

Jinwoo Lee

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248
papers

19,962
citations

74
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135
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265
ext. papers

21,971
ext. citations

10.6
avg, IF

7
L-index

#	Paper	IF	Citations
248	Recent Progress in the Synthesis of Porous Carbon Materials. <i>Advanced Materials</i> , 2006 , 18, 2073-2094	24	1748
247	Magnetic fluorescent delivery vehicle using uniform mesoporous silica spheres embedded with monodisperse magnetic and semiconductor nanocrystals. <i>Journal of the American Chemical Society</i> , 2006 , 128, 688-9	16.4	797
246	Synthesis of a new mesoporous carbon and its application to electrochemical double-layer capacitors. <i>Chemical Communications</i> , 1999 , 2177-2178	5.8	659
245	Direct access to thermally stable and highly crystalline mesoporous transition-metal oxides with uniform pores. <i>Nature Materials</i> , 2008 , 7, 222-8	27	527
244	Fe ₃ O ₄ Nanoparticles Confined in Mesocellular Carbon Foam for High Performance Anode Materials for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2011 , 21, 2430-2438	15.6	370
243	Electric Double-Layer Capacitor Performance of a New Mesoporous Carbon. <i>Journal of the Electrochemical Society</i> , 2000 , 147, 2507	3.9	368
242	Synthesis of new nanoporous carbon materials using nanostructured silica materials as templates. <i>Journal of Materials Chemistry</i> , 2004 , 14, 478		366
241	Large-Scale Synthesis of Uniform and Crystalline Magnetite Nanoparticles Using Reverse Micelles as Nanoreactors under Reflux Conditions. <i>Advanced Functional Materials</i> , 2005 , 15, 503-509	15.6	365
240	Large-scale synthesis of TiO ₂ nanorods via nonhydrolytic sol-gel ester elimination reaction and their application to photocatalytic inactivation of E. coli. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 15297-302	7.4	349
239	Facile Synthesis of Nb ₂ O ₅ @Carbon Core-Shell Nanocrystals with Controlled Crystalline Structure for High-Power Anodes in Hybrid Supercapacitors. <i>ACS Nano</i> , 2015 , 9, 7497-505	16.7	340
238	Advanced hybrid supercapacitor based on a mesoporous niobium pentoxide/carbon as high-performance anode. <i>ACS Nano</i> , 2014 , 8, 8968-78	16.7	339
237	Simple synthesis of functionalized superparamagnetic magnetite/silica core/shell nanoparticles and their application as magnetically separable high-performance biocatalysts. <i>Small</i> , 2008 , 4, 143-52	11	338
236	Development of a New Mesoporous Carbon Using an HMS Aluminosilicate Template. <i>Advanced Materials</i> , 2000 , 12, 359-362	24	333
235	High-Performance Sodium-Ion Hybrid Supercapacitor Based on Nb ₂ O ₅ @Carbon Core-Shell Nanoparticles and Reduced Graphene Oxide Nanocomposites. <i>Advanced Functional Materials</i> , 2016 , 26, 3711-3719	15.6	312
234	Versatile Strategy for Tuning ORR Activity of a Single Fe-N Site by Controlling Electron-Withdrawing/Donating Properties of a Carbon Plane. <i>Journal of the American Chemical Society</i> , 2019 , 141, 6254-6262	16.4	300
233	Enhancing Stability of Perovskite Solar Cells to Moisture by the Facile Hydrophobic Passivation. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 17330-6	9.5	249
232	Fabrication of novel mesocellular carbon foams with uniform ultralarge mesopores. <i>Journal of the American Chemical Society</i> , 2001 , 123, 5146-7	16.4	249

