

Il-Doo Kim

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

208
papers

8,008
citations

51
h-index

81
g-index

232
ext. papers

9,930
ext. citations

11.6
avg, IF

6.65
L-index

#	Paper	IF	Citations
208	Large-area synthesis of ultra-thin, flexible, and transparent conductive metal-organic framework thin-films via microfluidic-based solution shearing process.. <i>Advanced Materials</i> , 2022 , e2107696	24	3
207	Oxide/ZIF-8 Hybrid Nanofiber Yarns: Heightened Surface Activity for Exceptional Chemiresistive Sensing.. <i>Advanced Materials</i> , 2022 , e2105869	24	2
206	Ion-permselective conducting polymer-based electrokinetic generators with maximized utility of green water. <i>Nano Energy</i> , 2022 , 94, 106946	17.1	2
205	Searching for an Optimal Multi-metallic Alloy Catalyst by Active Learning Combined with Experiments.. <i>Advanced Materials</i> , 2022 , e2108900	24	2
204	High-Performance, Flexible NO Chemiresistors Achieved by Design of Imine-Incorporated n-Type Conjugated Polymers.. <i>Advanced Science</i> , 2022 , e2200270	13.6	4
203	Large-Area Synthesis of Ultrathin, Flexible, and Transparent Conductive Metal-Organic Framework Thin Films via a Microfluidic-Based Solution Shearing Process (Adv. Mater. 12/2022). <i>Advanced Materials</i> , 2022 , 34, 2270094	24	
202	Photoenergy Harvesting by Photoacid Solution.. <i>Advanced Materials</i> , 2022 , e2201734	24	0
201	Violacein-embedded Nanofiber Filters with Antiviral and Antibacterial Activities.. <i>Chemical Engineering Journal</i> , 2022 , 136460	14.7	1
200	Searching for an Optimal Multi-Metallic Alloy Catalyst by Active Learning Combined with Experiments (Adv. Mater. 19/2022). <i>Advanced Materials</i> , 2022 , 34, 2270147	24	2
199	Investigation of Ordering on Oxygen-Deficient LiNi Mn O Thin Films for Boosting Electrochemical Performance in All-Solid-State Thin-Film Batteries.. <i>Small</i> , 2022 , e2201134	11	1
198	Promoting ex-solution from metal-organic framework-mediated oxide scaffold for highly active and robust catalysts.. <i>Advanced Materials</i> , 2022 , e2201109	24	3
197	Rational design approaches of two-dimensional metal oxides for chemiresistive gas sensors: A comprehensive review. <i>MRS Bulletin</i> , 2021 , 46, 1080-1094	3.2	2
196	Non-Equilibrium Sodiadation Pathway of CuSbS. <i>ACS Nano</i> , 2021 ,	16.7	1
195	Reduced Graphene-Oxide-Encapsulated MoS/Carbon Nanofiber Composite Electrode for High-Performance Na-Ion Batteries. <i>Nanomaterials</i> , 2021 , 11,	5.4	3
194	Synergistic Integration of Chemo-Resistive and SERS Sensing for Label-Free Multiplex Gas Detection (Adv. Mater. 44/2021). <i>Advanced Materials</i> , 2021 , 33, 2170350	24	
193	Synergistic Interactions of Different Electroactive Components for Superior Lithium Storage Performance. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 587-596	9.5	6
192	Nanoparticle Ex-solution for Supported Catalysts: Materials Design, Mechanism and Future Perspectives. <i>ACS Nano</i> , 2021 , 15, 81-110	16.7	36

