Jiwoong Bae

List of Publications by Year
in descending order

31 papers	2,983 citations	331259 21 h-index	414034 32 g-index
32 all docs	32 docs citations	32 times ranked	3593 citing authors

#	Article	IF	Citations
1	Hydrogels and Hydrogel-Derived Materials for Energy and Water Sustainability. Chemical Reviews, 2020, 120, 7642-7707.	23.0	646
2	A 3D Nanostructured Hydrogelâ€Frameworkâ€Derived Highâ€Performance Composite Polymer Lithiumâ€Ion Electrolyte. Angewandte Chemie - International Edition, 2018, 57, 2096-2100.	7.2	484
3	Synergistic Energy Nanoconfinement and Water Activation in Hydrogels for Efficient Solar Water Desalination. ACS Nano, 2019, 13, 7913-7919.	7.3	354
4	Designing 3D nanostructured garnet frameworks for enhancing ionic conductivity and flexibility in composite polymer electrolytes for lithium batteries. Energy Storage Materials, 2018, 15, 46-52.	9.5	203
5	Nanostructured Host Materials for Trapping Sulfur in Rechargeable Liâ€“S Batteries: Structure Design and Interfacial Chemistry. Small Methods, 2018, 2, 1700279.	4.6	201
6	Nanostructured Functional Hydrogels as an Emerging Platform for Advanced Energy Technologies. Advanced Materials, 2018, 30, e1801796.	11.1	177
7	Functional Hydrogels for Next-Generation Batteries and Supercapacitors. Trends in Chemistry, 2019, 1, 335-348.	4.4	158
8	Polar polymerâ€“solvent interaction derived favorable interphase for stable lithium metal batteries. Energy and Environmental Science, 2019, 12, 3319-3327.	15.6	122
9	Redistributing Liâ€Ion Flux by Parallelly Aligned Holey Nanosheets for Dendriteâ€Free Li Metal Anodes. Advanced Materials, 2020, 32, e2003920.	11.1	81
10	High-performance ultra-thin film solid oxide fuel cell using anodized-aluminum-oxide supporting structure. Electrochemistry Communications, 2014, 47, 1-4.	2.3	64
11	High-performance thin film solid oxide fuel cells with scandia-stabilized zirconia (ScSZ) thin film electrolyte. International Journal of Hydrogen Energy, 2015, 40, 15704-15708.	3.8	54
12	High-performance magnesium metal batteries via switching the passivation film into a solid electrolyte interphase. Energy and Environmental Science, 2021, 14, 4391-4399.	15.6	49
13	Influence of the grain size of samaria-doped ceria cathodic interlayer for enhanced surface oxygen kinetics of low-temperature solid oxide fuel cell. Journal of the European Ceramic Society, 2014, 34, 3763-3768.	2.8	41
14	Grain boundary blocking of ionic conductivity in nanocrystalline yttria-doped ceria thin films. Scripta Materialia, 2015, 104, 45-48.	2.6	36
15	A 3D Nanostructured Hydrogelâ€Frameworkâ€Derived Highâ€Performance Composite Polymer Lithiumâ€Ion Electrolyte. Angewandte Chemie, 2018, 130, 2118-2122.	1.6	34
16	Nanostructuring methods for enhancing light absorption rate of Si-based photovoltaic devices: A review. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 67-74.	2.7	29
17	A General Strategy of Anion-Rich High-Concentration Polymeric Interlayer for High-Voltage, All-Solid-State Batteries. Nano Letters, 2021, 21, 1184-1191.	4.5	29
18	Liquid Alloy Enabled Solidâ€State Batteries for Conformal Electrodeâ€“Electrolyte Interfaces. Advanced Functional Materials, 2021, 31, 2010863.	7.8	29

#	Article	IF	Citations
19	A thermally self-sustaining solid oxide fuel cell system at ultra-low operating temperature (319ÂÂ°C). Energy, 2016, 104, 107-113.	4.5	25
20	Thermally-Induced Dopant Segregation Effects on the Space Charge Layer and Ionic Conductivity of Nanocrystalline Gadolinia-Doped Ceria. Journal of the Electrochemical Society, 2016, 163, F919-F926.	1.3	25
21	Yttria-stabilized zirconia thin films with restrained columnar grains for oxygen ion conducting electrolytes. Ceramics International, 2016, 42, 16703-16709.	2.3	23
22	Polyeutectic-based stable and effective electrolytes for high-performance energy storage systems. Energy and Environmental Science, 2021, 14, 931-939.	15.6	21
23	Influence of deposition temperature on the microstructure of thin-film electrolyte for SOFCs with a nanoporous AAO support structure. International Journal of Hydrogen Energy, 2017, 42, 10199-10207.	3.8	19
24	Single-chamber fabrication of high-performance low-temperature solid oxide fuel cells with grain-controlled functional layers. Journal of Materials Chemistry A, 2017, 5, 2029-2036.	5.2	18
25	Three-dimensional hexagonal GDC interlayer for area enhancement of low-temperature solid oxide fuel cells. Surface and Coatings Technology, 2015, 279, 54-59.	2.2	17
26	Post-Annealing of Thin-Film Yttria Stabilized Zirconia Electrolytes for Anode-Supported Low-Temperature Solid Oxide Fuel Cells. Journal of Nanoscience and Nanotechnology, 2014, 14, 9294-9299.	0.9	12
27	Optimized antireflective silicon nanostructure arrays using nanosphere lithography. Nanotechnology, 2016, 27, 215302.	1.3	10
28	Enhanced Oxygen Reduction Reaction in Nanocrystalline Surface of Samariaâ€Doped Ceria via Randomly Distributed Dopants. Journal of the American Ceramic Society, 2016, 99, 4050-4056.	1.9	8
29	Performance stability of strontium-doped lanthanum cobaltite ceramic cathode synthesized by a wet chemical method. Ceramics International, 2016, 42, 12853-12859.	2.3	8
30	Superior La1â^'xSrxCoO3â^'Î´ ceramic electrode fabrication by MOCSD for low-temperature SOFC application. Surface and Coatings Technology, 2017, 311, 157-163.	2.2	1
31	Titelbild: A 3D Nanostructured Hydrogelâ€Frameworkâ€Derived Highâ€Performance Composite Polymer Lithiumâ€Ion Electrolyte (Angew. Chem. 8/2018). Angewandte Chemie, 2018, 130, 2025-2025.	1.6	1