

Guangyuan Wesley Zheng

List of Publications by Citations

Source: <https://exaly.com/author-pdf/7317679/guangyuan-wesley-zheng-publications-by-citations.pdf>
Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. 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.

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	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
61	Nanostructured sulfur cathodes. <i>Chemical Society Reviews</i> , 2013 , 42, 3018-32	58.5	1563
60	Interconnected hollow carbon nanospheres for stable lithium metal anodes. <i>Nature Nanotechnology</i> , 2014 , 9, 618-23	28.7	1304
59	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
58	Hollow carbon nanofiber-encapsulated sulfur cathodes for high specific capacity rechargeable lithium batteries. <i>Nano Letters</i> , 2011 , 11, 4462-7	11.5	1096
57	The synergetic effect of lithium polysulfide and lithium nitrate to prevent lithium dendrite growth. <i>Nature Communications</i> , 2015 , 6, 7436	17.4	1034
56	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
55	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
54	Nanoscale Nucleation and Growth of Electrodeposited Lithium Metal. <i>Nano Letters</i> , 2017 , 17, 1132-1139	11.5	699
53	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
52	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
51	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
50	Engineering empty space between Si nanoparticles for lithium-ion battery anodes. <i>Nano Letters</i> , 2012 , 12, 904-9	11.5	602
49	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
48	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
47	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
46	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

45	Transparent air filter for high-efficiency PM2.5 capture. <i>Nature Communications</i> , 2015 , 6, 6205	17.4	525
44	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
43	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
42	Polymer nanofiber-guided uniform lithium deposition for battery electrodes. <i>Nano Letters</i> , 2015 , 15, 2910-6	11.5	406
41	Transparent and conductive paper from nanocellulose fibers. <i>Energy and Environmental Science</i> , 2013 , 6, 513-518	35.4	375
40	Rechargeable Li-O 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
39	Stable cycling of lithium sulfide cathodes through strong affinity with a bifunctional binder. <i>Chemical Science</i> , 2013 , 4, 3673	9.4	366
38	Electrochemical tuning of layered lithium transition metal oxides for improvement of oxygen evolution reaction. <i>Nature Communications</i> , 2014 , 5, 4345	17.4	350
37	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
36	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
35	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
34	Sulfur cathodes with hydrogen reduced titanium dioxide inverse opal structure. <i>ACS Nano</i> , 2014 , 8, 5249-567	16.7	273
33	Paper supercapacitors by a solvent-free drawing method. <i>Energy and Environmental Science</i> , 2011 , 4, 3368	35.4	263
32	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
31	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
30	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
29	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
28	Graphite-Encapsulated Li-Metal Hybrid Anodes for High-Capacity Li Batteries. <i>Chem</i> , 2016 , 1, 287-297	16.2	197

27	Crab shells as sustainable templates from nature for nanostructured battery electrodes. <i>Nano Letters</i> , 2013 , 13, 3385-90	11.5	185
26	Nanostructured paper for flexible energy and electronic devices. <i>MRS Bulletin</i> , 2013 , 38, 320-325	3.2	173
25	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
24	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
23	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
22	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
21	Silicon-conductive nanopaper for Li-ion batteries. <i>Nano Energy</i> , 2013 , 2, 138-145	17.1	137
20	Robust Pinhole-free LiN Solid Electrolyte Grown from Molten Lithium. <i>ACS Central Science</i> , 2018 , 4, 97-104	16.8	130
19	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
18	Lithium Silicide Surface Enrichment: A Solution to Lithium Metal Battery. <i>Advanced Materials</i> , 2018 , 30, e1801745	24	119
17	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
16	A Sulfur Cathode with Pomegranate-Like Cluster Structure. <i>Advanced Energy Materials</i> , 2015 , 5, 1500211	21.8	108
15	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
14	High-capacity Li ₂ S/graphene oxide composite cathodes with stable cycling performance. <i>Chemical Science</i> , 2014 , 5, 1396	9.4	99
13	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
12	In situ observation of divergent phase transformations in individual sulfide nanocrystals. <i>Nano Letters</i> , 2015 , 15, 1264-71	11.5	86
11	Phase Transformations in TiS ₂ during K Intercalation. <i>ACS Energy Letters</i> , 2017 , 2, 1835-1840	20.1	85
10	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

9	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
8	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
7	Lateral and Vertical Two-Dimensional Layered Topological Insulator Heterostructures. <i>ACS Nano</i> , 2015 , 9, 10916-21	16.7	25
6	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
5	Thermal Conductive 2D Boron Nitride for High-Performance All-Solid-State Lithium-Sulfur Batteries. <i>Advanced Science</i> , 2020 , 7, 2001303	13.6	15
4	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
3	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
2	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
1	Phase engineering of Mo-V oxides molecular sieves for zinc-ion batteries. <i>Science China Materials</i> , 2020 , 13, 1205-1212	7.1	2