Joong Kee Lee

List of Publications by Year in descending order

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85 papers	3,059 citations	101543 36 h-index	175258 52 g-index
88 all docs	88 docs citations	88 times ranked	4744 citing authors

#	Article	IF	Citations
1	Functionalized Zn@ZnO Hexagonal Pyramid Array for Dendriteâ€Free and Ultrastable Zinc Metal Anodes. Advanced Functional Materials, 2020, 30, 2004210.	14.9	148
2	Effect of polyimide binder on electrochemical characteristics of surface-modified silicon anode for lithium ion batteries. Journal of Power Sources, 2013, 244, 521-526.	7.8	142
3	Three-dimensional silicon/carbon coreâ€“shell electrode as an anode material for lithium-ion batteries. Journal of Power Sources, 2015, 279, 13-20.	7.8	113
4	ZnO Nanorod Array Modified PVDF Membrane with Superhydrophobic Surface for Vacuum Membrane Distillation Application. ACS Applied Materials & Interfaces, 2018, 10, 13452-13461.	8.0	109
5	One-Step Catalytic Synthesis of CuO/Cu₂O in a Graphitized Porous C Matrix Derived from the Cu-Based Metalâ€“Organic Framework for Li- and Na-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 19514-19523.	8.0	99
6	Phenyl-rich silicone oil as a precursor for SiOC anode materials for long-cycle and high-rate lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 2651-2656.	10.3	93
7	Soft, Highly Elastic, and Dischargeâ€Currentâ€Controllable Eutectic Galliumâ€“Indium Liquid Metalâ€“Air Battery Operated at Room Temperature. Advanced Energy Materials, 2018, 8, 1703652.	19.5	91
8	Formation of Semimetallic Cobalt Telluride Nanotube Film via Anion Exchange Tellurization Strategy in Aqueous Solution for Electrocatalytic Applications. ACS Applied Materials & Interfaces, 2015, 7, 25914-25922.	8.0	76
9	Li₄SiO₄-Based Artificial Passivation Thin Film for Improving Interfacial Stability of Li Metal Anodes. ACS Applied Materials & Interfaces, 2018, 10, 8692-8701.	8.0	71
10	Revisiting Metal Sulfide Semiconductors: A Solutionâ€Based General Protocol for Thin Film Formation, Hall Effect Measurement, and Application Prospects. Advanced Functional Materials, 2015, 25, 5739-5747.	14.9	70
11	Self-Relaxant Superelastic Matrix Derived from C₆₀ Incorporated Sn Nanoparticles for Ultra-High-Performance Li-Ion Batteries. ACS Nano, 2018, 12, 5588-5604.	14.6	67
12	A coordination chemistry approach for shape controlled synthesis of indium oxide nanostructures and their photoelectrochemical properties. Journal of Materials Chemistry A, 2014, 2, 5490-5498.	10.3	65
13	Coating Lithium Titanate with Nitrogen-Doped Carbon by Simple Refluxing for High-Power Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 10250-10257.	8.0	65
14	Silicon/copper dome-patterned electrodes for high-performance hybrid supercapacitors. Scientific Reports, 2013, 3, 3183.	3.3	62
15	Solution processed high bandâ€gap CuInGaS₂ thin film for solar cell applications. Progress in Photovoltaics: Research and Applications, 2014, 22, 122-128.	8.1	60
16	Charge Transfer-Induced Molecular Hole Doping into Thin Film of Metalâ€“Organic Frameworks. ACS Applied Materials & Interfaces, 2015, 7, 18501-18507.	8.0	58
17	An ion exchange mediated shape-preserving strategy for constructing 1-D arrays of porous CoS_{1.0365} nanorods for electrocatalytic reduction of triiodide. Journal of Materials Chemistry A, 2015, 3, 7900-7909.	10.3	57
18	Self-assembly of cobalt hexacyanoferrate crystals in 1-D array using ion exchange transformation route for enhanced electrocatalytic oxidation of alkaline and neutral water. Journal of Materials Chemistry A, 2016, 4, 9781-9788.	10.3	57