191	Polyelemental Nanoparticles as Catalysts for a Li-O Battery. <i>ACS Nano</i> , 2021 , 15, 4235-4244	16.7	18
190	Straightforward strategy toward a shape-deformable carbon-free cathode for flexible Li ⁺ air batteries in ambient air. <i>Nano Energy</i> , 2021 , 83, 105821	17.1	6
189	Pyrolysis of Enzymolysis-Treated Wood: Hierarchically Assembled Porous Carbon Electrode for Advanced Energy Storage Devices. <i>Advanced Functional Materials</i> , 2021 , 31, 2101077	15.6	26
188	Surface Activity-Tuned Metal Oxide Chemiresistor: Toward Direct and Quantitative Halitosis Diagnosis. <i>ACS Nano</i> , 2021 , 15, 14207-14217	16.7	19
187	Hierarchically Assembled Cobalt Oxynitride Nanorods and N-Doped Carbon Nanofibers for Efficient Bifunctional Oxygen Electrocatalysis with Exceptional Regenerative Efficiency. <i>ACS Nano</i> , 2021 ,	16.7	15
186	Wood-Derived, Conductivity and Hierarchical Pore Integrated Thick Electrode Enabling High Areal/Volumetric Energy Density for Hybrid Capacitors. <i>Small</i> , 2021 , 17, e2102532	11	15
185	Graphene Liquid Cell Electron Microscopy: Progress, Applications, and Perspectives. <i>ACS Nano</i> , 2021 , 15, 288-308	16.7	18
184	Unravelling high volumetric capacity of Co ₃ O ₄ nanograin-interconnected secondary particles for lithium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 6242-6251	13	8
183	Reducing Time to Discovery: Materials and Molecular Modeling, Imaging, Informatics, and Integration. <i>ACS Nano</i> , 2021 , 15, 3971-3995	16.7	11
182	Ensemble Design of Electrode-Electrolyte Interfaces: Toward High-Performance Thin-Film All-Solid-State Li-Metal Batteries. <i>ACS Nano</i> , 2021 , 15, 4561-4575	16.7	10
181	Large-area synthesis of nanoscopic catalyst-decorated conductive MOF film using microfluidic-based solution shearing. <i>Nature Communications</i> , 2021 , 12, 4294	17.4	6
180	Confinement of Ultrasmall Bimetallic Nanoparticles in Conductive Metal-Organic Frameworks via Site-Specific Nucleation. <i>Advanced Materials</i> , 2021 , 33, e2101216	24	6
179	Confinement of Ultrasmall Bimetallic Nanoparticles in Conductive Metal-Organic Frameworks via Site-Specific Nucleation (Adv. Mater. 38/2021). <i>Advanced Materials</i> , 2021 , 33, 2170302	24	0
178	Synergistic Integration of Chemo-Resistive and SERS Sensing for Label-Free Multiplex Gas Detection. <i>Advanced Materials</i> , 2021 , 33, e2105199	24	4
177	Lithium-Air Batteries: Air-Breathing Challenges and Perspective. <i>ACS Nano</i> , 2020 , 14, 14549-14578	16.7	41
176	The Design and Science of Polyelemental Nanoparticles. <i>ACS Nano</i> , 2020 , 14, 6407-6413	16.7	29
175	High-density Fibrous Polyimide Sponges with Superior Mechanical and Thermal Properties. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 19006-19014	9.5	66
174	Ultralight, Structurally Stable Electrospun Sponges with Tailored Hydrophilicity as a Novel Material Platform. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 18002-18011	9.5	13

