Min-Cheol Kim

List of Publications by Year in Descending Order

59 papers	978 citations	17 h-index	29 g-index
61 ext. papers	1,167 ext. citations	6.9 avg, IF	4.32 L-index

#	Paper	IF	Citations
59	Multifunctional catalytic porous transport layer integrated with NiSe2 chalcogen compound for high-performance electrochemical energy devices. *Applied Surface Science*, **2022**, 590, 153030	6.7	0
58	High-performance free-standing hybrid solid electrolyte membrane combined with Li6.28Al0.24La3Zr2O12 and hexagonal-BN for all-solid-state lithium-based batteries. *Chemical Engineering Journal*, **2022**, 446, 137035	14.7	3
57	Electrochemically active hydroquinone-based redox mediator for flexible energy storage system with improved charge storing ability. *Journal of Colloid and Interface Science*, **2021**, 588, 62-69	9.3	5
56	1T-MoS2/carbon nanofiber composite as an interlayer fabricated by an in situ electrochemical fabrication method for lithium-sulfur batteries. *Journal of Alloys and Compounds*, **2021**, 857, 158236	5.7	14
55	Hierarchically Ordinated Two-Dimensional MoS2 Nanosheets on Three-Dimensional Reduced Graphene Oxide Aerogels as Highly Active and Stable Catalysts for Hydrogen Evolution Reaction. *Catalysts*, **2021**, 11, 182	4	2
54	Effect of ionic conductivity in polymer-gel electrolytes containing iodine-based redox mediators for efficient, flexible energy storage systems. *Journal of Industrial and Engineering Chemistry*, **2021**, 94, 384-389	6.3	4
53	Enhanced electrochemical performance of a selectively formed V2O3/C composite structure for Li-ion batteries. *Electrochimica Acta*, **2021**, 389, 138685	6.7	4
52	Porous SnO nanostructure with a high specific surface area for improved electrochemical performance.. *RSC Advances*, **2020**, 10, 10519-10525	3.7	8
51	Enhanced electrochemical performance of MoS/graphene nanosheet nanocomposites.. *RSC Advances*, **2020**, 10, 19077-19082	3.7	8
50	Improved electrochemical properties of LiNi0.8Co0.15Al0.05O2 cathode materials synthesized using micelle structures. *Journal of Solid State Electrochemistry*, **2020**, 24, 2233-2240	2.6	2
49	Biomimetic Cathodes Applying Imprinted Carbon Paper with Vortex for Enhanced Oxygen Reduction Reaction of Lithium–Air Batteries. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 4325-4330	8.3	
48	Ni2P/graphitic carbon nanostructure electrode with superior electrochemical performance. *Electrochimica Acta*, **2020**, 341, 136045	6.7	14
47	Polymeric redox mediator as a stable cathode catalyst for lithium-O2 batteries. *Journal of Power Sources*, **2020**, 453, 227850	8.9	8
46	Chemical valence electron-engineered LiNi0.4Mn1.5MtO4 (Mt = Co and Fe) cathode materials with high-performance electrochemical properties. *Applied Surface Science*, **2020**, 504, 144514	6.7	6
45	Rational Design of Electrochemical Iodine-Based Redox Mediators for Water-Proofed Flexible Fiber Supercapacitors. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 2409-2415	8.3	6
44	Synthesis of highly conductive titanium suboxide support materials with superior electrochemical durability for proton exchange membrane fuel cells. *Molecular Crystals and Liquid Crystals*, **2020**, 707, 110-117	0.5	0
43	Redox-Mediated Polymer Catalyst for Lithium-Air Batteries with High Round-Trip Efficiency. *Catalysts*, **2020**, 10, 1479	4	

