

Xin Shen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2239612/publications.pdf>

Version: 2024-02-01

41
papers

4,530
citations

236833

25
h-index

330025

37
g-index

43
all docs

43
docs citations

43
times ranked

3998
citing authors

#	ARTICLE	IF	CITATIONS
1	Coralloid Carbon Fiber-Based Composite Lithium Anode for Robust Lithium Metal Batteries. <i>Joule</i> , 2018, 2, 764-777.	11.7	609
2	Highly Stable Lithium Metal Batteries Enabled by Regulating the Solvation of Lithium Ions in Nonaqueous Electrolytes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 5301-5305.	7.2	601
3	Beyond lithium ion batteries: Higher energy density battery systems based on lithium metal anodes. <i>Energy Storage Materials</i> , 2018, 12, 161-175.	9.5	422
4	An Armored Mixed Conductor Interphase on a Dendrite-Free Lithium Metal Anode. <i>Advanced Materials</i> , 2018, 30, e1804461.	11.1	338
5	Lithiophilic LiC ₆ Layers on Carbon Hosts Enabling Stable Li Metal Anode in Working Batteries. <i>Advanced Materials</i> , 2019, 31, e1807131.	11.1	273
6	Lithium matrix composite anode protected by a solid electrolyte layer for stable lithium metal batteries. <i>Journal of Energy Chemistry</i> , 2019, 37, 29-34.	7.1	219
7	Ion-Solvent Complexes Promote Gas Evolution from Electrolytes on a Sodium Metal Anode. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 734-737.	7.2	208
8	The Failure of Solid Electrolyte Interphase on Li Metal Anode: Structural Uniformity or Mechanical Strength?. <i>Advanced Energy Materials</i> , 2020, 10, 1903645.	10.2	182
9	Advanced Electrode Materials in Lithium Batteries: Retrospect and Prospect. <i>Energy Material Advances</i> , 2021, 2021, .	4.7	179
10	Identifying the Critical Anion-Cation Coordination to Regulate the Electric Double Layer for an Efficient Lithium Metal Anode Interface. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 4215-4220.	7.2	145
11	How Does External Pressure Shape Li Dendrites in Li Metal Batteries?. <i>Advanced Energy Materials</i> , 2021, 11, 2003416.	10.2	141
12	The dendrite growth in 3D structured lithium metal anodes: Electron or ion transfer limitation?. <i>Energy Storage Materials</i> , 2019, 23, 556-565.	9.5	126
13	The Origin of the Reduced Reductive Stability of Ion-Solvent Complexes on Alkali and Alkaline Earth Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16643-16647.	7.2	124
14	Ion-Solvent Chemistry-Inspired Cation-Additive Strategy to Stabilize Electrolytes for Sodium-Metal Batteries. <i>CheM</i> , 2020, 6, 2242-2256.	5.8	116
15	A Review of Composite Lithium Metal Anode for Practical Applications. <i>Advanced Materials Technologies</i> , 2020, 5, .	3.0	111
16	Lithium Bonds in Lithium Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11192-11195.	7.2	99
17	An Atomic Insight into the Chemical Origin and Variation of the Dielectric Constant in Liquid Electrolytes. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 21473-21478.	7.2	74
18	Sodiophilicity/potassiophilicity chemistry in sodium/potassium metal anodes. <i>Journal of Energy Chemistry</i> , 2020, 51, 1-6.	7.1	69