173	Electrospun fibers based on carbohydrate gum polymers and their multifaceted applications. <i>Carbohydrate Polymers</i> , 2020 , 247, 116705	10.3	15
172	Multifunctional Inorganic Nanomaterial Aerogel Assembled into fSWNT Hydrogel Platform for Ultrasensitive NO Sensing. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 10637-10647	9.5	7
171	Recycling non-food-grade tree gum wastes into nanoporous carbon for sustainable energy harvesting. <i>Green Chemistry</i> , 2020 , 22, 1198-1208	10	19
170	Low-Thermal-Budget Doping: Low-Thermal-Budget Doping of 2D Materials in Ambient Air Exemplified by Synthesis of Boron-Doped Reduced Graphene Oxide (Adv. Sci. 7/2020). <i>Advanced Science</i> , 2020 , 7, 2070039	13.6	78
169	Carbon anchored conducting polymer composite linkage for high performance water energy harvesters. <i>Nano Energy</i> , 2020 , 74, 104827	17.1	3
168	Design of Hollow Nanofibrous Structures using Electrospinning: An Aspect of Chemical Sensor Applications. <i>ChemNanoMat</i> , 2020 , 6, 1014-1027	3.5	9
167	Self-operating transpiration-driven electrokinetic power generator with an artificial hydrological cycle. <i>Energy and Environmental Science</i> , 2020 , 13, 527-534	35.4	45
166	Recent advances in ABO ₃ perovskites: their gas-sensing performance as resistive-type gas sensors. <i>Springer Series in Emerging Cultural Perspectives in Work, Organizational, and Personnel Studies</i> , 2020 , 57, 24-39	1.3	18
165	Tree Gum Graphene Oxide Nanocomposite Films as Gas Barriers. <i>ACS Applied Nano Materials</i> , 2020 , 3, 633-640	5.6	24
164	Stable and High-Capacity Si Electrodes with Free-Standing Architecture for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2020 , 3, 208-217	6.1	5
163	Pore-Size-Tuned Graphene Oxide Membrane as a Selective Molecular Sieving Layer: Toward Ultrasensitive Chemiresistors. <i>Analytical Chemistry</i> , 2020 , 92, 957-965	7.8	18
162	Dopant-Driven Positive Reinforcement in Ex-Solution Process: New Strategy to Develop Highly Capable and Durable Catalytic Materials. <i>Advanced Materials</i> , 2020 , 32, e2003983	24	13
161	Catalytic Materials: Dopant-Driven Positive Reinforcement in Ex-Solution Process: New Strategy to Develop Highly Capable and Durable Catalytic Materials (Adv. Mater. 46/2020). <i>Advanced Materials</i> , 2020 , 32, 2070342	24	0
160	Free-Standing Carbon Nanofibers Protected by a Thin Metallic Iridium Layer for Extended Life-Cycle Li-Oxygen Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 55756-55765	9.5	14
159	Colorimetric Dye-Loaded Nanofiber Yarn: Eye-Readable and Weavable Gas Sensing Platform. <i>ACS Nano</i> , 2020 ,	16.7	19
158	2D Materials Decorated with Ultrathin and Porous Graphene Oxide for High Stability and Selective Surface Activity. <i>Advanced Materials</i> , 2020 , 32, e2002723	24	18
157	Chemiresistive Hydrogen Sensors: Fundamentals, Recent Advances, and Challenges. <i>ACS Nano</i> , 2020 , 14, 14284-14322	16.7	41
156	Sustainable Personal Protective Clothing for Healthcare Applications: A Review. <i>ACS Nano</i> , 2020 , 14, 12313-12340	16.7	108

