

# Il-Doo Kim

## List of Publications by Citations

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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	Bifunctional composite catalysts using Co <sub>3</sub> O <sub>4</sub> nanofibers immobilized on nonoxidized graphene nanoflakes for high-capacity and long-cycle Li-O <sub>2</sub> batteries. <i>Nano Letters</i> , <b>2013</b> , 13, 4190-7	11.5	306
207	Electrospun nanofibers as a platform for advanced secondary batteries: a comprehensive review. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 703-750	13	288
206	Thin-Wall Assembled SnO <sub>2</sub> Fibers Functionalized by Catalytic Pt Nanoparticles and their Superior Exhaled-Breath-Sensing Properties for the Diagnosis of Diabetes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 2357-2367	15.6	276
205	The Role of NiO Doping in Reducing the Impact of Humidity on the Performance of SnO <sub>2</sub> -Based Gas Sensors: Synthesis Strategies, and Phenomenological and Spectroscopic Studies. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 4456-4463	15.6	262
204	Nanoscale PdO Catalyst Functionalized CoO Hollow Nanocages Using MOF Templates for Selective Detection of Acetone Molecules in Exhaled Breath. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 8201-8210	9.5	182
203	Brush-Like Cobalt Nitride Anchored Carbon Nanofiber Membrane: Current Collector-Catalyst Integrated Cathode for Long Cycle Li-O Batteries. <i>ACS Nano</i> , <b>2018</b> , 12, 128-139	16.7	175
202	Glycyrrhizic acid affords robust neuroprotection in the postischemic brain via anti-inflammatory effect by inhibiting HMGB1 phosphorylation and secretion. <i>Neurobiology of Disease</i> , <b>2012</b> , 46, 147-56	7.5	172
201	One-Dimensional RuO <sub>2</sub> /Mn <sub>2</sub> O <sub>3</sub> Hollow Architectures as Efficient Bifunctional Catalysts for Lithium-Oxygen Batteries. <i>Nano Letters</i> , <b>2016</b> , 16, 2076-83	11.5	164
200	Mass-scalable synthesis of 3D porous germanium-carbon composite particles as an ultra-high rate anode for lithium ion batteries. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 3577-3588	35.4	159
199	A High-Capacity and Long-Cycle-Life Lithium-Ion Battery Anode Architecture: Silver Nanoparticle-Decorated SnO/NiO Nanotubes. <i>ACS Nano</i> , <b>2016</b> , 10, 11317-11326	16.7	149
198	Innovative Nanosensor for Disease Diagnosis. <i>Accounts of Chemical Research</i> , <b>2017</b> , 50, 1587-1596	24.3	143
197	Highly reversible switching from P- to N-type NO <sub>2</sub> sensing in a monolayer Fe <sub>2</sub> O <sub>3</sub> inverse opal film and the associated P-N transition phase diagram. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 3372-3381	13	136
196	Microsphere templating as means of enhancing surface activity and gas sensitivity of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> thin films. <i>Nano Letters</i> , <b>2006</b> , 6, 193-8	11.5	136
195	Metal-Organic Framework Templated Catalysts: Dual Sensitization of PdO-ZnO Composite on Hollow SnO Nanotubes for Selective Acetone Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 18069-18077	9.5	127
194	Accelerating Palladium Nanowire H <sub>2</sub> Sensors Using Engineered Nanofiltration. <i>ACS Nano</i> , <b>2017</b> , 11, 9276-9285	9.5	123
193	Recent Developments in 2D Nanomaterials for Chemiresistive-Type Gas Sensors. <i>Electronic Materials Letters</i> , <b>2018</b> , 14, 221-260	2.9	120
192	Rational Design of Highly Porous SnO <sub>2</sub> Nanotubes Functionalized with Biomimetic Nanocatalysts for Direct Observation of Simulated Diabetes. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 4740-4748	15.6	115