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19	Structural and electrochemical properties of fullerene-coated silicon thin film as anode materials for lithium secondary batteries. Materials Chemistry and Physics, 2009, 113, 249-254.	4.0	55
20	Oxidation-resistant hybrid metal oxides/metal nanodots/silver nanowires for high performance flexible transparent heaters. Nanoscale, 2016, 8, 3307-3313.	5.6	55
21	Flexible, fiber-shaped, quasi-solid-state Zn-polyaniline batteries with methanesulfonic acid-doped aqueous gel electrolyte. Energy Storage Materials, 2021, 35, 739-749.	18.0	55
22	Pseudocapacitive Characteristics of Low-Carbon Silicon Oxycarbide for Lithium-Ion Capacitors. ACS Applied Materials & Interfaces, 2017, 9, 20566-20576.	8.0	54
23	Si/Ti₂O₃/Reduced Graphene Oxide Nanocomposite Anodes for Lithium-Ion Batteries with Highly Enhanced Cyclic Stability. ACS Applied Materials & Interfaces, 2015, 7, 18483-18490.	8.0	53
24	Plasma-Assisted Surface Modification on the Electrode Interface for Flexible Fiber-Shaped Znâ€“Polyaniline Batteries. ACS Applied Materials & Interfaces, 2020, 12, 5820-5830.	8.0	50
25	Surface modification of LiNi0.5Mn1.5O4 cathodes with ZnAl2O4 by a solâ€“gel method for lithium ion batteries. Electrochimica Acta, 2014, 115, 326-331.	5.2	47
26	Alâ€“C hybrid nanoclustered anodes for lithium ion batteries with high electrical capacity and cyclic stability. Chemical Communications, 2014, 50, 2837-2840.	4.1	45
27	Indolocarbazole based small molecules: an efficient hole transporting material for perovskite solar cells. RSC Advances, 2015, 5, 55321-55327.	3.6	44
28	Plasma-polymerized C60-coated CNT interlayer with physical and chemical functions for lithiumâ€“sulfur batteries. Chemical Engineering Journal, 2020, 401, 126075.	12.7	43
29	Effect of fullerene coating on silicon thin film anodes for lithium rechargeable batteries. Journal of Solid State Electrochemistry, 2010, 14, 51-56.	2.5	42
30	Cu3Si-doped porous-silicon particles prepared by simplified chemical vapor deposition method as anode material for high-rate and long-cycle lithium-ion batteries. Journal of Alloys and Compounds, 2017, 701, 425-432.	5.5	42
31	Hierarchical hollow dual Coreâ€“Shell carbon nanowall-encapsulated pâ€“n SnO/SnO2 heterostructured anode for high-performance lithium-ion-based energy storage. Carbon, 2019, 153, 62-72.	10.3	42
32	Coating of sulfur particles with manganese oxide nanowires as a cathode material in lithiumâ€“sulfur batteries. Materials Letters, 2015, 158, 132-135.	2.6	41
33	Using TiO2 Mesoflower Interlayer in Tubular Porous Titanium Membranes for Enhanced Electrocatalytic Filtration. Electrochimica Acta, 2016, 218, 318-324.	5.2	40
34	Ordered SnO nanoparticles in MWCNT as a functional host material for high-rate lithium-sulfur battery cathode. Nano Research, 2017, 10, 2083-2095.	10.4	40
35	Hierarchically structured photoanode with enhanced charge collection and light harvesting abilities for fiber-shaped dye-sensitized solar cells. Nano Energy, 2018, 49, 95-102.	16.0	40
36	An elastic carbon layer on echeveria-inspired SnO2 anode for long-cycle and high-rate lithium ion batteries. Carbon, 2015, 94, 539-547.	10.3	37