155	An iron-doped NASICON type sodium ion battery cathode for enhanced sodium storage performance and its full cell applications. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 20436-20445	13	20
154	Focused Electric-Field Polymer Writing: Toward Ultralarge, Multistimuli-Responsive Membranes. <i>ACS Nano</i> , 2020 , 14, 12173-12183	16.7	13
153	Single-Atom Pt Stabilized on One-Dimensional Nanostructure Support Carbon Nitride/SnO Heterojunction Trapping. <i>ACS Nano</i> , 2020 , 14, 11394-11405	16.7	35
152	A Critical Review on Functionalization of Air-Cathodes for Nonaqueous LiO ₂ Batteries. <i>Advanced Functional Materials</i> , 2020 , 30, 1808303	15.6	77
151	CuFeO-NiFeO hybrid electrode for lithium-ion batteries with ultra-stable electrochemical performance.. <i>RSC Advances</i> , 2019 , 9, 27257-27263	3.7	6
150	A feasible strategy to prepare quantum dot-incorporated carbon nanofibers as free-standing platforms. <i>Nanoscale Advances</i> , 2019 , 1, 3948-3956	5.1	1
149	Highly efficient and stable solid-state LiO ₂ batteries using a perovskite solid electrolyte. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 3150-3160	13	30
148	Nitrogen-Dopant-Induced Organic/Inorganic Hybrid Perovskite Crystal Growth on Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2019 , 29, 1902489	15.6	11
147	A General Synthesis of Crumpled Metal Oxide Nanosheets as Superior Chemiresistive Sensing Layers. <i>Advanced Functional Materials</i> , 2019 , 29, 1903128	15.6	37
146	Atomic-scale combination of germanium-zinc nanofibers for structural and electrochemical evolution. <i>Nature Communications</i> , 2019 , 10, 2364	17.4	29
145	Mixture of quantum dots and ZnS nanoparticles as emissive layer for improved quantum dots light emitting diodes.. <i>RSC Advances</i> , 2019 , 9, 15177-15183	3.7	3
144	Mussel-Inspired Polydopamine-Treated Reinforced Composite Membranes with Self-Supported CeOx Radical Scavengers for Highly Stable PEM Fuel Cells. <i>Advanced Functional Materials</i> , 2019 , 29, 1806929	15.6	40
143	Graphene Liquid Cell Electron Microscopy of Initial Lithiation in CoO Nanoparticles. <i>ACS Omega</i> , 2019 , 4, 6784-6788	3.9	11
142	Unveiling the Origin of Superior Electrochemical Performance in Polycrystalline Dense SnO ₂ Nanospheres as Anodes for Lithium-ion Batteries. <i>ACS Applied Energy Materials</i> , 2019 , 2, 2004-2012	6.1	9
141	Heterogeneous Metal Oxide-Graphene Thorn-Bush Single Fiber as a Freestanding Chemiresistor. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 10208-10217	9.5	17
140	Preparation of Graphene Liquid Cells for the Observation of Lithium-ion Battery Material. <i>Journal of Visualized Experiments</i> , 2019 ,	1.6	3
139	Heterogeneous, Porous 2D Oxide Sheets via Rapid Galvanic Replacement: Toward Superior HCHO Sensing Application. <i>Advanced Functional Materials</i> , 2019 , 29, 1903012	15.6	30
138	Janus Graphene Liquid Crystalline Fiber with Tunable Properties Enabled by Ultrafast Flash Reduction. <i>Small</i> , 2019 , 15, e1901529	11	15

137	Transpiration Driven Electrokinetic Power Generator. <i>ACS Nano</i> , 2019 , 13, 12703-12709	16.7	52
136	Gallium Nitride Nanoparticles Embedded in a Carbon Nanofiber Anode for Ultralong-Cycle-Life Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 44263-44269	9.5	9
135	Chemiresistors: Catalytic Metal Nanoparticles Embedded in Conductive Metal-Organic Frameworks for Chemiresistors: Highly Active and Conductive Porous Materials (Adv. Sci. 21/2019). <i>Advanced Science</i> , 2019 , 6, 1970126	13.6	1
134	2D Oxide Sensors: Heterogeneous, Porous 2D Oxide Sheets via Rapid Galvanic Replacement: Toward Superior HCHO Sensing Application (Adv. Funct. Mater. 42/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970290	15.6	
133	Effect of annealing temperature on the interfacial interaction of LiNi _{0.5} Mn _{1.5} O ₄ thin film cathode with stainless-steel substrate. <i>Journal of Electroceramics</i> , 2019 , 42, 104-112	1.5	5
132	High-rate formation cycle of Co ₃ O ₄ nanoparticle for superior electrochemical performance in lithium-ion batteries. <i>Electrochimica Acta</i> , 2019 , 295, 7-13	6.7	21
131	Recent Developments in 2D Nanomaterials for Chemiresistive-Type Gas Sensors. <i>Electronic Materials Letters</i> , 2018 , 14, 221-260	2.9	120
130	Metal nanotrough embedded colorless polyimide films: transparent conducting electrodes with exceptional flexibility and high conductivity. <i>Nanoscale</i> , 2018 , 10, 7927-7932	7.7	8
129	Mulberry Paper-Based Supercapacitor Exhibiting High Mechanical and Chemical Toughness for Large-Scale Energy Storage Applications. <i>Advanced Energy Materials</i> , 2018 , 8, 1800064	21.8	35
128	Rational design of protective In ₂ O ₃ layer-coated carbon nanopaper membrane: Toward stable cathode for long-cycle Li-O ₂ batteries. <i>Nano Energy</i> , 2018 , 46, 193-202	17.1	51
127	Nitrogen-Doped Single Graphene Fiber with Platinum Water Dissociation Catalyst for Wearable Humidity Sensor. <i>Small</i> , 2018 , 14, e1703934	11	72
126	Three-Dimensional Nanofibrous Air Electrode Assembled With Carbon Nanotubes-Bridged Hollow FeO Nanoparticles for High-Performance Lithium-Oxygen Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 6531-6540	9.5	46
125	Nanoscale PtO Catalysts-Loaded SnO Multichannel Nanofibers toward Highly Sensitive Acetone Sensor. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 2016-2025	9.5	73
124	Highly porous coral-like silicon particles synthesized by an ultra-simple thermal-reduction method. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 2834-2846	13	22
123	Facile Synthesis of Pt-Functionalized Meso/Macroporous SnO Hollow Spheres through in Situ Templating with SiO ₂ for HS Sensors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 18183-18191	9.5	49
122	Material-Independent Nanotransfer onto a Flexible Substrate Using Mechanical-Interlocking Structure. <i>ACS Nano</i> , 2018 , 12, 4387-4397	16.7	17
121	Stress-Tolerant Nanoporous Germanium Nanofibers for Long Cycle Life Lithium Storage with High Structural Stability. <i>ACS Nano</i> , 2018 , 12, 8169-8176	16.7	33
120	Few-Layered WS ₂ Nanoplates Confined in Co, N-Doped Hollow Carbon Nanocages: Abundant WS ₂ Edges for Highly Sensitive Gas Sensors. <i>Advanced Functional Materials</i> , 2018 , 28, 1802575	15.6	53