191	High-Power Aqueous Zinc-Ion Batteries for Customized Electronic Devices. <i>ACS Nano</i> , <b>2018</b> , 12, 11838-11846	11.4	110
190	Sustainable Personal Protective Clothing for Healthcare Applications: A Review. <i>ACS Nano</i> , <b>2020</b> , 14, 12313-12340	16.7	108
189	Overview of electroceramic materials for oxide semiconductor thin film transistors. <i>Journal of Electroceramics</i> , <b>2014</b> , 32, 117-140	1.5	103
188	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> , <b>2017</b> , 139, 11868-11876	16.4	101
187	Ultrasensitive and selective C <sub>2</sub> H <sub>5</sub> OH sensors using Rh-loaded In <sub>2</sub> O <sub>3</sub> hollow spheres. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 18560		92
186	2D WS <sub>2</sub> -edge functionalized multi-channel carbon nanofibers: effect of WS <sub>2</sub> edge-abundant structure on room temperature NO <sub>2</sub> sensing. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 8725-8732	13	89
185	Exceptional High-Performance of Pt-Based Bimetallic Catalysts for Exclusive Detection of Exhaled Biomarkers. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700737	24	84
184	Graphene-Wrapped Anatase TiO <sub>2</sub> Nanofibers as High-Rate and Long-Cycle-Life Anode Material for Sodium Ion Batteries. <i>Scientific Reports</i> , <b>2015</b> , 5, 13862	4.9	84
183	Rational Design of Efficient Electrocatalysts for Hydrogen Evolution Reaction: Single Layers of WS <sub>2</sub> Nanoplates Anchored to Hollow Nitrogen-Doped Carbon Nanofibers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 28116-21	9.5	82
182	Selective, sensitive, and reversible detection of H <sub>2</sub> S using Mo-doped ZnO nanowire network sensors. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 6412-6418	13	81
181	Carbon-Interconnected Ge Nanocrystals as an Anode with Ultra-Long-Term Cyclability for Lithium Ion Batteries. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 5291-5298	15.6	80
180	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> , <b>2020</b> , 7, 2070039	13.6	78
179	A Critical Review on Functionalization of Air-Cathodes for Nonaqueous LiO <sub>2</sub> Batteries. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1808303	15.6	77
178	Hybrid crystalline-ITO/metal nanowire mesh transparent electrodes and their application for highly flexible perovskite solar cells. <i>NPG Asia Materials</i> , <b>2016</b> , 8, e282-e282	10.3	76
177	Nanoscale PtO Catalysts-Loaded SnO Multichannel Nanofibers toward Highly Sensitive Acetone Sensor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 2016-2025	9.5	73
176	Nitrogen-Doped Single Graphene Fiber with Platinum Water Dissociation Catalyst for Wearable Humidity Sensor. <i>Small</i> , <b>2018</b> , 14, e1703934	11	72
175	Mesoporous SnO Nanotubes via Electrospinning-Etching Route: Highly Sensitive and Selective Detection of HS Molecule. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 26304-26313	9.5	67
174	High-density Fibrous Polyimide Sponges with Superior Mechanical and Thermal Properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 19006-19014	9.5	66

