

Guangyuan Wesley Zheng

List of Publications by Year in Descending Order

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

62 papers	23,289 citations	55 h-index	65 g-index
65 ext. papers	25,653 ext. citations	18.7 avg, IF	7.08 L-index

#	Paper	IF	Citations
62	Synergistic Effect of Salinized Quinone for Entrapment of Polysulfides for High-Performance Li-S Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 23867-23873	9.5	7
61	Mechanical rolling formation of interpenetrated lithium metal/lithium tin alloy foil for ultrahigh-rate battery anode. <i>Nature Communications</i> , 2020 , 11, 829	17.4	125
60	Cathode-Supported-Electrolyte Configuration for High-Performance All-Solid-State Lithium-Sulfur Batteries. <i>ACS Applied Energy Materials</i> , 2020 , 3, 11540-11547	6.1	3
59	Stabilizing a Lithium Metal Battery by an In Situ LiS-modified Interfacial Layer via Amorphous-Sulfide Composite Solid Electrolyte. <i>Nano Letters</i> , 2020 , 20, 8273-8281	11.5	16
58	Thermal Conductive 2D Boron Nitride for High-Performance All-Solid-State Lithium-Sulfur Batteries. <i>Advanced Science</i> , 2020 , 7, 2001303	13.6	15
57	Simultaneous Cobalt and Phosphorous Doping of MoS ₂ for Improved Catalytic Performance on Polysulfide Conversion in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1902096	21.8	72
56	A Cathode-Integrated Sulfur-Deficient CoS Catalytic Interlayer for the Reutilization of "Lost" Polysulfides in Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2019 , 13, 7073-7082	16.7	156
55	Large-Scale Color-Changing Thin Film Energy Storage Device with High Optical Contrast and Energy Storage Capacity. <i>ACS Applied Energy Materials</i> , 2018 , 1, 1658-1663	6.1	9
54	Robust Pinhole-free LiN Solid Electrolyte Grown from Molten Lithium. <i>ACS Central Science</i> , 2018 , 4, 97-104	14.8	130
53	Elucidating the Catalytic Activity of Oxygen Deficiency in the Polysulfide Conversion Reactions of Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1801868	21.8	115
52	Lithium Silicide Surface Enrichment: A Solution to Lithium Metal Battery. <i>Advanced Materials</i> , 2018 , 30, e1801745	24	119
51	Electrochemical energy storage devices for wearable technology: a rationale for materials selection and cell design. <i>Chemical Society Reviews</i> , 2018 , 47, 5919-5945	58.5	215
50	Nanoscale Nucleation and Growth of Electrodeposited Lithium Metal. <i>Nano Letters</i> , 2017 , 17, 1132-1139	11.5	699
49	Core-Shell Nanoparticle Coating as an Interfacial Layer for Dendrite-Free Lithium Metal Anodes. <i>ACS Central Science</i> , 2017 , 3, 135-140	16.8	140
48	Electrocatalysis of polysulfide conversion by sulfur-deficient MoS ₂ nanoflakes for lithium-sulfur batteries. <i>Energy and Environmental Science</i> , 2017 , 10, 1476-1486	35.4	617
47	Phase Transformations in TiS ₂ during K Intercalation. <i>ACS Energy Letters</i> , 2017 , 2, 1835-1840	20.1	85
46	In Situ Observation and Electrochemical Study of Encapsulated Sulfur Nanoparticles by MoS Flakes. <i>Journal of the American Chemical Society</i> , 2017 , 139, 10133-10141	16.4	106

45	High-Performance Lithium Metal Negative Electrode with a Soft and Flowable Polymer Coating. <i>ACS Energy Letters</i> , 2016 , 1, 1247-1255	20.1	218
44	Balancing surface adsorption and diffusion of lithium-polysulfides on nonconductive oxides for lithium-sulfur battery design. <i>Nature Communications</i> , 2016 , 7, 11203	17.4	866
43	A Stretchable Graphitic Carbon/Si Anode Enabled by Conformal Coating of a Self-Healing Elastic Polymer. <i>Advanced Materials</i> , 2016 , 28, 2455-61	24	163
42	In Situ Chemical Synthesis of Lithium Fluoride/Metal Nanocomposite for High Capacity Prelithiation of Cathodes. <i>Nano Letters</i> , 2016 , 16, 1497-501	11.5	77
41	Graphite-Encapsulated Li-Metal Hybrid Anodes for High-Capacity Li Batteries. <i>Chem</i> , 2016 , 1, 287-297	16.2	197
40	Durable rechargeable zinc-air batteries with neutral electrolyte and manganese oxide catalyst. <i>Journal of Power Sources</i> , 2016 , 332, 330-336	8.9	95
39	The synergetic effect of lithium polysulfide and lithium nitrate to prevent lithium dendrite growth. <i>Nature Communications</i> , 2015 , 6, 7436	17.4	1034
38	A Sulfur Cathode with Pomegranate-Like Cluster Structure. <i>Advanced Energy Materials</i> , 2015 , 5, 1500211	21.8	108
37	Polymer nanofiber-guided uniform lithium deposition for battery electrodes. <i>Nano Letters</i> , 2015 , 15, 2910-6	11.5	406
36	Lateral and Vertical Two-Dimensional Layered Topological Insulator Heterostructures. <i>ACS Nano</i> , 2015 , 9, 10916-21	16.7	25
35	A phosphorene-graphene hybrid material as a high-capacity anode for sodium-ion batteries. <i>Nature Nanotechnology</i> , 2015 , 10, 980-5	28.7	1114
34	In-operando optical imaging of temporal and spatial distribution of polysulfides in lithium-sulfur batteries. <i>Nano Energy</i> , 2015 , 11, 579-586	17.1	76
33	In situ observation of divergent phase transformations in individual sulfide nanocrystals. <i>Nano Letters</i> , 2015 , 15, 1264-71	11.5	86
32	Transparent air filter for high-efficiency PM2.5 capture. <i>Nature Communications</i> , 2015 , 6, 6205	17.4	525
31	Improving lithium-sulphur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. <i>Nature Communications</i> , 2014 , 5, 3943	17.4	341
30	Facile synthesis of Li ₂ S/polypyrrole composite structures for high-performance Li ₂ S cathodes. <i>Energy and Environmental Science</i> , 2014 , 7, 672	35.4	237
29	High electrochemical selectivity of edge versus terrace sites in two-dimensional layered MoS ₂ materials. <i>Nano Letters</i> , 2014 , 14, 7138-44	11.5	220
28	Charging-free electrochemical system for harvesting low-grade thermal energy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17011-6	11.5	152