231	Highly Improved Rate Capability for a Lithium-Ion Battery Nano-Li ₄ Ti ₅ O ₁₂ Negative Electrode via Carbon-Coated Mesoporous Uniform Pores with a Simple Self-Assembly Method. <i>Advanced Functional Materials</i> , 2011 , 21, 4349-4357	15.6	241
230	A Comprehensive Review of Materials with Catalytic Effects in Li-S Batteries: Enhanced Redox Kinetics. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 18746-18757	16.4	221
229	Generalized fabrication of multifunctional nanoparticle assemblies on silica spheres. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 4789-93	16.4	215
228	Platinum-free tungsten carbides as an efficient counter electrode for dye sensitized solar cells. <i>Chemical Communications</i> , 2010 , 46, 8600-2	5.8	198
227	Modified carbon nitride nanozyme as bifunctional glucose oxidase-peroxidase for metal-free bioinspired cascade photocatalysis. <i>Nature Communications</i> , 2019 , 10, 940	17.4	191
226	Simple Fabrication of a Highly Sensitive and Fast Glucose Biosensor Using Enzymes Immobilized in Mesocellular Carbon Foam. <i>Advanced Materials</i> , 2005 , 17, 2828-2833	24	186
225	Simple synthesis of hierarchically ordered mesocellular mesoporous silica materials hosting crosslinked enzyme aggregates. <i>Small</i> , 2005 , 1, 744-53	11	179
224	Development of high-performance supercapacitor electrodes using novel ordered mesoporous tungsten oxide materials with high electrical conductivity. <i>Chemical Communications</i> , 2011 , 47, 1021-3	5.8	178
223	Crosslinked enzyme aggregates in hierarchically-ordered mesoporous silica: a simple and effective method for enzyme stabilization. <i>Biotechnology and Bioengineering</i> , 2007 , 96, 210-8	4.9	173
222	Ordered Mesoporous SnO ₂ Based Photoanodes for High-Performance Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 22032-22037	3.8	163
221	Highly active heterogeneous Fenton catalyst using iron oxide nanoparticles immobilized in alumina coated mesoporous silica. <i>Chemical Communications</i> , 2006 , 463-5	5.8	163
220	Inorganic Rubidium Cation as an Enhancer for Photovoltaic Performance and Moisture Stability of HC(NH ₂) ₂ PbI ₃ Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2017 , 27, 1605988	15.6	148
219	Mesoporous Ge/GeO ₂ /Carbon Lithium-Ion Battery Anodes with High Capacity and High Reversibility. <i>ACS Nano</i> , 2015 , 9, 5299-309	16.7	141
218	Block Copolymer Directed Ordered Mesostructured TiNb ₂ O ₇ Multimetallic Oxide Constructed of Nanocrystals as High Power Li-Ion Battery Anodes. <i>Chemistry of Materials</i> , 2014 , 26, 3508-3514	9.6	137
217	A mini review of designed mesoporous materials for energy-storage applications: from electric double-layer capacitors to hybrid supercapacitors. <i>Nanoscale</i> , 2016 , 8, 7827-33	7.7	136
216	Investigation of the Support Effect in Atomically Dispersed Pt on WO ₃ for Utilization of Pt in the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 16038-16042	16.4	133
215	Preparation of a magnetically switchable bio-electrocatalytic system employing cross-linked enzyme aggregates in magnetic mesocellular carbon foam. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 7427-32	16.4	128
214	Block-Copolymer-Assisted One-Pot Synthesis of Ordered Mesoporous WO ₃ /Carbon Nanocomposites as High-Rate-Performance Electrodes for Pseudocapacitors. <i>Advanced Functional Materials</i> , 2013 , 23, 3747-3754	15.6	126