119	An Impedance-Transduced Chemiresistor with a Porous Carbon Channel for Rapid, Nonenzymatic, Glucose Sensing. <i>Analytical Chemistry</i> , 2018 , 90, 9338-9346	7.8	11
118	Applications and Advances in Bioelectronic Noses for Odour Sensing. <i>Sensors</i> , 2018 , 18,	3.8	46
117	Perovskite La _{0.75} Sr _{0.25} Cr _{0.5} Mn _{0.5} O ₃ Sensitized SnO ₂ fiber-in-tube scaffold: highly selective and sensitive formaldehyde sensing. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 10543-10551	13	22
116	Synergistic Coupling of Metallic Cobalt Nitride Nanofibers and IrO _x Nanoparticle Catalysts for Stable Oxygen Evolution. <i>Chemistry of Materials</i> , 2018 , 30, 5941-5950	9.6	37
115	Feasible Defect Engineering by Employing Metal Organic Framework Templates into One-Dimensional Metal Oxides for Battery Applications. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 20540-20549	9.5	34
114	Graphene oxide templating: facile synthesis of morphology engineered crumpled SnO ₂ nanofibers for superior chemiresistors. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 13825-13834	13	24
113	Abnormal Optoelectric Properties of Two-Dimensional Protonic Ruthenium Oxide with a Hexagonal Structure. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 22661-22668	9.5	6
112	Brush-Like Cobalt Nitride Anchored Carbon Nanofiber Membrane: Current Collector-Catalyst Integrated Cathode for Long Cycle Li-O Batteries. <i>ACS Nano</i> , 2018 , 12, 128-139	16.7	175
111	In Situ TEM Observation on the Growth of Solid Electrolyte Interphase (SEI) Layer on Co ₃ O ₄ upon Sodiation and Magnesiation using Graphene Liquid Cell. <i>Microscopy and Microanalysis</i> , 2018 , 24, 300-301	0.5	1
110	In situ Transmission Electron Microscopy of Lithiation Dynamics in a SnCh Hollow Nanosphere. <i>Microscopy and Microanalysis</i> , 2018 , 24, 1944-1945	0.5	
109	2D Nanopatterning: 2D Metal Chalcogenide Nanopatterns by Block Copolymer Lithography (Adv. Funct. Mater. 50/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870354	15.6	3
108	Wireless Real-Time Temperature Monitoring of Blood Packages: Silver Nanowire-Embedded Flexible Temperature Sensors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 44678-44685	9.5	42
107	Pt-Functionalized PdO Nanowires for Room Temperature Hydrogen Gas Sensors. <i>ACS Sensors</i> , 2018 , 3, 2152-2158	9.2	46
106	High-Power Aqueous Zinc-Ion Batteries for Customized Electronic Devices. <i>ACS Nano</i> , 2018 , 12, 11838-11846	11.46	110
105	Ultrastable Graphene-Encapsulated 3 nm Nanoparticles by In Situ Chemical Vapor Deposition. <i>Advanced Materials</i> , 2018 , 30, e1805023	24	17
104	2D Metal Chalcogenide Nanopatterns by Block Copolymer Lithography. <i>Advanced Functional Materials</i> , 2018 , 28, 1804508	15.6	22
103	Glass-Fabric Reinforced Ag Nanowire/Siloxane Composite Heater Substrate: Sub-10 nm Metal@Metal Oxide Nanosheet for Sensitive Flexible Sensing Platform. <i>Small</i> , 2018 , 14, e1802260	11	16
102	Gas Sensors: Few-Layered WS ₂ Nanoplates Confined in Co, N-Doped Hollow Carbon Nanocages: Abundant WS ₂ Edges for Highly Sensitive Gas Sensors (Adv. Funct. Mater. 36/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870254	15.6	0

