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 0 Chemie, 2019, 131, 5613-5617.	1.6	11