Changshin Jo

List of Publications by Year in Descending Order

70 papers	4,341 citations	35 h-index	65 g-index
75 ext. papers	5,053 ext. citations	11.1 avg, IF	5.84 L-index

#	Paper	IF	Citations
70	Nickel fluoride (NiF2)/porous carbon nanocomposite synthesized via ammonium fluoride (NH4F) treatment for lithium-ion battery cathode applications. *Journal of Power Sources*, **2022**, 521, 230935	8.9	2
69	A review on current collector coating methods for next-generation batteries. *Chemical Engineering Journal*, **2022**, 446, 136860	14.7	0
68	In situ Raman investigation of resting thermal effects on gas emission in charged commercial 18650 lithium ion batteries. *Journal of Industrial and Engineering Chemistry*, **2021**, 96, 339-344	6.3	4
67	Recent advances in the synthesis of mesoporous materials and their application to lithium-ion batteries and hybrid supercapacitors. *Korean Journal of Chemical Engineering*, **2021**, 38, 227-247	2.8	10
66	A biopolymer-based functional separator for stable Li metal batteries with an additive-free commercial electrolyte. *Journal of Materials Chemistry A*, **2021**, 9, 7774-7781	13	7
65	Biomass-Derived P, N Self-Doped Hard Carbon as Bifunctional Oxygen Electrocatalyst and Anode Material for Seawater Batteries. *Advanced Functional Materials*, **2021**, 31, 2010882	15.6	16
64	The mechanical and electrochemical properties of polyaniline-coated carbon nanotube mat. *Journal of Energy Storage*, **2021**, 41, 102757	7.8	1
63	Reliable protocols for calculating the specific energy and energy density of Li-Ion batteries. *Materials Today Energy*, **2021**, 21, 100838	7	2
62	Synthesis of Sodium Cobalt Fluoride/Reduced Graphene Oxide (NaCoF/rGO) Nanocomposites and Investigation of Their Electrochemical Properties as Cathodes for Li-Ion Batteries. *Materials*, **2021**, 14,	3.5	6
61	Mesoporous carbon host material for stable lithium metal anode. *Nanoscale*, **2020**, 12, 11818-11824	7.7	28
60	Morphological Control of Nanostructured VO by Deep Eutectic Solvents. *ACS Applied Materials & Interfaces*, **2020**, 12, 18803-18812	9.5	10
59	Photo-Rechargeable Zinc-Ion Capacitor Using 2D Graphitic Carbon Nitride. *Nano Letters*, **2020**, 20, 5967-5974	11.5	50
58	Simultaneous Suppression of Shuttle Effect and Lithium Dendrite Growth by Lightweight Bifunctional Separator for Li–S Batteries. *ACS Applied Energy Materials*, **2020**, 3, 2643-2652	6.1	16
57	A small-strain niobium nitride anode with ordered mesopores for ultra-stable potassium-ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 3119-3127	13	19
56	Plasma production of nanomaterials for energy storage: continuous gas-phase synthesis of metal oxide CNT materials via a microwave plasma. *Nanoscale*, **2020**, 12, 5196-5208	7.7	6
55	Continuous-Flow Synthesis of Carbon-Coated Silicon/Iron Silicide Secondary Particles for Li-Ion Batteries. *ACS Nano*, **2020**, 14, 698-707	16.7	31
54	A Review of Functional Separators for Lithium Metal Battery Applications. *Materials*, **2020**, 13,	3.5	27