173	Highly efficient electronic sensitization of non-oxidized graphene flakes on controlled pore-loaded WO <sub>3</sub> nanofibers for selective detection of H <sub>2</sub> S molecules. <i>Scientific Reports</i> , <b>2015</b> , 5, 8067	4.9	65
172	Cobalt(II) monoxide nanoparticles embedded in porous carbon nanofibers as a highly reversible conversion reaction anode for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 3239	13	64
171	Exhaled VOCs sensing properties of WO <sub>3</sub> nanofibers functionalized by Pt and IrO <sub>2</sub> nanoparticles for diagnosis of diabetes and halitosis. <i>Journal of Electroceramics</i> , <b>2012</b> , 29, 106-116	1.5	64
170	Bimodally Porous WO Microbelts Functionalized with Pt Catalysts for Selective HS Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 20643-20651	9.5	63
169	WO <sub>3</sub> Nanofiber-Based Biomarker Detectors Enabled by Protein-Encapsulated Catalyst Self-Assembled on Polystyrene Colloid Templates. <i>Small</i> , <b>2016</b> , 12, 911-20	11	62
168	Ultrafast optical reduction of graphene oxide sheets on colorless polyimide film for wearable chemical sensors. <i>NPG Asia Materials</i> , <b>2016</b> , 8, e315-e315	10.3	60
167	Amorphous Zinc Stannate (Zn <sub>2</sub> SnO <sub>4</sub> ) Nanofibers Networks as Photoelectrodes for Organic Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3146-3155	15.6	59
166	Growth dynamics of solid electrolyte interphase layer on SnO <sub>2</sub> nanotubes realized by graphene liquid cell electron microscopy. <i>Nano Energy</i> , <b>2016</b> , 25, 154-160	17.1	58
165	Formation of a Surficial Bifunctional Nanolayer on Nb O for Ultrastable Electrodes for Lithium-Ion Battery. <i>Small</i> , <b>2017</b> , 13, 1603610	11	56
164	Few-Layered WS <sub>2</sub> Nanoplates Confined in Co, N-Doped Hollow Carbon Nanocages: Abundant WS <sub>2</sub> Edges for Highly Sensitive Gas Sensors. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1802575	15.6	53
163	Dimensional Effects of MoS Nanoplates Embedded in Carbon Nanofibers for Bifunctional Li and Na Insertion and Conversion Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 26758-26768	9.5	53
162	MOF derived ZnCo <sub>2</sub> O <sub>4</sub> 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> , <b>2017</b> , 5, 22717-22725	13	52
161	Silver Nanowire Embedded Colorless Polyimide Heater for Wearable Chemical Sensors: Improved Reversible Reaction Kinetics of Optically Reduced Graphene Oxide. <i>Small</i> , <b>2016</b> , 12, 5826-5835	11	52
160	Transpiration Driven Electrokinetic Power Generator. <i>ACS Nano</i> , <b>2019</b> , 13, 12703-12709	16.7	52
159	Hierarchical Metal-Organic Framework-Assembled Membrane Filter for Efficient Removal of Particulate Matter. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 19957-19963	9.5	52
158	Rational design of protective In <sub>2</sub> O <sub>3</sub> layer-coated carbon nanopaper membrane: Toward stable cathode for long-cycle Li-O <sub>2</sub> batteries. <i>Nano Energy</i> , <b>2018</b> , 46, 193-202	17.1	51
157	Facile Synthesis of Pt-Functionalized Meso/Macroporous SnO Hollow Spheres through in Situ Templating with SiO for HS Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 18183-18191	9.5	49
156	Glassy Metal Alloy Nanofiber Anodes Employing Graphene Wrapping Layer: Toward Ultralong-Cycle-Life Lithium-Ion Batteries. <i>ACS Nano</i> , <b>2015</b> , 9, 6717-27	16.7	49

155	Metal Chelation Assisted In Situ Migration and Functionalization of Catalysts on Peapod-Like Hollow SnO toward a Superior Chemical Sensor. <i>Small</i> , <b>2016</b> , 12, 5989-5997	11	47
154	Three-Dimensional Nanofibrous Air Electrode Assembled With Carbon Nanotubes-Bridged Hollow FeO Nanoparticles for High-Performance Lithium-Oxygen Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 6531-6540	9.5	46
153	Applications and Advances in Bioelectronic Noses for Odour Sensing. <i>Sensors</i> , <b>2018</b> , 18,	3.8	46
152	Pt-Functionalized PdO Nanowires for Room Temperature Hydrogen Gas Sensors. <i>ACS Sensors</i> , <b>2018</b> , 3, 2152-2158	9.2	46
151	Self-operating transpiration-driven electrokinetic power generator with an artificial hydrological cycle. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 527-534	35.4	45
150	Electrospun Nanostructures for High Performance Chemiresistive and Optical Sensors. <i>Macromolecular Materials and Engineering</i> , <b>2017</b> , 302, 1600569	3.9	43
149	Rational Design of 1-D CoO Nanofibers@Low content Graphene Composite Anode for High Performance Li-Ion Batteries. <i>Scientific Reports</i> , <b>2017</b> , 7, 45105	4.9	43
148	Synthesis of Ni-based co-catalyst functionalized W:BiVO <sub>4</sub> nanofibers for solar water oxidation. <i>Green Chemistry</i> , <b>2016</b> , 18, 944-950	10	42
147	Fast, Scalable Synthesis of Micronized Ge <sub>3</sub> N <sub>4</sub> @C with a High Tap Density for Excellent Lithium Storage. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1605975	15.6	42
146	Wireless Real-Time Temperature Monitoring of Blood Packages: Silver Nanowire-Embedded Flexible Temperature Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 44678-44685	9.5	42
145	Lithium-Air Batteries: Air-Breathing Challenges and Perspective. <i>ACS Nano</i> , <b>2020</b> , 14, 14549-14578	16.7	41
144	Rational design of Sn-based multicomponent anodes for high performance lithium-ion batteries: SnO <sub>2</sub> @TiO <sub>2</sub> @reduced graphene oxide nanotubes. <i>RSC Advances</i> , <b>2016</b> , 6, 2920-2925	3.7	41
143	Facile synthesis of hierarchical porous WO <sub>3</sub> nanofibers having 1D nanoneedles and their functionalization with non-oxidized graphene flakes for selective detection of acetone molecules. <i>RSC Advances</i> , <b>2015</b> , 5, 7584-7588	3.7	41
142	Chemiresistive Hydrogen Sensors: Fundamentals, Recent Advances, and Challenges. <i>ACS Nano</i> , <b>2020</b> , 14, 14284-14322	16.7	41
141	Mussel-Inspired Polydopamine-Treated Reinforced Composite Membranes with Self-Supported CeOx Radical Scavengers for Highly Stable PEM Fuel Cells. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1806929	15.6	40
140	In Situ Coupling of Multidimensional MOFs for Heterogeneous Metal-Oxide Architectures: Toward Sensitive Chemiresistors. <i>ACS Central Science</i> , <b>2018</b> , 4, 929-937	16.8	38
139	Metal-Organic Framework-Templated PdO-CoO Nanocubes Functionalized by SWCNTs: Improved NO Reaction Kinetics on Flexible Heating Film. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 40593-40603	9.5	37
138	A General Synthesis of Crumpled Metal Oxide Nanosheets as Superior Chemiresistive Sensing Layers. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1903128	15.6	37