#	ARTICLE	IF	CITATIONS
19	Applying Machine Learning to Rechargeable Batteries: From the Microscale to the Macroscale. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 24354-24366.	7.2	67
20	An adaptive differential evolutionary algorithm incorporating multiple mutation strategies for the economic load dispatch problem. <i>Applied Soft Computing Journal</i> , 2019, 78, 641-669.	4.1	57
21	An efficient fitness-based differential evolution algorithm and a constraint handling technique for dynamic economic emission dispatch. <i>Energy</i> , 2019, 186, 115801.	4.5	51
22	The Origin of the Reduced Reductive Stability of Ion-Solvent Complexes on Alkali and Alkaline Earth Metal Anodes. <i>Angewandte Chemie</i> , 2018, 130, 16885-16889.	1.6	50
23	A Pressure Self-Adaptable Route for Uniform Lithium Plating and Stripping in Composite Anode. <i>Advanced Functional Materials</i> , 2021, 31, 2004189.	7.8	39
24	The Defect Chemistry of Carbon Frameworks for Regulating the Lithium Nucleation and Growth Behaviors in Lithium Metal Anodes. <i>Small</i> , 2021, 17, e2007142.	5.2	35
25	Mesoporous Graphene Hosts for Dendrite-Free Lithium Metal Anode in Working Rechargeable Batteries. <i>Transactions of Tianjin University</i> , 2020, 26, 127-134.	3.3	33
26	A Novel Simple Particle Swarm Optimization Algorithm for Global Optimization. <i>Mathematics</i> , 2018, 6, 287.	1.1	25
27	Identifying the Critical Anion-Cation Coordination to Regulate the Electric Double Layer for an Efficient Lithium-Metal Anode Interface. <i>Angewandte Chemie</i> , 2021, 133, 4261-4266.	1.6	25
28	Horizontal Stress Release for Protuberance-Free Li Metal Anode. <i>Advanced Functional Materials</i> , 2020, 30, 2002522.	7.8	22
29	Stress Regulation on Atomic Bonding and Ionic Diffusivity: Mechanochemical Effects in Sulfide Solid Electrolytes. <i>Energy & Fuels</i> , 2021, 35, 10210-10218.	2.5	22
30	Lithium Bonds in Lithium Batteries. <i>Angewandte Chemie</i> , 2020, 132, 11288-11291.	1.6	20
31	The dynamic evolution of aggregated lithium dendrites in lithium metal batteries. <i>Chinese Journal of Chemical Engineering</i> , 2021, 37, 137-143.	1.7	12
32	Applying Machine Learning to Rechargeable Batteries: From the Microscale to the Macroscale. <i>Angewandte Chemie</i> , 2021, 133, 24558-24570.	1.6	11
33	An Atomic Insight into the Chemical Origin and Variation of the Dielectric Constant in Liquid Electrolytes. <i>Angewandte Chemie</i> , 2021, 133, 21643-21648.	1.6	9
34	Multi-strategy different dimensional mutation differential evolution algorithm. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	4
35	A Simplified and Efficient Gravitational Search Algorithm for Unconstrained Optimization Problems. , 2017, , .		3
36	A Self-Adaptive Differential Evolution with Dynamic Selecting Mutation Strategy. , 2017, , .		2

#	ARTICLE	IF	CITATIONS
37	A Phase-Based Adaptive Differential Evolution Algorithm for the Economic Load Dispatch Considering Valve-Point Effects and Transmission Losses. <i>Mathematical Problems in Engineering</i> , 2018, 2018, 1-24.	0.6	2
38	A hybrid gravitational search algorithm for unconstrained problems. , 2018, , .		1
39	Solving the economic load dispatch problems by a modified differential evolution algorithm based on two mutation strategies and one disturbance. , 2018, , .		1
40	Innentitelbild: The Origin of the Reduced Reductive Stability of Ion-Solvent Complexes on Alkali and Alkaline Earth Metal Anodes (<i>Angew. Chem.</i> 51/2018). <i>Angewandte Chemie</i> , 2018, 130, 16810-16810.	1.6	0
41	Rücktitelbild: Identifying the Critical Anion-Cation Coordination to Regulate the Electric Double Layer for an Efficient Lithium-Metal Anode Interface (<i>Angew. Chem.</i> 8/2021). <i>Angewandte Chemie</i> , 2021, 133, 4428-4428.	1.6	0