Tao Deng

List of Publications by Year
in descending order

41 papers	7,753 citations	136950 32 h-index	265206 42 g-index
42 all docs	42 docs citations	42 times ranked	5224 citing authors

#	Article	IF	Citations
1	Non-flammable electrolyte enables Li-metal batteries with aggressive cathode chemistries. Nature Nanotechnology, 2018, 13, 715-722.	31.5	964
2	Highly Fluorinated Interphases Enable High-Voltage Li-Metal Batteries. CheM, 2018, 4, 174-185.	11.7	682
3	Solvation Structure Design for Aqueous Zn Metal Batteries. Journal of the American Chemical Society, 2020, 142, 21404-21409.	13.7	680
4	Fluorinated interphase enables reversible aqueous zinc battery chemistries. Nature Nanotechnology, 2021, 16, 902-910.	31.5	560
5	All-temperature batteries enabled by fluorinated electrolytes with non-polar solvents. Nature Energy, 2019, 4, 882-890.	39.5	557
6	Fluorinated solid electrolyte interphase enables highly reversible solid-state Li metal battery. Science Advances, 2018, 4, eaau9245.	10.3	521
7	An Inorganicâ€Rich Solid Electrolyte Interphase for Advanced Lithiumâ€Metal Batteries in Carbonate Electrolytes. Angewandte Chemie - International Edition, 2021, 60, 3661-3671.	13.8	317
8	Hydrophobic Organicâ€Electrolyteâ€Protected Zinc Anodes for Aqueous Zinc Batteries. Angewandte Chemie - International Edition, 2020, 59, 19292-19296.	13.8	287
9	Design of a Solid Electrolyte Interphase for Aqueous Zn Batteries. Angewandte Chemie - International Edition, 2021, 60, 13035-13041.	13.8	239
10	Critical Review on Lowâ€Temperature Liâ€Ion/Metal Batteries. Advanced Materials, 2022, 34, e2107899.	21.0	204
11	A Universal Organic Cathode for Ultrafast Lithium and Multivalent Metal Batteries. Angewandte Chemie - International Edition, 2018, 57, 7146-7150.	13.8	177
12	A Pyrazineâ€Based Polymer for Fastâ€Charge Batteries. Angewandte Chemie - International Edition, 2019, 58, 17820-17826.	13.8	173
13	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.	7.1	168
14	Self-Templated Formation of P2-type K_{0.6}CoO₂ Microspheres for High Reversible Potassium-Ion Batteries. Nano Letters, 2018, 18, 1522-1529.	9.1	167
15	Designing In-Situ-Formed Interphases Enables Highly Reversible Cobalt-Free LiNiO2 Cathode for Li-ion and Li-metal Batteries. Joule, 2019, 3, 2550-2564.	24.0	167
16	Layered P2â€Type K_{0.65}Fe_{0.5}Mn_{0.5}O₂ Microspheres as Superior Cathode for Highâ€Energy Potassiumâ€Ion Batteries. Advanced Functional Materials, 2018, 28, 1800219.	14.9	157
17	Tuning the Anodeâ€"Electrolyte Interface Chemistry for Garnetâ€Based Solidâ€State Li Metal Batteries. Advanced Materials, 2020, 32, e2000030.	21.0	156
18	Highly Reversible Aqueous Zinc Batteries enabled by Zincophilicâ€"Zincophobic Interfacial Layers and Interrupted Hydrogenâ€Bond Electrolytes. Angewandte Chemie - International Edition, 2021, 60, 18845-18851.	13.8	150

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19	Achieving High Energy Density through Increasing the Output Voltage: A Highly Reversible 5.3Â V Battery. CheM, 2019, 5, 896-912.	11.7	145
20	Realizing Complete Solidâ€Solution Reaction in High Sodium Content P2â€Type Cathode for Highâ€Performance Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 14511-14516.	13.8	142
21	Azo Compounds Derived from Electrochemical Reduction of Nitro Compounds for High Performance Liâ€Ion Batteries. Advanced Materials, 2018, 30, e1706498.	21.0	134
22	Bifunctional Interphase-Enabled Li₁₀GeP₂S₁₂ Electrolytes for Lithiumâ€“Sulfur Battery. ACS Energy Letters, 2021, 6, 862-868.	17.4	115
23	High-Performance All-Solid-State Naâ€“S Battery Enabled by Castingâ€“Annealing Technology. ACS Nano, 2018, 12, 3360-3368.	14.6	102
24	Highâ€Energy Aqueous Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2021, 60, 11943-11948.	13.8	100
25	Formation of LiFâ€rich Cathodeâ€Electrolyte Interphase by Electrolyte Reduction. Angewandte Chemie - International Edition, 2022, 61, .	13.8	90
26	In situ formation of polymer-inorganic solid-electrolyte interphase for stable polymeric solid-state lithium-metal batteries. CheM, 2021, 7, 3052-3068.	11.7	76
27	Identifying soft breakdown in all-solid-state lithium battery. Joule, 2022, 6, 1770-1781.	24.0	71
28	Interfacial-engineering-enabled practical low-temperature sodium metal battery. Nature Nanotechnology, 2022, 17, 269-277.	31.5	69
29	Realizing Complete Solidâ€Solution Reaction in High Sodium Content P2â€Type Cathode for Highâ€Performance Sodiumâ€Ion Batteries. Angewandte Chemie, 2020, 132, 14619-14624.	2.0	65
30	Tuning Interface Lithiophobicity for Lithium Metal Solid-State Batteries. ACS Energy Letters, 2022, 7, 131-139.	17.4	56
31	A Universal Organic Cathode for Ultrafast Lithium and Multivalent Metal Batteries. Angewandte Chemie, 2018, 130, 7264-7268.	2.0	51
32	Reversible Alloying of Phosphorene with Potassium and Its Stabilization Using Reduced Graphene Oxide Buffer Layers. ACS Nano, 2019, 13, 14094-14106.	14.6	36
33	Hydrophobic Organicâ€Electrolyteâ€Protected Zinc Anodes for Aqueous Zinc Batteries. Angewandte Chemie, 2020, 132, 19454-19458.	2.0	30
34	An Inorganicâ€Rich Solid Electrolyte Interphase for Advanced Lithiumâ€Metal Batteries in Carbonate Electrolytes. Angewandte Chemie, 2021, 133, 3705-3715.	2.0	29
35	A Pyrazineâ€Based Polymer for Fastâ€Charge Batteries. Angewandte Chemie, 2019, 131, 17984-17990.	2.0	19
36	Design of a Solid Electrolyte Interphase for Aqueous Zn Batteries. Angewandte Chemie, 2021, 133, 13145-13151.	2.0	16

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37	Thermal Runaway Suppression of High-Energy Lithium-Ion Batteries by Designing the Stable Interphase. Journal of the Electrochemical Society, 2021, 168, 090563.	2.9	16
38	Formation of LiFâ€rich Cathodeâ€Electrolyte Interphase by Electrolyte Reduction. Angewandte Chemie, 2022, 134, .	2.0	16
39	Highâ€Energy Aqueous Sodiumâ€Ion Batteries. Angewandte Chemie, 2021, 133, 12050-12055.	2.0	13
40	Highly Reversible Aqueous Zinc Batteries enabled by Zincophilicâ€“Zincophobic Interfacial Layers and Interrupted Hydrogenâ€Bond Electrolytes. Angewandte Chemie, 2021, 133, 18993-18999.	2.0	11
41	All-Fluorinated Electrolyte Enables Safe LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ | Graphite Pouch Cells with Stable High-Voltage Operation. Energy & Fuels, 2022, 36, 6511-6519.	5.1	3