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37	SnO2-coated LiCoO2 cathode material for high-voltage applications in lithium-ion batteries. Solid State Ionics, 2014, 256, 89-92.	2.7	33
38	A novel photoanode with high flexibility for fiber-shaped dye sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 5925-5931.	10.3	32
39	Study on a stretchable, fiber-shaped, and TiO2 nanowire array-based dye-sensitized solar cell with electrochemical impedance spectroscopy method. Electrochimica Acta, 2018, 267, 34-40.	5.2	32
40	Si nanoparticles-nested inverse opal carbon supports for highly stable lithium-ion battery anodes. Journal of Materials Chemistry A, 2015, 3, 23684-23689.	10.3	31
41	A novel flexible micro-ratchet/ZnO nano-rods surface with rapid recovery icephobic performance. Journal of Industrial and Engineering Chemistry, 2018, 62, 52-57.	5.8	31
42	Photoactive g-C3N4/CuZIF-67 bifunctional electrocatalyst with staggered p-n heterojunction for rechargeable Zn-air batteries. Applied Catalysis B: Environmental, 2022, 306, 121096.	20.2	31
43	Metalâ€“Semiconductor Ohmic and Schottky Contact Interfaces for Stable Li-Metal Electrodes. ACS Energy Letters, 0, , 1432-1442.	17.4	27
44	CdS buffer-layer free highly efficient ZnO-CdSe photoelectrochemical cells. Applied Physics Letters, 2012, 101, .	3.3	26
45	Robust anti-icing performance of silicon wafer with hollow micro-/nano-structured ZnO. Journal of Industrial and Engineering Chemistry, 2018, 62, 46-51.	5.8	26
46	Carbon film covering originated from fullerene C60 on the surface of lithium metal anode for lithium secondary batteries. Journal of Electroceramics, 2009, 23, 248-253.	2.0	25
47	Electrical and optical properties of fluorine-doped tin oxide (SnOx:F) thin films deposited on PET by using ECRâ€“MOCVD. Journal of Electroceramics, 2009, 23, 506-511.	2.0	24
48	Electrochemical characteristics of semi conductive silicon anode for lithium polymer batteries. Journal of Electroceramics, 2010, 24, 308-312.	2.0	24
49	Double-layer effect on electrothermal properties of transparent heaters. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1923-1927.	1.8	23
50	Plasma-polymerized C60 as a functionalized coating layer on fluorine-doped tin oxides for anode materials of lithium-ion batteries. Carbon, 2015, 81, 835-838.	10.3	23
51	Stable Zn Metal Anodes with Limited Zn-Doping in MgF2 Interphase for Fast and Uniformly Ionic Flux. Nano-Micro Letters, 2022, 14, 46.	27.0	23
52	A polymerized C60 coating enhancing interfacial stability at three-dimensional LiCoO2 in high-potential regime. Journal of Power Sources, 2015, 298, 1-7.	7.8	21
53	Interfacial Engineering for Enhanced Light Absorption and Charge Transfer of a Solution-Processed Bulk Heterojunction Based on Heptazole as a Small Molecule Type of Donor. ACS Applied Materials & Interfaces, 2016, 8, 8637-8643.	8.0	21
54	Synthesis and characterization of a hierarchically structured three-dimensional conducting scaffold for highly stable Li metal anodes. Journal of Materials Chemistry A, 2019, 7, 12882-12892.	10.3	20