213	Development of a high-performance anode for lithium ion batteries using novel ordered mesoporous tungsten oxide materials with high electrical conductivity. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 11060-6	3.6	125
212	Selective CO production by Au coupled ZnTe/ZnO in the photoelectrochemical CO ₂ reduction system. <i>Energy and Environmental Science</i> , 2015 , 8, 3597-3604	35.4	122
211	One-pot synthesis of tin-embedded carbon/silica nanocomposites for anode materials in lithium-ion batteries. <i>ACS Nano</i> , 2013 , 7, 1036-44	16.7	121
210	Filtration-Free Recyclable Catalytic Asymmetric Dihydroxylation Using a Ligand Immobilized on Magnetic Mesocellular Mesoporous Silica. <i>Advanced Synthesis and Catalysis</i> , 2006 , 348, 41-46	5.6	117
209	Direct synthesis of uniform mesoporous carbons from the carbonization of as-synthesized silica/triblock copolymer nanocomposites. <i>Carbon</i> , 2004 , 42, 2711-2719	10.4	116
208	General Synthesis of N-Doped Macroporous Graphene-Encapsulated Mesoporous Metal Oxides and Their Application as New Anode Materials for Sodium-Ion Hybrid Supercapacitors. <i>Advanced Functional Materials</i> , 2017 , 27, 1603921	15.6	106
207	Mechanically Recoverable and Highly Efficient Perovskite Solar Cells: Investigation of Intrinsic Flexibility of Organic/Inorganic Perovskite. <i>Advanced Energy Materials</i> , 2015 , 5, 1501406	21.8	106
206	Fabrication of a novel polypyrrole/poly(methyl methacrylate) coaxial nanocable using mesoporous silica as a nanoreactor. <i>Chemical Communications</i> , 2001 , 83-84	5.8	106
205	Designing a Highly Active Metal-Free Oxygen Reduction Catalyst in Membrane Electrode Assemblies for Alkaline Fuel Cells: Effects of Pore Size and Doping-Site Position. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 9230-4	16.4	105
204	Fabrication of nanoporous nanocomposites entrapping Fe ₃ O ₄ magnetic nanoparticles and oxidases for colorimetric biosensing. <i>Chemistry - A European Journal</i> , 2011 , 17, 10700-7	4.8	105
203	Simple synthesis of mesoporous carbon with magnetic nanoparticles embedded in carbon rods. <i>Carbon</i> , 2005 , 43, 2536-2543	10.4	105
202	Approaching Ultrastable High-Rate Li-S Batteries through Hierarchically Porous Titanium Nitride Synthesized by Multiscale Phase Separation. <i>Advanced Materials</i> , 2019 , 31, e1806547	24	105
201	Ordered Mesoporous Titanium Nitride as a Promising Carbon-Free Cathode for Aprotic Lithium-Oxygen Batteries. <i>ACS Nano</i> , 2017 , 11, 1736-1746	16.7	104
200	Ordered-mesoporous Nb ₂ O ₅ /carbon composite as a sodium insertion material. <i>Nano Energy</i> , 2015 , 16, 62-70	17.1	104
199	Block copolymer directed synthesis of mesoporous TiO ₂ for dye-sensitized solar cells. <i>Soft Matter</i> , 2009 , 5, 134-139	3.6	104
198	N- and B-Codoped Graphene: A Strong Candidate To Replace Natural Peroxidase in Sensitive and Selective Bioassays. <i>ACS Nano</i> , 2019 , 13, 4312-4321	16.7	103
197	Cu-Pd alloy nanoparticles as highly selective catalysts for efficient electrochemical reduction of CO ₂ to CO. <i>Applied Catalysis B: Environmental</i> , 2019 , 246, 82-88	21.8	102
196	Functional mesoporous materials for energy applications: solar cells, fuel cells, and batteries. <i>Nanoscale</i> , 2013 , 5, 4584-605	7.7	100