42	Facile one-pot synthesis of Ge/TiO nanocomposite structures with improved electrochemical performance. *Nanoscale*, **2019**, 11, 17415-17424	7.7	18
41	Surface modified and size-controlled octahedral Cu2O nanostructured electrodes for lithium-ion batteries. *Journal of Alloys and Compounds*, **2019**, 794, 84-93	5.7	15
40	TiO-coated LiCoO electrodes fabricated by a sputtering deposition method for lithium-ion batteries with enhanced electrochemical performance.. *RSC Advances*, **2019**, 9, 7903-7907	3.7	3
39	Role of polyvinylpyrrolidone in the electrochemical performance of LiMnO cathode for lithium-ion batteries.. *RSC Advances*, **2019**, 9, 10297-10304	3.7	4
38	F-doped Li1.15Ni0.275Ru0.575O2 cathode materials with long cycle life and improved rate performance. *Electrochimica Acta*, **2019**, 326, 135015	6.7	7
37	Pore-controlled polymer membrane with Mn (II) ion trapping effect for high-rate performance LiMn2O4 cathode. *Journal of Solid State Electrochemistry*, **2019**, 23, 475-484	2.6	4
36	Stress-relieved Si anode on a porous Cu current collector for high-performance lithium-ion batteries. *Materials Chemistry and Physics*, **2019**, 223, 152-156	4.4	4
35	Systematic design of hierarchical Ni3S2/MoO2 nanostructures grown on 3D conductive substrate for high-performance pseudocapacitors. *Ceramics International*, **2019**, 45, 2670-2675	5.1	8
34	MoS2-TiN nanostructured electrodes fabricated using co-sputtering deposition method for high-performance lithium-ion batteries. *Journal of Alloys and Compounds*, **2018**, 741, 1048-1054	5.7	3
33	Nature inspired cathodes using high-density carbon papers with an eddy current effect for high-rate performance lithium–air batteries. *Journal of Materials Chemistry A*, **2018**, 6, 9550-9560	13	15
32	Molybdenum carbide embedded in carbon nanofiber as a 3D flexible anode with superior stability and high-rate performance for Li-ion batteries. *Ceramics International*, **2018**, 44, 7972-7977	5.1	15
31	3D yolk–shell Si@void@CNF nanostructured electrodes with improved electrochemical performance for lithium-ion batteries. *Journal of Industrial and Engineering Chemistry*, **2018**, 64, 344-351	6.3	19
30	In-situ synthesis of Ge/Ti4O7 composite with enhanced electrochemical properties. *Ceramics International*, **2018**, 44, 663-668	5.1	4
29	Micro-patterned 3D Si electrodes fabricated using an imprinting process for high-performance lithium-ion batteries. *Journal of Applied Electrochemistry*, **2018**, 48, 1057-1068	2.6	7
28	Stress Dispersed Cu Metal Anode by Laser Multiscale Patterning for Lithium-Ion Batteries with High Capacity. *Metals*, **2018**, 8, 410	2.3	
27	Sea urchin-like Li4Ti5O12 nanostructure as a Li-Ion battery anode with high energy density and improved ionic transport. *Journal of Alloys and Compounds*, **2018**, 767, 73-80	5.7	9
26	Investigation of the durability of Fe/N-doped mesoporous carbon nanostructure as a non-precious metal catalyst for oxygen reduction reaction in acid medium. *Carbon*, **2018**, 140, 189-200	10.4	17
25	A chemically regenerative redox fuel cell using (2,2,6,6-tetramethylpiperidin-1-yl)oxyl redox reaction in acid medium. *Journal of Power Sources*, **2018**, 393, 32-36	8.9	4