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55	Electrochemical characteristics of silicon-metals coated graphites for anode materials of lithium secondary batteries. Journal of Electroceramics, 2006, 17, 661-665.	2.0	19
56	Chemically tuned, bi-functional polar interlayer for TiO₂ photoanodes in fibre-shaped dye-sensitized solar cells. Journal of Materials Chemistry A, 2020, 8, 2549-2562.	10.3	17
57	A Shapeâ€Variable, Lowâ€Temperature Liquid Metalâ€“Conductive Polymer Aqueous Secondary Battery. Advanced Functional Materials, 2021, 31, 2107062.	14.9	17
58	Effect of micro-patterned fluorine-doped tin oxide films on electrochromic properties of Prussian blue films. Applied Surface Science, 2014, 313, 864-869.	6.1	15
59	Surface-Coated Silicon Anodes with Amorphous Carbon Film Prepared by Fullerene C[sub 60] Sputtering. Journal of the Electrochemical Society, 2010, 157, A660.	2.9	13
60	Effects of annealing temperature on the electrochemical characteristics of ZnO microrods as anode materials of lithium-ion battery using chemical bath deposition. Ionics, 2019, 25, 457-466.	2.4	13
61	Uniformly dispersed silicon nanoparticle/carbon nanosphere composites as highly stable lithium-ion battery electrodes. RSC Advances, 2015, 5, 17424-17428.	3.6	12
62	Synthesis and modification of activated carbon originated from Indonesian local Orange peel for lithium ion Capacitorâ€™s cathode. Journal of Solid State Electrochemistry, 2017, 21, 1331-1342.	2.5	12
63	Electrochemical characteristics of fluorine-doped tin oxide film coated on stainless steel bipolar plates. Surface and Coatings Technology, 2015, 277, 1-6.	4.8	11
64	Photoelectrochemistry of solution processed hematite nanoparticles, nanoparticle-chains and nanorods. RSC Advances, 2012, 2, 11808.	3.6	10
65	Uniformly distributed reaction by 3D host-lithium composite anode for high rate capability and reversibility of Li-O2 batteries. Chemical Engineering Journal, 2022, 427, 130914.	12.7	10
66	Electrochemical behavior of a laser microstructured fluorine doped tin oxide anode layer with a plasma pretreatment for 3D battery systems. RSC Advances, 2014, 4, 4247-4252.	3.6	9
67	Fullerene C₆₀ Coated Silicon Nanowires as Anode Materials for Lithium Secondary Batteries. Journal of Nanoscience and Nanotechnology, 2012, 12, 3547-3551.	0.9	8
68	Effect of lithium difluoro (oxalato) borate on LiMn2O4-activated carbon hybrid capacitors. Electronic Materials Letters, 2013, 9, 751-754.	2.2	8
69	3D Wovenâ€Like Carbon Micropattern Decorated with Silicon Nanoparticles for Use in Lithiumâ€Ion Batteries. ChemSusChem, 2015, 8, 3414-3418.	6.8	8
70	Interfacial Engineering of CdOâ€“CdSe 3D Microarchitectures with inÂsitu Photopolymerized <scp>PEDOT</scp> for an Enhanced Photovoltaic Performance. Photochemistry and Photobiology, 2015, 91, 780-785.	2.5	8
71	Fullerene coated indium tin oxide counter electrode of Prussian blue electrode for enhanced electrochromic properties. Solar Energy Materials and Solar Cells, 2015, 139, 44-50.	6.2	8
72	Rambutan peel derived porous carbons for lithium sulfur battery. SN Applied Sciences, 2021, 3, 1.	2.9	8

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73	Carbon-coated silicon nanoparticle-embedded carbon sphere assembly electrodes with enhanced performance for lithium-ion batteries. RSC Advances, 2016, 6, 38012-38017.	3.6	7
74	Employment of SnO2:F@Ni3Sn2/Ni nanoclusters composites as an anode material for lithium-ion batteries. Journal of Alloys and Compounds, 2016, 680, 744-751.	5.5	7
75	Icephobic performance on the aluminum foil-based micro-/nanostructured surface. Chinese Physics B, 2017, 26, 046801.	1.4	6
76	Electrochemical characteristics of amophous carbon coated silicon electrodes. Korean Journal of Chemical Engineering, 2009, 26, 1034-1039.	2.7	5
77	Electrochemical performance of silicon thin film anodes covered by diamond-like carbon with various surface coating morphologies. Journal of Solid State Electrochemistry, 2010, 14, 1247-1253.	2.5	5
78	Antiglare and antireflective coating of layer-by-layer SiO2 and TiZrO2 on surface-modified glass. Applied Surface Science, 2019, 490, 278-282.	6.1	5
79	Potato Peel Based Carbonâ€“Sulfur Composite as Cathode Materials for Lithium Sulfur Battery. Journal of Nanoscience and Nanotechnology, 2021, 21, 6243-6247.	0.9	5
80	Synthesis of Boron-Doped C₆₀Film Using Plasma-Assisted Thermal Evaporation Technique and its Electrochemical Characterizations. Fullerenes Nanotubes and Carbon Nanostructures, 2012, 20, 216-223.	2.1	3
81	A facile approach for carburization of anodically grown titania nanotubes: towards metallization of nanotubes. RSC Advances, 2014, 4, 32599.	3.6	3
82	Design and synthesis of an interfacial layer of the polysulfide immobilizer for lithium-sulfur batteries by the one-pot hydrothermal method. Applied Surface Science, 2018, 461, 154-160.	6.1	3
83	Lithium-Ion Batteryâ€”3D Micro-/Nano-Structuring, Modification and Characterization. Springer Series in Materials Science, 2020, , 313-347.	0.6	2
84	Synthesis of kerosene based nanocarbons by a nebulized spray pyrolysis method. AIP Conference Proceedings, 2016, , .	0.4	0
85	Preparation of Kerosene Based Carbon Nanomaterials by Nebulized Spray Pyrolysis. Journal of Nanoscience and Nanotechnology, 2017, 17, 4275-4278.	0.9	0