137	Synergistic Coupling of Metallic Cobalt Nitride Nanofibers and IrO <sub>x</sub> Nanoparticle Catalysts for Stable Oxygen Evolution. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 5941-5950	9.6	37
136	Nanoparticle Ex-solution for Supported Catalysts: Materials Design, Mechanism and Future Perspectives. <i>ACS Nano</i> , <b>2021</b> , 15, 81-110	16.7	36
135	Optically Sintered 2D RuO <sub>2</sub> Nanosheets: Temperature-Controlled NO <sub>2</sub> Reaction. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1606026	15.6	35
134	Mulberry Paper-Based Supercapacitor Exhibiting High Mechanical and Chemical Toughness for Large-Scale Energy Storage Applications. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800064	21.8	35
133	Single-Atom Pt Stabilized on One-Dimensional Nanostructure Support Carbon Nitride/SnO Heterojunction Trapping. <i>ACS Nano</i> , <b>2020</b> , 14, 11394-11405	16.7	35
132	Feasible Defect Engineering by Employing Metal Organic Framework Templates into One-Dimensional Metal Oxides for Battery Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 20540-20549	9.5	34
131	Sub-Parts-per-Million Hydrogen Sulfide Colorimetric Sensor: Lead Acetate Anchored Nanofibers toward Halitosis Diagnosis. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 8769-8775	7.8	34
130	Stress-Tolerant Nanoporous Germanium Nanofibers for Long Cycle Life Lithium Storage with High Structural Stability. <i>ACS Nano</i> , <b>2018</b> , 12, 8169-8176	16.7	33
129	Tailored Combination of Low Dimensional Catalysts for Efficient Oxygen Reduction and Evolution in Li-O <sub>2</sub> Batteries. <i>ChemSusChem</i> , <b>2016</b> , 9, 2080-8	8.3	32
128	Highly efficient and stable solid-state LiD <sub>2</sub> batteries using a perovskite solid electrolyte. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 3150-3160	13	30
127	Heterogeneous, Porous 2D Oxide Sheets via Rapid Galvanic Replacement: Toward Superior HCHO Sensing Application. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1903012	15.6	30
126	Atomic-scale combination of germanium-zinc nanofibers for structural and electrochemical evolution. <i>Nature Communications</i> , <b>2019</b> , 10, 2364	17.4	29
125	The Design and Science of Polyelemental Nanoparticles. <i>ACS Nano</i> , <b>2020</b> , 14, 6407-6413	16.7	29
124	Hierarchical ZnO Nanowires-loaded Sb-doped SnO <sub>2</sub> -ZnO Micrograting Pattern via Direct Imprinting-assisted Hydrothermal Growth and Its Selective Detection of Acetone Molecules. <i>Scientific Reports</i> , <b>2016</b> , 6, 18731	4.9	29
123	Electrospun materials for solar energy conversion: innovations and trends. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 10173-10197	7.1	29
122	Intranasal delivery of HMGB1-binding heptamer peptide confers a robust neuroprotection in the postischemic brain. <i>Neuroscience Letters</i> , <b>2012</b> , 525, 179-83	3.3	28
121	Bioinspired Cocatalysts Decorated WO Nanotube Toward Unparalleled Hydrogen Sulfide Chemiresistor. <i>ACS Sensors</i> , <b>2018</b> , 3, 1164-1173	9.2	28
120	Crystalline IrO <sub>2</sub> -decorated TiO <sub>2</sub> nanofiber scaffolds for robust and sustainable solar water oxidation. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 5610	13	27