101	Sub-Parts-per-Million Hydrogen Sulfide Colorimetric Sensor: Lead Acetate Anchored Nanofibers toward Halitosis Diagnosis. <i>Analytical Chemistry</i> , 2018 , 90, 8769-8775	7.8	34
100	Hierarchical Metal-Organic Framework-Assembled Membrane Filter for Efficient Removal of Particulate Matter. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 19957-19963	9.5	52
99	Bimodally Porous WO Microbelts Functionalized with Pt Catalysts for Selective HS Sensors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 20643-20651	9.5	63
98	Bioinspired Cocatalysts Decorated WO Nanotube Toward Unparalleled Hydrogen Sulfide Chemiresistor. <i>ACS Sensors</i> , 2018 , 3, 1164-1173	9.2	28
97	In Situ Coupling of Multidimensional MOFs for Heterogeneous Metal-Oxide Architectures: Toward Sensitive Chemiresistors. <i>ACS Central Science</i> , 2018 , 4, 929-937	16.8	38
96	Nanoscale PdO Catalyst Functionalized CoO Hollow Nanocages Using MOF Templates for Selective Detection of Acetone Molecules in Exhaled Breath. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 8201-8210	9.5	182
95	Fast, Scalable Synthesis of Micronized Ge ₃ N ₄ @C with a High Tap Density for Excellent Lithium Storage. <i>Advanced Functional Materials</i> , 2017 , 27, 1605975	15.6	42
94	Optically Sintered 2D RuO ₂ Nanosheets: Temperature-Controlled NO ₂ Reaction. <i>Advanced Functional Materials</i> , 2017 , 27, 1606026	15.6	35
93	Metal-Organic Framework Templated Catalysts: Dual Sensitization of PdO-ZnO Composite on Hollow SnO Nanotubes for Selective Acetone Sensors. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 18069-18077	9.5	127
92	Innovative Nanosensor for Disease Diagnosis. <i>Accounts of Chemical Research</i> , 2017 , 50, 1587-1596	24.3	143
91	Supercharging a MnO Nanowire: An Amine-Altered Morphology Retains Capacity at High Rates and Mass Loadings. <i>Langmuir</i> , 2017 , 33, 9324-9332	4	1
90	Electrospun Nanostructures for High Performance Chemiresistive and Optical Sensors. <i>Macromolecular Materials and Engineering</i> , 2017 , 302, 1600569	3.9	43
89	2D WS ₂ -edge functionalized multi-channel carbon nanofibers: effect of WS ₂ edge-abundant structure on room temperature NO ₂ sensing. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 8725-8732	13	89
88	Rational Design of 1-D CoO Nanofibers@Low content Graphene Composite Anode for High Performance Li-Ion Batteries. <i>Scientific Reports</i> , 2017 , 7, 45105	4.9	43
87	Formation of a Surficial Bifunctional Nanolayer on Nb O for Ultrastable Electrodes for Lithium-Ion Battery. <i>Small</i> , 2017 , 13, 1603610	11	56
86	Cu Microbelt Network Embedded in Colorless Polyimide Substrate: Flexible Heater Platform with High Optical Transparency and Superior Mechanical Stability. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 39650-39656	9.5	17
85	MOF derived ZnCo ₂ O ₄ porous hollow spheres functionalized with Ag nanoparticles for a long-cycle and high-capacity lithium ion battery anode. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 22717-22725	13	52
84	Metal-Organic Framework-Templated PdO-CoO Nanocubes Functionalized by SWCNTs: Improved NO Reaction Kinetics on Flexible Heating Film. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 40593-40603	9.5	37