195	A tailored TiO ₂ electron selective layer for high-performance flexible perovskite solar cells via low temperature UV process. <i>Nano Energy</i> , 2016 , 28, 380-389	17.1	100
194	Large-pore sized mesoporous carbon electrocatalyst for efficient dye-sensitized solar cells. <i>Chemical Communications</i> , 2010 , 46, 2136-8	5.8	99
193	A magnetically separable, highly stable enzyme system based on nanocomposites of enzymes and magnetic nanoparticles shipped in hierarchically ordered, mesocellular, mesoporous silica. <i>Small</i> , 2005 , 1, 1203-7	11	99
192	Heme Cofactor-Resembling Fe ^{II} Single Site Embedded Graphene as Nanozymes to Selectively Detect H ₂ O ₂ with High Sensitivity. <i>Advanced Functional Materials</i> , 2020 , 30, 1905410	15.6	99
191	Highly efficient colorimetric detection of target cancer cells utilizing superior catalytic activity of graphene oxide-magnetic-platinum nanohybrids. <i>Nanoscale</i> , 2014 , 6, 1529-36	7.7	98
190	Direct access to hierarchically porous inorganic oxide materials with three-dimensionally interconnected networks. <i>Journal of the American Chemical Society</i> , 2014 , 136, 16066-72	16.4	98
189	Soft-Template Simple Synthesis of Ordered Mesoporous Titanium Nitride-Carbon Nanocomposite for High Performance Dye-Sensitized Solar Cell Counter Electrodes. <i>Chemistry of Materials</i> , 2012 , 24, 1575-1582	9.6	98
188	Unbiased Sunlight-Driven Artificial Photosynthesis of Carbon Monoxide from CO ₂ Using a ZnTe-Based Photocathode and a Perovskite Solar Cell in Tandem. <i>ACS Nano</i> , 2016 , 10, 6980-7	16.7	97
187	Highly Efficient and Durable Quantum Dot Sensitized ZnO Nanowire Solar Cell Using Noble-Metal-Free Counter Electrode. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 22018-22024	3.8	96
186	A facile synthesis of bimodal mesoporous silica and its replication for bimodal mesoporous carbon. <i>Chemical Communications</i> , 2003 , 1138-9	5.8	95
185	Carbonate-coordinated cobalt co-catalyzed BiVO ₄ /WO ₃ composite photoanode tailored for CO ₂ reduction to fuels. <i>Nano Energy</i> , 2015 , 15, 153-163	17.1	91
184	Investigation of Pseudocapacitive Charge-Storage Behavior in Highly Conductive Ordered Mesoporous Tungsten Oxide Electrodes. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 11880-11886	3.8	91
183	Soft-template synthesis of mesoporous non-precious metal catalyst with Fe-N _x /C active sites for oxygen reduction reaction in fuel cells. <i>Applied Catalysis B: Environmental</i> , 2018 , 222, 191-199	21.8	90
182	TiO ₂ nanodisks designed for Li-ion batteries: a novel strategy for obtaining an ultrathin and high surface area anode material at the ice interface. <i>Energy and Environmental Science</i> , 2013 , 6, 2932	35.4	90
181	Simple Synthesis of Uniform Mesoporous Carbons with Diverse Structures from Mesostructured Polymer/Silica Nanocomposites. <i>Chemistry of Materials</i> , 2004 , 16, 3323-3330	9.6	89
180	Degradation mechanism of electrocatalyst during long-term operation of PEMFC. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 8974-8981	6.7	86
179	Awakening Solar Water-Splitting Activity of ZnFe ₂ O ₄ Nanorods by Hybrid Microwave Annealing. <i>Advanced Energy Materials</i> , 2015 , 5, 1401933	21.8	85
178	One-pot synthesis of intermetallic electrocatalysts in ordered, large-pore mesoporous carbon/silica toward formic acid oxidation. <i>ACS Nano</i> , 2012 , 6, 6870-81	16.7	85

177	Ferrocene-derivatized ordered mesoporous carbon as high performance counter electrodes for dye-sensitized solar cells. <i>Carbon</i> , 2010 , 48, 3715-3720	10.4	84
176	Pt-Decorated Magnetic Nanozymes for Facile and Sensitive Point-of-Care Bioassay. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 35133-35140	9.5	82
175	Simple synthesis of hierarchically structured partially graphitized carbon by emulsion/block-copolymer co-template method for high power supercapacitors. <i>Carbon</i> , 2013 , 64, 391-402	10.4	81
174	Highly crystalline inverse opal transition metal oxides via a combined assembly of soft and hard chemistries. <i>Journal of the American Chemical Society</i> , 2008 , 130, 8882-3	16.4	74
173	Low-cost and facile synthesis of mesocellular carbon foams. <i>Chemical Communications</i> , 2002 , 2674-5	5.8	74
172	Low-cost electrospun WC/C composite nanofiber as a powerful platinum-free counter electrode for dye sensitized solar cell. <i>Nano Energy</i> , 2014 , 9, 392-400	17.1	73
171	Improvement of desolvation and resilience of alginate binders for Si-based anodes in a lithium ion battery by calcium-mediated cross-linking. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 25628-35	3.6	73
170	A Highly Efficient Electrochemical Biosensing Platform by Employing Conductive Nanocomposite Entrapping Magnetic Nanoparticles and Oxidase in Mesoporous Carbon Foam. <i>Advanced Functional Materials</i> , 2011 , 21, 2868-2875	15.6	72
169	Controlling nanoparticle location via confined assembly in electrospun block copolymer nanofibers. <i>Small</i> , 2008 , 4, 2067-73	11	72
168	Simple fabrication of flexible electrodes with high metal-oxide content: electrospun reduced tungsten oxide/carbon nanofibers for lithium ion battery applications. <i>Nanoscale</i> , 2014 , 6, 10147-55	7.7	71
167	Magnetic mesoporous materials for removal of environmental wastes. <i>Journal of Hazardous Materials</i> , 2011 , 192, 1140-7	12.8	71
166	Rational Design of TiC-Supported Single-Atom Electrocatalysts for Hydrogen Evolution and Selective Oxygen Reduction Reactions. <i>ACS Energy Letters</i> , 2019 , 4, 126-132	20.1	69
165	Magnetite/mesocellular carbon foam as a magnetically recoverable fenton catalyst for removal of phenol and arsenic. <i>Chemosphere</i> , 2012 , 89, 1230-7	8.4	68
164	Ordered mesoporous Zn-doped SnO ₂ synthesized by exotemplating for efficient dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2011 , 4, 2529	35.4	68
163	Ordered mesoporous WO ₃ possessing electronically conductive framework comparable to carbon framework toward long-term stable cathode supports for fuel cells. <i>Journal of Materials Chemistry</i> , 2010 , 20, 7416		68
162	Reverse micelle synthesis of colloidal nickel-manganese layered double hydroxide nanosheets and their pseudocapacitive properties. <i>Chemistry - A European Journal</i> , 2014 , 20, 14880-4	4.8	67
161	Ultrafast synthesis of MoS ₂ or WS ₂ -reduced graphene oxide composites via hybrid microwave annealing for anode materials of lithium ion batteries. <i>Journal of Power Sources</i> , 2015 , 295, 228-234	8.9	66
160	Ordered mesoporous silica nanoparticles with and without embedded iron oxide nanoparticles: structure evolution during synthesis. <i>Journal of Materials Chemistry</i> , 2010 , 20, 7807		65

