Caitian Gao

List of Publications by Year in descending order

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43 papers	3,591 citations	172207 29 h-index	264894 42 g-index
43 all docs	43 docs citations	43 times ranked	6341 citing authors

#	Article	IF	Citations
1	Tuning the Hydration Entropy of Cations during Electrochemical Intercalation for High Thermopower. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	3
2	Amorphizing noble metal chalcogenide catalysts at the single-layer limit towards hydrogen production. Nature Catalysis, 2022, 5, 212-221.	16.1	113
3	Thermally Assisted Alkali/Zinc Ion Hybrid Battery for High Roundtrip Efficiency. ACS Applied Energy Materials, 2022, 5, 2780-2785.	2.5	1
4	Continuous thermally regenerative electrochemical systems for directly converting low-grade heat to electricity. Nano Energy, 2022, 101, 107547.	8.2	17
5	Efficient Lowâ€Grade Heat Harvesting Enabled by Tuning the Hydration Entropy in an Electrochemical System. Advanced Materials, 2021, 33, e2004717.	11.1	22
6	Tear-Based Aqueous Batteries for Smart Contact Lenses Enabled by Prussian Blue Analogue Nanocomposites. Nano Letters, 2021, 21, 1659-1665.	4.5	22
7	Lowâ€Grade Heat Harvesting: Efficient Lowâ€Grade Heat Harvesting Enabled by Tuning the Hydration Entropy in an Electrochemical System (Adv. Mater. 13/2021). Advanced Materials, 2021, 33, 2170096.	11.1	0
8	Copper Hexacyanoferrate Thin Film Deposition and Its Application to a New Method for Diffusion Coefficient Measurement. Nanomaterials, 2021, 11, 1860.	1.9	3
9	Engineering grain boundaries at theÂ2D limit for theÂhydrogen evolution reaction. Nature Communications, 2020, 11, 57.	5.8	153
10	An electrochromic alarm system for smart contact lenses. Sensors and Actuators B: Chemical, 2020, 322, 128601.	4.0	20
11	Selective Ion Sweeping on Prussian Blue Analogue Nanoparticles and Activated Carbon for Electrochemical Kinetic Energy Harvesting. Nano Letters, 2020, 20, 1800-1807.	4.5	8
12	Electrochromic Alarm System with Computer Vision in Smart Contact Lens. ECS Meeting Abstracts, 2020, MA2020-02, 2081-2081.	0.0	1
13	Self-gating in semiconductor electrocatalysis. Nature Materials, 2019, 18, 1098-1104.	13.3	167
14	Lithium Manganese Oxide in an Aqueous Electrochemical System for Low-Grade Thermal Energy Harvesting. Chemistry of Materials, 2019, 31, 4379-4384.	3.2	41
15	The Effect of Electrolyte Type on the Li Ion Intercalation in Copper Hexacyanoferrate. Journal of the Electrochemical Society, 2019, 166, A1732-A1737.	1.3	12
16	Engineering the Electrochemical Temperature Coefficient for Efficient Lowâ€Grade Heat Harvesting. Advanced Functional Materials, 2018, 28, 1803129.	7.8	64
17	Thermally Regenerative Electrochemical Cycle for Low-Grade Heat Harvesting. ACS Energy Letters, 2017, 2, 2326-2334.	8.8	106
18	Germanium on seamless graphene carbon nanotube hybrids for lithium ion anodes. Carbon, 2017, 123, 433-439.	5.4	35