83	Direct Realization of Complete Conversion and Agglomeration Dynamics of SnO Nanoparticles in Liquid Electrolyte. <i>ACS Omega</i> , 2017 , 2, 6329-6336	3.9	22
82	Ultrasmall titanium oxide/titanium oxynitride composite nanoparticle-embedded carbon nanofiber mats as high-capacity and free-standing electrodes for lithium sulfur batteries. <i>RSC Advances</i> , 2017 , 7, 44804-44808	3.7	9
81	Accelerating Palladium Nanowire H Sensors Using Engineered Nanofiltration. <i>ACS Nano</i> , 2017 , 11, 9276-9285	9.8	123
80	Expanding depletion region via doping: Zn-doped Cu ₂ O buffer layer in Cu ₂ O photocathodes for photoelectrochemical water splitting. <i>Korean Journal of Chemical Engineering</i> , 2017 , 34, 3214-3219	2.8	18
79	Elaborate Manipulation for Sub-10 nm Hollow Catalyst Sensitized Heterogeneous Oxide Nanofibers for Room Temperature Chemical Sensors. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 24821-24829	9.5	9
78	Mesoporous SnO Nanotubes via Electrospinning-Etching Route: Highly Sensitive and Selective Detection of HS Molecule. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 26304-26313	9.5	67
77	Nanomechanical Encoding Method Using Enhanced Thermal Concentration on a Metallic Nanobridge. <i>ACS Nano</i> , 2017 , 11, 7781-7789	16.7	7
76	Exceptional High-Performance of Pt-Based Bimetallic Catalysts for Exclusive Detection of Exhaled Biomarkers. <i>Advanced Materials</i> , 2017 , 29, 1700737	24	84
75	Metal Organic Framework-Templated Chemiresistor: Sensing Type Transition from P-to-N Using Hollow Metal Oxide Polyhedron via Galvanic Replacement. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11868-11876	16.4	101
74	Real Time Observation of Initial Conversion Reaction of Co ₃ O ₄ Nanoparticles Using Graphene Liquid Cell Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1968-1969	0.5	
73	In Situ High-Resolution Transmission Electron Microscopy (TEM) Observation of Sn Nanoparticles on SnO ₂ Nanotubes Under Lithiation. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1107-1115	0.5	18
72	The Effect of Electron Beam Dosage in the Decomposition Behavior of Electrolytes Encapsulated Inside the Graphene Sheets Based on In Situ TEM Observation. <i>Microscopy and Microanalysis</i> , 2017 , 23, 2052-2053	0.5	1
71	In Situ TEM Observation on the Agglomeration of Nanoparticles in the Interface of SnO ₂ . <i>Microscopy and Microanalysis</i> , 2017 , 23, 2054-2055	0.5	2
70	Synthesis of Ni-based co-catalyst functionalized W:BiVO ₄ nanofibers for solar water oxidation. <i>Green Chemistry</i> , 2016 , 18, 944-950	10	42
69	Tailored Combination of Low Dimensional Catalysts for Efficient Oxygen Reduction and Evolution in LiO ₂ Batteries. <i>ChemSusChem</i> , 2016 , 9, 2007-2007	8.3	2
68	Hierarchical ZnO Nanowires-loaded Sb-doped SnO ₂ -ZnO Micrograting Pattern via Direct Imprinting-assisted Hydrothermal Growth and Its Selective Detection of Acetone Molecules. <i>Scientific Reports</i> , 2016 , 6, 18731	4.9	29
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