24	Direct Ethanol Fuel Cells with Superior Ethanol-Tolerant Nonprecious Metal Cathode Catalysts for Oxygen Reduction Reaction. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7609-7618	8.3	21
23	High-Performance Chemically Regenerative Redox Fuel Cells Using a NO /NO Regeneration Reaction. *Angewandte Chemie - International Edition*, **2017**, 56, 2893-2897	16.4	7
22	3-D Si/carbon nanofiber as a binder/current collector-free anode for lithium-ion batteries. *Journal of Industrial and Engineering Chemistry*, **2017**, 49, 105-111	6.3	36
21	High-Performance Chemically Regenerative Redox Fuel Cells Using a NO3/NO Regeneration Reaction. *Angewandte Chemie*, **2017**, 129, 2939-2943	3.6	1
20	Electrochemical catalytic contribution of transition metals at the center of porphyrin macrocycle structures as catalysts for oxygen reduction reaction. *Journal of Industrial and Engineering Chemistry*, **2017**, 54, 200-204	6.3	9
19	Sulfur-Doped Porphyrinic Carbon Nanostructures Synthesized with Amorphous MoS for the Oxygen Reduction Reaction in an Acidic Medium. *ChemSusChem*, **2017**, 10, 2202-2209	8.3	8
18	Fe/N/S-doped mesoporous carbon nanostructures as electrocatalysts for oxygen reduction reaction in acid medium. *Applied Catalysis B: Environmental*, **2017**, 203, 889-898	21.8	138
17	Porous Cu-rich@Cu3Pt alloy catalyst with a low Pt loading for enhanced electrocatalytic reactions. *Journal of Alloys and Compounds*, **2017**, 691, 26-33	5.7	25
16	3D flexible Si based-composite (Si@Si3N4)/CNF electrode with enhanced cyclability and high rate capability for lithium-ion batteries. *Nano Energy*, **2016**, 27, 545-553	17.1	73
15	In situ formation of MoS2/C nanocomposite as an anode for high-performance lithium-ion batteries. *RSC Advances*, **2016**, 6, 92259-92266	3.7	10
14	Chemically Regenerative Redox Fuel Cells Using Iron Redox Couples as a Liquid Catalyst with Cocatalysts. *ACS Catalysis*, **2016**, 6, 5302-5306	13.1	10
13	Synthesis of hollow carbon nanostructures as a non-precious catalyst for oxygen reduction reaction. *Electrochimica Acta*, **2016**, 191, 805-812	6.7	26
12	In Situ Synthesis and Characterization of Ge Embedded Electrospun Carbon Nanostructures as High Performance Anode Material for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 7022-9	9.5	53
11	Highly stable TiO2 coated Li2MnO3 cathode materials for lithium-ion batteries. *Journal of Power Sources*, **2016**, 304, 119-127	8.9	62
10	Tungsten nitride nanoplates as an anode material for lithium ion batteries. *Ceramics International*, **2016**, 42, 1933-1942	5.1	25
9	Synthesis of Pt-Rich@PtNi alloy core–shell nanoparticles using halides. *RSC Advances*, **2015**, 5, 8301-8306	3.7	6
8	Two-dimensional nanocomposites based on tungsten oxide nanoplates and graphene nanosheets for high-performance lithium ion batteries. *Electrochimica Acta*, **2015**, 163, 132-139	6.7	36
7	Cubic and octahedral Cu2O nanostructures as anodes for lithium-ion batteries. *Journal of Materials Chemistry A*, **2015**, 3, 23003-23010	13	50

6	Ultrasmall PtSn alloy catalyst for ethanol electro-oxidation reaction. *Journal of Power Sources*, **2015**, 275, 557-562	8.9	33
5	Sputtered amorphous thin film nanocomposites as an anode for lithium-ion batteries. *Journal of Power Sources*, **2015**, 273, 707-715	8.9	12
4	Carbon nanotube web-based current collectors for high-performance lithium ion batteries. *Materials Today Communications*, **2015**, 4, 149-155	2.5	9
3	Improved pseudocapacitive performance of well-defined WO3 nanoplates. *Ceramics International*, **2015**, 41, 4989-4995	5.1	25
2	Improved Lithium Ion Behavior Properties of TiO2@Graphitic-like Carbon Core@Shell Nanostructure. *Electrochimica Acta*, **2014**, 147, 241-249	6.7	24
1	Mesoporous molybdenum nitride nanobelts as an anode with improved electrochemical properties in lithium ion batteries. *Journal of Power Sources*, **2014**, 269, 534-541	8.9	39