159	One-dimensional crosslinked enzyme aggregates in SBA-15: Superior catalytic behavior to conventional enzyme immobilization. <i>Microporous and Mesoporous Materials</i> , 2008 , 111, 18-23	5.3	65
158	Highly Efficient Enzyme Immobilization and Stabilization within Meso-Structured Onion-Like Silica for Biodiesel Production. <i>Chemistry of Materials</i> , 2012 , 24, 924-929	9.6	64
157	Selective charge transfer to dioxygen on KPF6-modified carbon nitride for photocatalytic synthesis of H ₂ O ₂ under visible light. <i>Journal of Catalysis</i> , 2018 , 357, 51-58	7.3	62
156	Synergistic Effect of Molecular-Type Electrocatalysts with Ultrahigh Pore Volume Carbon Microspheres for Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2018 , 12, 6013-6022	16.7	61
155	Ordered mesoporous carbon electrodes for Li-O ₂ batteries. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 13426-31	9.5	59
154	Generalized Fabrication of Multifunctional Nanoparticle Assemblies on Silica Spheres. <i>Angewandte Chemie</i> , 2006 , 118, 4907-4911	3.6	59
153	Polymer Interfacial Self-Assembly Guided Two-Dimensional Engineering of Hierarchically Porous Carbon Nanosheets. <i>Journal of the American Chemical Society</i> , 2020 , 142, 9250-9257	16.4	58
152	Heterogeneous asymmetric nitro-Mannich reaction using a bis(oxazoline) ligand grafted on mesoporous silica. <i>Tetrahedron: Asymmetry</i> , 2004 , 15, 2595-2598		58
151	Robust mesocellular carbon foam counter electrode for quantum-dot sensitized solar cells. <i>Electrochemistry Communications</i> , 2011 , 13, 34-37	5.1	57
150	Palladium oxide as a novel oxygen evolution catalyst on BiVO ₄ photoanode for photoelectrochemical water splitting. <i>Journal of Catalysis</i> , 2014 , 317, 126-134	7.3	56
149	Programmed Nanoparticle-Loaded Nanoparticles for Deep-Penetrating 3D Cancer Therapy. <i>Advanced Materials</i> , 2018 , 30, e1707557	24	56
148	Development of Highly Stable and Mass Transfer-Enhanced Cathode Catalysts: Support-Free Electrospun Intermetallic FePt Nanotubes for Polymer Electrolyte Membrane Fuel Cells. <i>Advanced Energy Materials</i> , 2015 , 5, 1402093	21.8	54
147	Soft-template synthesized ordered mesoporous carbon counter electrodes for dye-sensitized solar cells. <i>Carbon</i> , 2010 , 48, 4563-4565	10.4	53
146	Experimental studies of strong dipolar interparticle interaction in monodisperse Fe ₃ O ₄ nanoparticles. <i>Applied Physics Letters</i> , 2007 , 91, 102502	3.4	53
145	Ordered mesoporous carbon nanochannel reactors for high-performance Fischer-Tropsch synthesis. <i>Chemical Communications</i> , 2013 , 49, 5141-3	5.8	52
144	Spontaneous Generation of HO and Hydroxyl Radical through O Reduction on Copper Phosphide under Ambient Aqueous Condition. <i>Environmental Science & Technology</i> , 2019 , 53, 2918-2925	10.3	51
143	Structural Effect on Electrochemical Performance of Ordered Porous Carbon Electrodes for Na-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 11748-54	9.5	51
142	Interaction Mediator Assisted Synthesis of Mesoporous Molybdenum Carbide: Mo-Valence State Adjustment for Optimizing Hydrogen Evolution. <i>ACS Nano</i> , 2020 , 14, 4988-4999	16.7	50

