Singyuk Hou

List of Publications by Year
in descending order

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59 papers	11,017 citations	57631 44 h-index	118652 62 g-index
62 all docs	62 docs citations	62 times ranked	10351 citing authors

#	Article	IF	Citations
1	Zn/MnO₂ Battery Chemistry With H⁺ and Zn²⁺ Coinsertion. Journal of the American Chemical Society, 2017, 139, 9775-9778.	6.6	1,375
2	Non-flammable electrolyte enables Li-metal batteries with aggressive cathode chemistries. Nature Nanotechnology, 2018, 13, 715-722.	15.6	964
3	Highly Fluorinated Interphases Enable High-Voltage Li-Metal Batteries. CheM, 2018, 4, 174-185.	5.8	682
4	Aqueous Li-ion battery enabled by halogen conversionâ€“intercalation chemistry in graphite. Nature, 2019, 569, 245-250.	13.7	590
5	Fluorinated interphase enables reversible aqueous zinc battery chemistries. Nature Nanotechnology, 2021, 16, 902-910.	15.6	560
6	A critical review of cathodes for rechargeable Mg batteries. Chemical Society Reviews, 2018, 47, 8804-8841.	18.7	420
7	Supramolecular regulation of bioorthogonal catalysis in cells using nanoparticle-embedded transition metal catalysts. Nature Chemistry, 2015, 7, 597-603.	6.6	395
8	Extremely stable antimonyâ€“carbon composite anodes for potassium-ion batteries. Energy and Environmental Science, 2019, 12, 615-623.	15.6	358
9	The Interplay of Size and Surface Functionality on the Cellular Uptake of Sub-10 nm Gold Nanoparticles. ACS Nano, 2015, 9, 9986-9993.	7.3	328
10	An Inorganicâ€Rich Solid Electrolyte Interphase for Advanced Lithiumâ€Metal Batteries in Carbonate Electrolytes. Angewandte Chemie - International Edition, 2021, 60, 3661-3671.	7.2	317
11	Regulation of Macrophage Recognition through the Interplay of Nanoparticle Surface Functionality and Protein Corona. ACS Nano, 2016, 10, 4421-4430.	7.3	264
12	Solvation sheath reorganization enables divalent metal batteries with fast interfacial charge transfer kinetics. Science, 2021, 374, 172-178.	6.0	238
13	Solidâ€State Electrolyte Design for Lithium Dendrite Suppression. Advanced Materials, 2020, 32, e2002741.	11.1	219
14	Intercalation of Bi nanoparticles into graphite results in an ultra-fast and ultra-stable anode material for sodium-ion batteries. Energy and Environmental Science, 2018, 11, 1218-1225.	15.6	212
15	A 63 m Superconcentrated Aqueous Electrolyte for High-Energy Li-Ion Batteries. ACS Energy Letters, 2020, 5, 968-974.	8.8	197
16	High Interfacial-Energy Interphase Promoting Safe Lithium Metal Batteries. Journal of the American Chemical Society, 2020, 142, 2438-2447.	6.6	195
17	A Universal Organic Cathode for Ultrafast Lithium and Multivalent Metal Batteries. Angewandte Chemie - International Edition, 2018, 57, 7146-7150.	7.2	177
18	A Pyrazineâ€Based Polymer for Fastâ€Charge Batteries. Angewandte Chemie - International Edition, 2019, 58, 17820-17826.	7.2	173

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19	Azo compounds as a family of organic electrode materials for alkali-ion batteries. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2004-2009.	3.3	168
20	Self-Templated Formation of P2-type K_{0.6}CoO₂ Microspheres for High Reversible Potassium-Ion Batteries. Nano Letters, 2018, 18, 1522-1529.	4.5	167
21	Designing In-Situ-Formed Interphases Enables Highly Reversible Cobalt-Free LiNiO2 Cathode for Li-ion and Li-metal Batteries. Joule, 2019, 3, 2550-2564.	11.7	167
22	High-Energy Li Metal Battery with Lithiated Host. Joule, 2019, 3, 732-744.	11.7	160
23	Reversible Redox Chemistry of Azo Compounds for Sodiumâ€ion Batteries. Angewandte Chemie - International Edition, 2018, 57, 2879-2883.	7.2	159
24	Unique aqueous Li-ion/sulfur chemistry with high energy density and reversibility. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6197-6202.	3.3	151
25	An Organic Anode for High Temperature Potassiumâ€ion Batteries. Advanced Energy Materials, 2019, 9, 1802986.	10.2	151
26	Reversible S⁰/MgS_x Redox Chemistry in a MgTFSI₂/MgCl₂/DME Electrolyte for Rechargeable Mg/S Batteries. Angewandte Chemie - International Edition, 2017, 56, 13526-13530.	7.2	149
27	Achieving High Energy Density through Increasing the Output Voltage: A Highly Reversible 5.3ÂV Battery. CheM, 2019, 5, 896-912.	5.8	145
28	Azo Compounds Derived from Electrochemical Reduction of Nitro Compounds for High Performance Liâ€ion Batteries. Advanced Materials, 2018, 30, e1706498.	11.1	134
29	Manipulating electrolyte and solid electrolyte interphase to enable safe and efficient Li-S batteries. Nano Energy, 2018, 50, 431-440.	8.2	134
30	Thermodynamics and Kinetics of Sulfur Cathode during Discharge in MgTFSI₂â€“DME Electrolyte. Advanced Materials, 2018, 30, 1704313.	11.1	122
31	Fully Zwitterionic Nanoparticle Antimicrobial Agents through Tuning of Core Size and Ligand Structure. ACS Nano, 2016, 10, 8732-8737.	7.3	118
32	Reducing Mg Anode Overpotential via Ion Conductive Surface Layer Formation by Iodine Additive. Advanced Energy Materials, 2018, 8, 1701728.	10.2	107
33	High-Performance All-Solid-State Naâ€“S Battery Enabled by Castingâ€“Annealing Technology. ACS Nano, 2018, 12, 3360-3368.	7.3	102
34	Existence of Solid Electrolyte Interphase in Mg Batteries: Mg/S Chemistry as an Example. ACS Applied Materials & Interfaces, 2018, 10, 14767-14776.	4.0	99
35	Interfacial Design for a 4.6ÂV Highâ€Voltage Singleâ€Crystalline LiCoO₂ Cathode. Advanced Materials, 2022, 34, e2108353.	11.1	98
36	Tuning Anionic Chemistry To Improve Kinetics of Mg Intercalation. Chemistry of Materials, 2019, 31, 3183-3191.	3.2	91

