Shibabrata Basak

List of Publications by Year
in descending order

30 papers	1,068 citations	623734 14 h-index	501196 28 g-index
31 all docs	31 docs citations	31 times ranked	1928 citing authors

#	Article	IF	Citations
1	<i>Operando</i> transmission electron microscopy of battery cycling: thickness dependent breaking of TiO₂ coating on Si/SiO₂ nanoparticles. Chemical Communications, 2022, 58, 3130-3133.	4.1	2
2	Active Interphase Enables Stable Performance for an Allâ€Phosphateâ€Based Composite Cathode in an Allâ€Solidâ€State Battery. Small, 2022, 18, e2200266.	10.0	7
3	Improved Electrochemical Performance of Zinc Anodes by EDTA in Nearâ€Neutral Zincâ^'Air Batteries. Batteries and Supercaps, 2021, 4, 1830-1842.	4.7	10
4	Structural Study of Polyacrylonitrile-Based Carbon Nanofibers for Understanding Gas Adsorption. ACS Applied Materials & Interfaces, 2021, 13, 46665-46670.	8.0	11
5	Nanostructuring Germanium Nanowires by In Situ TEM Ion Irradiation. Particle and Particle Systems Characterization, 2021, 38, 2100154.	2.3	0
6	Accessing Lithiumâ€"Oxygen Battery Discharge Products in Their Native Environments via Transmission Electron Microscopy Grid Electrode. ACS Applied Energy Materials, 2020, 3, 9509-9515.	5.1	6
7	<i>In situ</i> electrochemistry inside a TEM with controlled mass transport. Nanoscale, 2020, 12, 22192-22201.	5.6	29
8	Operando Transmission Electron Microscopy Study of All-Solid-State Battery Interface: Redistribution of Lithium among Interconnected Particles. ACS Applied Energy Materials, 2020, 3, 5101-5106.	5.1	14
9	Designing Reliable Operando TEM Experiments to Study (De)lithiation Mechanism of Battery Electrodes. Journal of the Electrochemical Society, 2019, 166, A3384-A3386.	2.9	2
10	Three-Dimensional Quantification of the Facet Evolution of Pt Nanoparticles in a Variable Gaseous Environment. Nano Letters, 2019, 19, 477-481.	9.1	93
11	Towards optimization of experimental parameters for studying Li-O2 battery discharge products in TEM using in situ EELS. Ultramicroscopy, 2018, 188, 52-58.	1.9	16
12	Magnetic Phase Transition in Spark-Produced Ternary LaFeSi Nanoalloys. ACS Applied Materials & Interfaces, 2018, 10, 6073-6078.	8.0	29
13	Facile Synthesis toward the Optimal Structure-Conductivity Characteristics of the Argyrodite Li₆PS₅Cl Solid-State Electrolyte. ACS Applied Materials & Interfaces, 2018, 10, 33296-33306.	8.0	158
14	A high-performance Li-ion anode from direct deposition of Si nanoparticles. Nano Energy, 2017, 38, 477-485.	16.0	67
15	Accessing the bottleneck in all-solid state batteries, lithium-ion transport over the solid-electrolyte-electrode interface. Nature Communications, 2017, 8, 1086.	12.8	299
16	Revealing the relation between the structure, Li-ion conductivity and solid-state battery performance of the argyrodite Li₆PS₅Br solid electrolyte. Journal of Materials Chemistry A, 2017, 5, 21178-21188.	10.3	76
17	3-D vertically aligned few layer graphene â€" partially reduced graphene oxide/sulfur electrodes for high performance lithiumâ€"sulfur batteries. Sustainable Energy and Fuels, 2017, 1, 1516-1523.	4.9	12
18	Reversible Naâ€Ion Uptake in Si Nanoparticles. Advanced Energy Materials, 2016, 6, 1501436.	19.5	101

#	Article	IF	Citations
19	<i>Operando</i> Nanobeam Diffraction to Follow the Decomposition of Individual Li₂O₂ Grains in a Nonaqueous Liâ€“O₂ Battery. Journal of Physical Chemistry Letters, 2016, 7, 3388-3394.	4.6	14
20	Use of Nano Seed Crystals To Control Peroxide Morphology in a Nonaqueous Liâ€“O₂ Battery. Journal of Physical Chemistry C, 2016, 120, 18421-18427.	3.1	21
21	Green manufacturing of metallic nanoparticles: a facile and universal approach to scaling up. Journal of Materials Chemistry A, 2016, 4, 11222-11227.	10.3	29
22	Nano-Workbench: A Combined Hollow AFM Cantilever and Robotic Manipulator. Micromachines, 2015, 6, 600-610.	2.9	8
23	The hydrogen permeability of Pdâ€“Cu based thin film membranes in relation to their structure: A combinatorial approach. International Journal of Hydrogen Energy, 2015, 40, 3932-3943.	7.1	16
24	Improving Reversible Capacities of High-Surface Lithium Insertion Materials Ã¢â,¬â€œ The Case of Amorphous TiO2. Frontiers in Energy Research, 2014, 2, .	2.3	7
25	Wet chemical growth of ultra-long ZnO nanoplates and their optical property. Chemical Physics Letters, 2013, 584, 155-158.	2.6	7
26	Electrochemical Growth of Hexagonal ZnO Pyramids and their Optical Property. Materials Letters, 2012, 83, 97-99.	2.6	11
27	SYNTHESIS AND CHARACTERIZATION OF CHEMICALLY GROWN ULTRALONG HEXAGONAL ZnO NANOTUBES. International Journal of Nanoscience, 2011, 10, 69-73.	0.7	15
28	Fern leaves. Materials Today, 2011, 14, 295.	14.2	4
29	Electrochemical Growth of ZnO Microspheres and Nanosheets. Advanced Science Letters, 2011, 4, 554-557.	0.2	3
30	Fabrication of intensity based fiber optic pH sensor. , 2010, , .		1