141	A Comprehensive Review of Materials with Catalytic Effects in LiB Batteries: Enhanced Redox Kinetics. <i>Angewandte Chemie</i> , 2019 , 131, 18920-18931	3.6	49
140	Ammonium Fluoride Mediated Synthesis of Anhydrous Metal Fluoride-Mesoporous Carbon Nanocomposites for High-Performance Lithium Ion Battery Cathodes. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 35180-35190	9.5	49
139	A highly efficient colorimetric immunoassay using a nanocomposite entrapping magnetic and platinum nanoparticles in ordered mesoporous carbon. <i>Advanced Healthcare Materials</i> , 2014 , 3, 36-41	10.1	49
138	Structural Design of Amorphous CoMoPx with Abundant Active Sites and Synergistic Catalysis Effect for Effective Water Splitting. <i>Advanced Functional Materials</i> , 2020 , 30, 2003889	15.6	49
137	MoO ₂ nanocrystals interconnected on mesocellular carbon foam as a powerful catalyst for vanadium redox flow battery. <i>RSC Advances</i> , 2016 , 6, 17574-17582	3.7	48
136	Effective antifouling using quorum-quenching acylase stabilized in magnetically-separable mesoporous silica. <i>Biomacromolecules</i> , 2014 , 15, 1153-9	6.9	48
135	Photocatalytic hydroxylation of benzene to phenol over titanium oxide entrapped into hydrophobically modified siliceous foam. <i>Applied Catalysis B: Environmental</i> , 2011 , 102, 132-139	21.8	47
134	Mesoporous tungsten oxynitride as electrocatalyst for promoting redox reactions of vanadium redox couple and performance of vanadium redox flow battery. <i>Applied Surface Science</i> , 2018 , 429, 187-195	6.7	46
133	Block copolymer directed one-pot simple synthesis of L10-phase FePt nanoparticles inside ordered mesoporous aluminosilicate/carbon composites. <i>ACS Nano</i> , 2011 , 5, 1018-25	16.7	46
132	Multiscale Phase Separations for Hierarchically Ordered Macro/Mesostructured Metal Oxides. <i>Advanced Materials</i> , 2018 , 30, 1703829	24	45
131	Well-dispersed Pd ₃ Pt ₁ alloy nanoparticles in large pore sized mesocellular carbon foam for improved methanol-tolerant oxygen reduction reaction. <i>Carbon</i> , 2011 , 49, 1108-1117	10.4	45
130	Colorimetric quantification of galactose using a nanostructured multi-catalyst system entrapping galactose oxidase and magnetic nanoparticles as peroxidase mimetics. <i>Analyst, The</i> , 2012 , 137, 1137-43	5	44
129	Sorption of Pb(II) and Cu(II) onto multi-amine grafted mesoporous silica embedded with nano-magnetite: effects of steric factors. <i>Journal of Hazardous Materials</i> , 2012 , 239-240, 183-91	12.8	43
128	Magnetically-separable and highly-stable enzyme system based on crosslinked enzyme aggregates shipped in magnetite-coated mesoporous silica. <i>Journal of Materials Chemistry</i> , 2009 , 19, 7864		43
127	An ordered nanocomposite of organic radical polymer and mesocellular carbon foam as cathode material in lithium ion batteries. <i>Journal of Materials Chemistry</i> , 2012 , 22, 1453-1458		42
126	Nanoscale enzyme reactors in mesoporous carbon for improved performance and lifetime of biosensors and biofuel cells. <i>Biosensors and Bioelectronics</i> , 2010 , 26, 655-60	11.8	42
125	Gravimetric analysis of the adsorption and desorption of CO ₂ on amine-functionalized mesoporous silica mounted on a microcantilever array. <i>Environmental Science & Technology</i> , 2011 , 45, 5704-9	10.3	41
124	Monolithic route to efficient dye-sensitized solar cells employing diblock copolymers for mesoporous TiO ₂ . <i>Journal of Materials Chemistry</i> , 2010 , 20, 1261-1268		40

