Lei Fan

List of Publications by Year
in descending order

27 papers	4,881 citations	257101 24 h-index	552369 26 g-index
27 all docs	27 docs citations	27 times ranked	6042 citing authors

#	Article	IF	Citations
1	Recent Progress of the Solidâ€State Electrolytes for Highâ€Energy Metalâ€Based Batteries. Advanced Energy Materials, 2018, 8, 1702657.	10.2	851
2	Direct electrosynthesis of pure aqueous H ₂ O ₂ solutions up to 20% by weight using a solid electrolyte. Science, 2019, 366, 226-231.	6.0	573
3	Strategies in catalysts and electrolyzer design for electrochemical CO ₂ reduction toward C ₂₊ products. Science Advances, 2020, 6, eaay3111.	4.7	477
4	Progress in electrolytes for rechargeable Li-based batteries and beyond. Green Energy and Environment, 2016, 1, 18-42.	4.7	400
5	Electrochemical CO2 reduction to high-concentration pure formic acid solutions in an all-solid-state reactor. Nature Communications, 2020, 11, 3633.	5.8	294
6	Regulating Li deposition at artificial solid electrolyte interphases. Journal of Materials Chemistry A, 2017, 5, 3483-3492.	5.2	258
7	A â€œcation-anion regulationâ€•synergistic anode host for dendrite-free lithium metal batteries. Science Advances, 2018, 4, eaar4410.	4.7	241
8	Synergistic Dualâ€Additive Electrolyte Enables Practical Lithiumâ€Metal Batteries. Angewandte Chemie - International Edition, 2020, 59, 14935-14941.	7.2	210
9	Stable Lithium Electrodeposition at Ultraâ€High Current Densities Enabled by 3D PMF/Li Composite Anode. Advanced Energy Materials, 2018, 8, 1703360.	10.2	194
10	Colossal Granular Lithium Deposits Enabled by the Grainâ€Coarsening Effect for Highâ€Efficiency Lithium Metal Full Batteries. Advanced Materials, 2020, 32, e2001740.	11.1	157
11	1D SnO₂ with Wireâ€inâ€Tube Architectures for Highly Selective Electrochemical Reduction of CO₂ to C₁ Products. Advanced Functional Materials, 2018, 28, 1706289.	7.8	153
12	Enabling Stable Lithium Metal Anode via 3D Inorganic Skeleton with Superlithiophilic Interphase. Advanced Energy Materials, 2018, 8, 1802350.	10.2	147
13	Hierarchical Co₃O₄ Nanofiberâ€“Carbon Sheet Skeleton with Superior Na/Liâ€Philic Property Enabling Highly Stable Alkali Metal Batteries. Advanced Functional Materials, 2019, 29, 1808847.	7.8	147
14	Tuning the LUMO Energy of an Organic Interphase to Stabilize Lithium Metal Batteries. ACS Energy Letters, 2019, 4, 644-650.	8.8	129
15	Rational design of robust-flexible protective layer for safe lithium metal battery. Energy Storage Materials, 2019, 18, 205-212.	9.5	116
16	Dynamic interphaseâ€“mediated assembly for deep cycling metal batteries. Science Advances, 2021, 7, eabl3752.	4.7	81
17	Chlorideâ€Reinforced Carbon Nanofiber Host as Effective Polysulfide Traps in Lithiumâ€“Sulfur Batteries. Advanced Science, 2016, 3, 1600175.	5.6	68
18	Engineering Wavyâ€Nanostructured Anode Interphases with Fast Ion Transfer Kinetics: Toward Practical Liâ€Metal Full Batteries. Advanced Functional Materials, 2020, 30, 2003800.	7.8	63

#	Article	IF	Citations
19	Proton sponge promotion of electrochemical CO2 reduction to multi-carbon products. Joule, 2022, 6, 205-220.	11.7	57
20	CO2/carbonate-mediated electrochemical water oxidation to hydrogen peroxide. Nature Communications, 2022, 13, 2668.	5.8	44
21	Enhanced Lithium Storage Capability in Li-Ion Batteries Using Porous 3D Co₃O₄ Nanofiber Anodes. Industrial & Engineering Chemistry Research, 2017, 56, 2046-2053.	1.8	42
22	Stable Liâ€Metal Deposition via a 3D Nanodiamond Matrix with Ultrahigh Young's Modulus. Small Methods, 2019, 3, 1900325.	4.6	40
23	Highâ€Efficacy and Polymeric Solidâ€Electrolyte Interphase for Closely Packed Li Electrodeposition. Advanced Science, 2021, 8, 2003240.	5.6	39
24	Highly uniform Fe3O4 nanoparticleâ€“rGO composites as anode materials for high performance lithium-ion batteries. RSC Advances, 2017, 7, 54939-54946.	1.7	35
25	Synergistic Dualâ€Additive Electrolyte Enables Practical Lithiumâ€Metal Batteries. Angewandte Chemie, 2020, 132, 15045-15051.	1.6	26
26	Ionic liquid-reinforced carbon nanofiber matrix enabled lean-electrolyte Li-S batteries via electrostatic attraction. Energy Storage Materials, 2020, 26, 378-384.	9.5	25
27	Constructing a Phosphatingâ€“Nitriding Interface for Practically Used Lithium Metal Anode. , 2020, 2, 1-8.		14