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37	Formation of LiFâ€rich Cathodeâ€Electrolyte Interphase by Electrolyte Reduction. Angewandte Chemie - International Edition, 2022, 61, .	7.2	90
38	A Covalent Organic Framework for Fast-Charge and Durable Rechargeable Mg Storage. Nano Letters, 2020, 20, 3880-3888.	4.5	72
39	Enabling safe aqueous lithium ion open batteries by suppressing oxygen reduction reaction. Nature Communications, 2020, 11, 2638.	5.8	71
40	Electrochemical nanoparticleâ€“enzyme sensors for screening bacterial contamination in drinking water. Analyst, The, 2015, 140, 4991-4996.	1.7	64
41	High-Energy-Density Rechargeable Mg Battery Enabled by a Displacement Reaction. Nano Letters, 2019, 19, 6665-6672.	4.5	59
42	Reversible S⁰/MgS_x Redox Chemistry in a MgTFSI₂/MgCl₂/DME Electrolyte for Rechargeable Mg/S Batteries. Angewandte Chemie, 2017, 129, 13711-13715.	1.6	58
43	Tuning Interface Lithiophobicity for Lithium Metal Solid-State Batteries. ACS Energy Letters, 2022, 7, 131-139.	8.8	56
44	A Universal Organic Cathode for Ultrafast Lithium and Multivalent Metal Batteries. Angewandte Chemie, 2018, 130, 7264-7268.	1.6	51
45	Immunomodulatory Effects of Coated Gold Nanoparticles in LPS-Stimulated InÂVitro and InÂVivo Murine Model Systems. CheM, 2016, 1, 320-327.	5.8	44
46	Waterâ€Pillared Sodium Vanadium Bronze Nanowires for Enhanced Rechargeable Magnesium Ion Storage. Small, 2020, 16, e2000741.	5.2	34
47	High-energy and low-cost membrane-free chlorine flow battery. Nature Communications, 2022, 13, 1281.	5.8	34
48	Quantitative Differentiation of Cell Surface-Bound and Internalized Cationic Gold Nanoparticles Using Mass Spectrometry. ACS Nano, 2016, 10, 6731-6736.	7.3	33
49	Reversible Redox Chemistry of Azo Compounds for Sodiumâ€ion Batteries. Angewandte Chemie, 2018, 130, 2929-2933.	1.6	33
50	An Inorganicâ€Rich Solid Electrolyte Interphase for Advanced Lithiumâ€Metal Batteries in Carbonate Electrolytes. Angewandte Chemie, 2021, 133, 3705-3715.	1.6	29
51	Cytosolic delivery of large proteins using nanoparticle-stabilized nanocapsules. Nanoscale, 2016, 8, 18038-18041.	2.8	28
52	Nanoparticleâ€“dendrimer hybrid nanocapsules for therapeutic delivery. Nanomedicine, 2016, 11, 1571-1578.	1.7	24
53	Mass Spectrometric Detection of Nanoparticle Hostâ€“Guest Interactions in Cells. Analytical Chemistry, 2014, 86, 6710-6714.	3.2	19
54	A Pyrazineâ€Based Polymer for Fastâ€Charge Batteries. Angewandte Chemie, 2019, 131, 17984-17990.	1.6	19

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55	Binding studies of cucurbit[7]uril with gold nanoparticles bearing different surface functionalities. Tetrahedron Letters, 2015, 56, 3653-3657.	0.7	17
56	Formation of LiFâ€rich Cathodeâ€Electrolyte Interphase by Electrolyte Reduction. Angewandte Chemie, 2022, 134, .	1.6	16
57	Operando probing ion and electron transport in porous electrodes. Nano Energy, 2020, 67, 104254.	8.2	13
58	Zwitterionic Ligands Bound to Cdse/Zns Quantum Dots Prevent Adhesion to Mammalian Cells. Phosphorus, Sulfur and Silicon and the Related Elements, 2015, 190, 2302-2306.	0.8	7
59	Nanoparticle Probes for Quantifying Supramolecular Determinants of Biosurface Affinity. Particle and Particle Systems Characterization, 2017, 34, 1700100.	1.2	4