123	Vertically aligned nanostructured TiO ₂ photoelectrodes for high efficiency perovskite solar cells via a block copolymer template approach. <i>Nanoscale</i> , 2016 , 8, 11472-9	7.7	40
122	Water Splitting Exceeding 17% Solar-to-Hydrogen Conversion Efficiency Using Solution-Processed Ni-Based Electrocatalysts and Perovskite/Si Tandem Solar Cell. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 33835-33843	9.5	39
121	Simple and Sensitive Point-of-Care Bioassay System Based on Hierarchically Structured Enzyme-Mimetic Nanoparticles. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1311-6	10.1	37
120	A novel mesoporous carbon-silica-titania nanocomposite as a high performance anode material in lithium ion batteries. <i>Chemical Communications</i> , 2011 , 47, 4944-6	5.8	37
119	Direct Access to Mesoporous Crystalline TiO ₂ /Carbon Composites with Large and Uniform Pores for Use as Anode Materials in Lithium Ion Batteries. <i>Macromolecular Chemistry and Physics</i> , 2011 , 212, 383-390	2.6	37
118	Synthesis and characterization of magnetically active carbon nanofiber/iron oxide composites with hierarchical pore structures. <i>Nanotechnology</i> , 2008 , 19, 455612	3.4	37
117	Highly efficient perovskite solar cells based on mechanically durable molybdenum cathode. <i>Nano Energy</i> , 2015 , 17, 131-139	17.1	35
116	Multiplexed immunoassay using the stabilized enzymes in mesoporous silica. <i>Biosensors and Bioelectronics</i> , 2009 , 25, 906-12	11.8	35
115	Facile conversion of activated carbon to battery anode material using microwave graphitization. <i>Carbon</i> , 2016 , 104, 106-111	10.4	35
114	Investigation of the Support Effect in Atomically Dispersed Pt on WO ₃ for Utilization of Pt in the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 2019 , 131, 16184-16188	3.6	33
113	Preparation Method of Co ₃ O ₄ Nanoparticles Using Ordered Mesoporous Carbons as a Template and Their Application for Fischer-Tropsch Synthesis. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 1773-1779 ^{3.8}		33
112	How g-CN Works and Is Different from TiO as an Environmental Photocatalyst: Mechanistic View. <i>Environmental Science & Technology</i> , 2020 , 54, 497-506	10.3	33
111	Selective electrocatalysis imparted by metal-insulator transition for durability enhancement of automotive fuel cells. <i>Nature Catalysis</i> , 2020 , 3, 639-648	36.5	32
110	Simple modification with amine- and hydroxyl- group rich biopolymer on ordered mesoporous carbon/sulfur composite for lithium-sulfur batteries. <i>Korean Journal of Chemical Engineering</i> , 2018 , 35, 579-586	2.8	32
109	Various Synthetic Methods for One-Dimensional Semiconductor Nanowires/Nanorods and Their Applications in Photovoltaic Devices. <i>European Journal of Inorganic Chemistry</i> , 2010 , 2010, 4251-4263	2.3	31
108	Ostwald Ripening Driven Exfoliation to Ultrathin Layered Double Hydroxides Nanosheets for Enhanced Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 44518-44526	9.5	31
107	Generalized Access to Mesoporous Inorganic Particles and Hollow Spheres from Multicomponent Polymer Blends. <i>Advanced Materials</i> , 2018 , 30, e1801127	24	31
106	Effect of mesocellular carbon foam electrode material on performance of vanadium redox flow battery. <i>Journal of Power Sources</i> , 2015 , 278, 245-254	8.9	30

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