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19	Nitrogen-doped carbonized cotton for highly flexible supercapacitors. Carbon, 2016, 105, 260-267.	5.4	108
20	Enhanced charge separation and transfer through Fe2O3/ITO nanowire arrays wrapped with reduced graphene oxide for water-splitting. Nano Energy, 2016, 30, 892-899.	8.2	71
21	Sandwich structured graphene-wrapped FeS-graphene nanoribbons with improved cycling stability for lithium ion batteries. Nano Research, 2016, 9, 2904-2911.	5.8	52
22	Highâ€Performance Pseudocapacitive Microsupercapacitors from Laserâ€Induced Graphene. Advanced Materials, 2016, 28, 838-845.	11.1	439
23	Toward efficient photoelectrochemical water-splitting by using screw-like SnO2 nanostructures as photoanode after being decorated with CdS quantum dots. Nano Energy, 2016, 19, 318-327.	8.2	139
24	Liquid Phase Exfoliation of Two-Dimensional Materials by Directly Probing and Matching Surface Tension Components. Nano Letters, 2015, 15, 5449-5454.	4.5	436
25	Synthesis of cadmium sulfide quantum dot-decorated barium stannate nanowires for photoelectrochemical water splitting. Journal of Materials Chemistry A, 2015, 3, 12769-12776.	5.2	41
26	Tin Disulfide Nanoplates on Graphene Nanoribbons for Full Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 26549-26556.	4.0	47
27	Facile and fast one-pot synthesis of ultra-long porous ZnO nanowire arrays for efficient dye-sensitized solar cells. Journal of Alloys and Compounds, 2014, 586, 766-772.	2.8	30
28	The role of carbon in the photocatalytic reaction of carbon/TiO 2 photocatalysts. Applied Surface Science, 2014, 320, 703-709.	3.1	50
29	High performance, self-powered UV-photodetector based on ultrathin, transparent, SnO2â€“TiO2 coreâ€“shell electrodes. Journal of Alloys and Compounds, 2014, 616, 510-515.	2.8	65
30	A simple method to eliminate the surface defects of diamond particles. Powder Technology, 2014, 266, 299-302.	2.1	4
31	Low-temperature synthesis of tin dioxide hollow nanospheres and their potential applications in dye-sensitized solar cells and photoelectrochemical type self-powered ultraviolet photodetectors. Journal of Power Sources, 2014, 272, 886-894.	4.0	46
32	Branched hierarchical photoanode of titanium dioxide nanoneedles on tin dioxide nanofiber network for high performance dye-sensitized solar cells. Journal of Power Sources, 2014, 264, 15-21.	4.0	32
33	One-step synthesis porous tungsten carbide films with excellent hydrophilicity. Materials Letters, 2014, 115, 9-12.	1.3	7
34	An overview of carbon materials for flexible electrochemical capacitors. Nanoscale, 2013, 5, 8799.	2.8	278
35	Titanium dioxide coated zinc oxide nanostrawberry aggregates for dye-sensitized solar cell and self-powered UV-photodetector. Journal of Power Sources, 2013, 239, 458-465.	4.0	60
36	Highâ€Performance Photoelectrochemicalâ€Type Selfâ€Powered UV Photodetector Using Epitaxial TiO₂/SnO₂ Branched Heterojunction Nanostructure. Small, 2013, 9, 2005-2011.	5.2	194

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37	TiO2 films with rich bulk oxygen vacancies prepared by electrospinning for dye-sensitized solar cells. Journal of Power Sources, 2012, 214, 244-250.	4.0	54
38	Nanocrystalline TiO2 film based photoelectrochemical cell as self-powered UV-photodetector. Nano Energy, 2012, 1, 640-645.	8.2	170
39	A facile method to prepare SnO2 nanotubes for use in efficient SnO2â€“TiO2 coreâ€“shell dye-sensitized solar cells. Nanoscale, 2012, 4, 3475.	2.8	140
40	Graphene-based composite materials beneficial to wound healing. Nanoscale, 2012, 4, 2978.	2.8	236
41	High Field Emission Performance of Needleâ€onâ€Fiber Hierarchicalâ€Structure <scp>ZnO</scp>. Journal of the American Ceramic Society, 2011, 94, 4387-4390.	1.9	13
42	Synthesis and H2 sensing properties of aligned ZnO nanotubes. Applied Surface Science, 2011, 257, 2264-2268.	3.1	44
43	Effect of Al doping on the visible photoluminescence of ZnO nanofibers. Journal of Alloys and Compounds, 2010, 506, 772-776.	2.8	47