53	A review on recent approaches for designing the SEI layer on sodium metal anodes. *Materials Advances*, **2020**, 1, 3143-3166	3.3	10
52	High energy density anodes using hybrid Li intercalation and plating mechanisms on natural graphite. *Energy and Environmental Science*, **2020**, 13, 3723-3731	35.4	21
51	Bicontinuous phase separation of lithium-ion battery electrodes for ultrahigh areal loading. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 21155-21161	11.5	17
50	Carbon dioxide to solid carbon at the surface of iron nanoparticle: Hollow nanocarbons for sodium ion battery anode application. *Journal of CO2 Utilization*, **2019**, 34, 588-595	7.6	3
49	A Comprehensive Review of Materials with Catalytic Effects in Li-S Batteries: Enhanced Redox Kinetics. *Angewandte Chemie*, **2019**, 131, 18920-18931	3.6	49
48	A Comprehensive Review of Materials with Catalytic Effects in Li-S Batteries: Enhanced Redox Kinetics. *Angewandte Chemie - International Edition*, **2019**, 58, 18746-18757	16.4	221
47	Amorphous Tin Oxide Nanohelix Structure Based Electrode for Highly Reversible Na-Ion Batteries. *ACS Nano*, **2019**, 13, 6513-6521	16.7	22
46	Approaching Ultrastable High-Rate Li-S Batteries through Hierarchically Porous Titanium Nitride Synthesized by Multiscale Phase Separation. *Advanced Materials*, **2019**, 31, e1806547	24	105
45	Self-Assembly of Hybrid Nanorods for Enhanced Volumetric Performance of Nanoparticles in Li-Ion Batteries. *Nano Letters*, **2019**, 19, 228-234	11.5	7
44	Simple modification with amine- and hydroxyl- group rich biopolymer on ordered mesoporous carbon/sulfur composite for lithium-sulfur batteries. *Korean Journal of Chemical Engineering*, **2018**, 35, 579-586	2.8	32
43	Multiscale Phase Separations for Hierarchically Ordered Macro/Mesostructured Metal Oxides. *Advanced Materials*, **2018**, 30, 1703829	24	45
42	Mesoporous tungsten oxynitride as electrocatalyst for promoting redox reactions of vanadium redox couple and performance of vanadium redox flow battery. *Applied Surface Science*, **2018**, 429, 187-195	6.7	46
41	Cancer Therapy: Programmed Nanoparticle-Loaded Nanoparticles for Deep-Penetrating 3D Cancer Therapy (Adv. Mater. 29/2018). *Advanced Materials*, **2018**, 30, 1870213	24	11
40	Synergistic Effect of Molecular-Type Electrocatalysts with Ultrahigh Pore Volume Carbon Microspheres for Lithium-Sulfur Batteries. *ACS Nano*, **2018**, 12, 6013-6022	16.7	61
39	Programmed Nanoparticle-Loaded Nanoparticles for Deep-Penetrating 3D Cancer Therapy. *Advanced Materials*, **2018**, 30, e1707557	24	56
38	Ordered Mesoporous Titanium Nitride as a Promising Carbon-Free Cathode for Aprotic Lithium-Oxygen Batteries. *ACS Nano*, **2017**, 11, 1736-1746	16.7	104
37	Enzyme-Driven Hasselback-Like DNA-Based Inorganic Superstructures. *Advanced Functional Materials*, **2017**, 27, 1704213	15.6	22
36	Rational design of Li3VO4@carbon core–shell nanoparticles as Li-ion hybrid supercapacitor anode materials. *Journal of Materials Chemistry A*, **2017**, 5, 20969-20977	13	26

35	Solvothermal synthesis of sodium cobalt fluoride (NaCoF3) nanoparticle clusters. *Materials Letters*, **2017**, 207, 89-92	3.3	6
34	Tracking the confinement effect of highly dispersive carbon in a tungsten oxide/carbon nanocomposite: conversion anode materials in lithium ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 24782-24789	13	14
33	General Synthesis of N-Doped Macroporous Graphene-Encapsulated Mesoporous Metal Oxides and Their Application as New Anode Materials for Sodium-Ion Hybrid Supercapacitors. *Advanced Functional Materials*, **2017**, 27, 1603921	15.6	106
32	Ammonium Fluoride Mediated Synthesis of Anhydrous Metal Fluoride-Mesoporous Carbon Nanocomposites for High-Performance Lithium Ion Battery Cathodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 35180-35190	9.5	49
31	High-Performance Sodium-Ion Hybrid Supercapacitor Based on Nb2O5@Carbon Core–Shell Nanoparticles and Reduced Graphene Oxide Nanocomposites. *Advanced Functional Materials*, **2016**, 26, 3711-3719	15.6	312
30	MoO2 nanocrystals interconnected on mesocellular carbon foam as a powerful catalyst for vanadium redox flow battery. *RSC Advances*, **2016**, 6, 17574-17582	3.7	48
29	A mini review of designed mesoporous materials for energy-storage applications: from electric double-layer capacitors to hybrid supercapacitors. *Nanoscale*, **2016**, 8, 7827-33	7.7	136
28	Facile conversion of activated carbon to battery anode material using microwave graphitization. *Carbon*, **2016**, 104, 106-111	10.4	35
27	Ordered-mesoporous Nb2O5/carbon composite as a sodium insertion material. *Nano Energy*, **2015**, 16, 62-70	17.1	104
26	Ultrafast synthesis of MoS2 or WS2-reduced graphene oxide composites via hybrid microwave annealing for anode materials of lithium ion batteries. *Journal of Power Sources*, **2015**, 295, 228-234	8.9	66
25	Facile Synthesis of Nb2O5@Carbon Core-Shell Nanocrystals with Controlled Crystalline Structure for High-Power Anodes in Hybrid Supercapacitors. *ACS Nano*, **2015**, 9, 7497-505	16.7	340
24	Mesoporous Ge/GeO2/Carbon Lithium-Ion Battery Anodes with High Capacity and High Reversibility. *ACS Nano*, **2015**, 9, 5299-309	16.7	141
23	Reversibility of Lithium-Ion–Air Batteries Using Lithium Intercalation Compounds as Anodes. *ChemPlusChem*, **2015**, 80, 349-353	2.8	5
22	Effect of Mesoporous Structured Cathode Materials on Charging Potentials and Rate Capability of Lithium-Oxygen Batteries. *ChemSusChem*, **2015**, 8, 3146-52	8.3	16
21	Structural Effect on Electrochemical Performance of Ordered Porous Carbon Electrodes for Na-Ion Batteries. *ACS Applied Materials & Interfaces*, **2015**, 7, 11748-54	9.5	51
20	Direct access to hierarchically porous inorganic oxide materials with three-dimensionally interconnected networks. *Journal of the American Chemical Society*, **2014**, 136, 16066-72	16.4	98
19	Simple fabrication of flexible electrodes with high metal-oxide content: electrospun reduced tungsten oxide/carbon nanofibers for lithium ion battery applications. *Nanoscale*, **2014**, 6, 10147-55	7.7	71
18	Reverse micelle synthesis of colloidal nickel-manganese layered double hydroxide nanosheets and their pseudocapacitive properties. *Chemistry - A European Journal*, **2014**, 20, 14880-4	4.8	67