27	Interconnected hollow carbon nanospheres for stable lithium metal anodes. <i>Nature Nanotechnology</i> , 2014 , 9, 618-23	28.7	1304
26	Improved lithium-sulfur batteries with a conductive coating on the separator to prevent the accumulation of inactive S-related species at the cathode-separator interface. <i>Energy and Environmental Science</i> , 2014 , 7, 3381-3390	35.4	425
25	Ultrathin two-dimensional atomic crystals as stable interfacial layer for improvement of lithium metal anode. <i>Nano Letters</i> , 2014 , 14, 6016-22	11.5	545
24	Sulfur cathodes with hydrogen reduced titanium dioxide inverse opal structure. <i>ACS Nano</i> , 2014 , 8, 5249-56	11.7	273
23	Formation of stable phosphorus-carbon bond for enhanced performance in black phosphorus nanoparticle-graphite composite battery anodes. <i>Nano Letters</i> , 2014 , 14, 4573-80	11.5	627
22	High-capacity Li ₂ S/graphene oxide composite cathodes with stable cycling performance. <i>Chemical Science</i> , 2014 , 5, 1396	9.4	99
21	Electrochemical tuning of layered lithium transition metal oxides for improvement of oxygen evolution reaction. <i>Nature Communications</i> , 2014 , 5, 4345	17.4	350
20	Strong sulfur binding with conducting Magnéli-phase Ti _(n) O ₂ (n-1) nanomaterials for improving lithium-sulfur batteries. <i>Nano Letters</i> , 2014 , 14, 5288-94	11.5	579
19	Stable cycling of lithium sulfide cathodes through strong affinity with a bifunctional binder. <i>Chemical Science</i> , 2013 , 4, 3673	9.4	366
18	Understanding the role of different conductive polymers in improving the nanostructured sulfur cathode performance. <i>Nano Letters</i> , 2013 , 13, 5534-40	11.5	543
17	Electrochemical tuning of vertically aligned MoS ₂ nanofilms and its application in improving hydrogen evolution reaction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 19701-6	11.5	747
16	High-performance hollow sulfur nanostructured battery cathode through a scalable, room temperature, one-step, bottom-up approach. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 7148-53	11.5	340
15	Transparent and conductive paper from nanocellulose fibers. <i>Energy and Environmental Science</i> , 2013 , 6, 513-518	35.4	375
14	Sulphur-TiO ₂ yolk-shell nanoarchitecture with internal void space for long-cycle lithium-sulphur batteries. <i>Nature Communications</i> , 2013 , 4, 1331	17.4	1698
13	Amphiphilic surface modification of hollow carbon nanofibers for improved cycle life of lithium sulfur batteries. <i>Nano Letters</i> , 2013 , 13, 1265-70	11.5	615
12	A membrane-free lithium/polysulfide semi-liquid battery for large-scale energy storage. <i>Energy and Environmental Science</i> , 2013 , 6, 1552	35.4	331
11	Nanostructured paper for flexible energy and electronic devices. <i>MRS Bulletin</i> , 2013 , 38, 320-325	3.2	173
10	Nanostructured sulfur cathodes. <i>Chemical Society Reviews</i> , 2013 , 42, 3018-32	58.5	1563

9	Silicon-conductive nanopaper for Li-ion batteries. <i>Nano Energy</i> , 2013 , 2, 138-145	17.1	137
8	Crab shells as sustainable templates from nature for nanostructured battery electrodes. <i>Nano Letters</i> , 2013 , 13, 3385-90	11.5	185
7	MoSe ₂ and WSe ₂ nanofilms with vertically aligned molecular layers on curved and rough surfaces. <i>Nano Letters</i> , 2013 , 13, 3426-33	11.5	579
6	High-capacity micrometer-sized Li ₂ S particles as cathode materials for advanced rechargeable lithium-ion batteries. <i>Journal of the American Chemical Society</i> , 2012 , 134, 15387-94	16.4	524
5	Engineering empty space between Si nanoparticles for lithium-ion battery anodes. <i>Nano Letters</i> , 2012 , 12, 904-9	11.5	602
4	Rechargeable LiO ₂ batteries with a covalently coupled MnCo ₂ O ₄ /graphene hybrid as an oxygen cathode catalyst. <i>Energy and Environmental Science</i> , 2012 , 5, 7931	35.4	372
3	Paper supercapacitors by a solvent-free drawing method. <i>Energy and Environmental Science</i> , 2011 , 4, 3368	35.4	263
2	Hollow carbon nanofiber-encapsulated sulfur cathodes for high specific capacity rechargeable lithium batteries. <i>Nano Letters</i> , 2011 , 11, 4462-7	11.5	1096
1	Phase engineering of Mo-V oxides molecular sieves for zinc-ion batteries. <i>Science China Materials</i> , 2011 , 54, 1111-1116	7.1	2