17	Advanced hybrid supercapacitor based on a mesoporous niobium pentoxide/carbon as high-performance anode. *ACS Nano*, **2014**, 8, 8968-78	16.7	339
16	Block Copolymer Directed Ordered Mesostructured TiNb2O7 Multimetallic Oxide Constructed of Nanocrystals as High Power Li-Ion Battery Anodes. *Chemistry of Materials*, **2014**, 26, 3508-3514	9.6	137
15	Improvement of desolvation and resilience of alginate binders for Si-based anodes in a lithium ion battery by calcium-mediated cross-linking. *Physical Chemistry Chemical Physics*, **2014**, 16, 25628-35	3.6	73
14	Synthesis of hierarchical linearly assembled graphitic carbon nanoparticles via catalytic graphitization in SBA-15. *Carbon*, **2014**, 75, 95-103	10.4	26
13	TiO2 nanodisks designed for Li-ion batteries: a novel strategy for obtaining an ultrathin and high surface area anode material at the ice interface. *Energy and Environmental Science*, **2013**, 6, 2932	35.4	90
12	Simple synthesis of hierarchically structured partially graphitized carbon by emulsion/block-copolymer co-template method for high power supercapacitors. *Carbon*, **2013**, 64, 391-402	10.4	81
11	Block-Copolymer-Assisted One-Pot Synthesis of Ordered Mesoporous WO3□/Carbon Nanocomposites as High-Rate-Performance Electrodes for Pseudocapacitors. *Advanced Functional Materials*, **2013**, 23, 3747-3754	15.6	126
10	Ordered mesoporous tungsten suboxide counter electrode for highly efficient iodine-free electrolyte-based dye-sensitized solar cells. *ChemSusChem*, **2013**, 6, 299-307	8.3	25
9	Functional mesoporous materials for energy applications: solar cells, fuel cells, and batteries. *Nanoscale*, **2013**, 5, 4584-605	7.7	100
8	One-pot synthesis of tin-embedded carbon/silica nanocomposites for anode materials in lithium-ion batteries. *ACS Nano*, **2013**, 7, 1036-44	16.7	121
7	Development of novel mesoporous C□TiO2□SnO2 nanocomposites and their application to anode materials in lithium ion secondary batteries. *Microporous and Mesoporous Materials*, **2012**, 151, 172-179	5.3	26
6	Nano-graphite functionalized mesocellular carbon foam with enhanced intra-penetrating electrical percolation networks for high performance electrochemical energy storage electrode materials. *Physical Chemistry Chemical Physics*, **2012**, 14, 5695-704	3.6	21
5	Soft-Template Simple Synthesis of Ordered Mesoporous Titanium Nitride-Carbon Nanocomposite for High Performance Dye-Sensitized Solar Cell Counter Electrodes. *Chemistry of Materials*, **2012**, 24, 1575-1582	9.6	98
4	An ordered nanocomposite of organic radical polymer and mesocellular carbon foam as cathode material in lithium ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 1453-1458		42
3	A novel mesoporous carbon-silica-titania nanocomposite as a high performance anode material in lithium ion batteries. *Chemical Communications*, **2011**, 47, 4944-6	5.8	37
2	Investigation of Pseudocapacitive Charge-Storage Behavior in Highly Conductive Ordered Mesoporous Tungsten Oxide Electrodes. *Journal of Physical Chemistry C*, **2011**, 115, 11880-11886	3.8	91
1	Development of a high-performance anode for lithium ion batteries using novel ordered mesoporous tungsten oxide materials with high electrical conductivity. *Physical Chemistry Chemical Physics*, **2011**, 13, 11060-6	3.6	125