119	Pyrolysis of Enzymolysis-Treated Wood: Hierarchically Assembled Porous Carbon Electrode for Advanced Energy Storage Devices. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101077	15.6	26
118	Graphene oxide templating: facile synthesis of morphology engineered crumpled SnO <sub>2</sub> nanofibers for superior chemiresistors. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 13825-13834	13	24
117	Tree Gum Graphene Oxide Nanocomposite Films as Gas Barriers. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 633-640	5.6	24
116	Molecular engineering of carbonyl organic electrodes for rechargeable metal-ion batteries: fundamentals, recent advances, and challenges. <i>Energy and Environmental Science</i> ,	35.4	24
115	Direct Realization of Complete Conversion and Agglomeration Dynamics of SnO Nanoparticles in Liquid Electrolyte. <i>ACS Omega</i> , <b>2017</b> , 2, 6329-6336	3.9	22
114	Highly porous coral-like silicon particles synthesized by an ultra-simple thermal-reduction method. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 2834-2846	13	22
113	Perovskite La <sub>0.75</sub> Sr <sub>0.25</sub> Cr <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>3</sub> Sensitized SnO <sub>2</sub> fiber-in-tube scaffold: highly selective and sensitive formaldehyde sensing. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 10543-10551	13	22
112	2D Metal Chalcogenide Nanopatterns by Block Copolymer Lithography. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1804508	15.6	22
111	Facile Synthesis of p-type Perovskite SrTi <sub>0.65</sub> Fe <sub>0.35</sub> O <sub>3</sub> Nanofibers Prepared by Electrospinning and Their Oxygen-Sensing Properties. <i>Macromolecular Materials and Engineering</i> , <b>2013</b> , 298, 521-527	3.9	21
110	High-rate formation cycle of Co <sub>3</sub> O <sub>4</sub> nanoparticle for superior electrochemical performance in lithium-ion batteries. <i>Electrochimica Acta</i> , <b>2019</b> , 295, 7-13	6.7	21
109	Rigorous substrate cleaning process for reproducible thin film hematite (α-Fe <sub>2</sub> O <sub>3</sub> ) photoanodes. <i>Journal of Materials Research</i> , <b>2016</b> , 31, 1565-1573	2.5	20
108	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> , <b>2020</b> , 8, 20436-20445	13	20
107	Recycling non-food-grade tree gum wastes into nanoporous carbon for sustainable energy harvesting. <i>Green Chemistry</i> , <b>2020</b> , 22, 1198-1208	10	19
106	Colorimetric Dye-Loaded Nanofiber Yarn: Eye-Readable and Weavable Gas Sensing Platform. <i>ACS Nano</i> , <b>2020</b> ,	16.7	19
105	Surface Activity-Tuned Metal Oxide Chemiresistor: Toward Direct and Quantitative Halitosis Diagnosis. <i>ACS Nano</i> , <b>2021</b> , 15, 14207-14217	16.7	19
104	Recent Progress in 1D Air Electrode Nanomaterials for Enhancing the Performance of Nonaqueous Lithium-Oxygen Batteries. <i>ChemNanoMat</i> , <b>2016</b> , 2, 616-634	3.5	19
103	Expanding depletion region via doping: Zn-doped Cu <sub>2</sub> O buffer layer in Cu <sub>2</sub> O photocathodes for photoelectrochemical water splitting. <i>Korean Journal of Chemical Engineering</i> , <b>2017</b> , 34, 3214-3219	2.8	18
102	In Situ High-Resolution Transmission Electron Microscopy (TEM) Observation of Sn Nanoparticles on SnO <sub>2</sub> Nanotubes Under Lithiation. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 1107-1115	0.5	18

101	Recent advances in ABO <sub>3</sub> perovskites: their gas-sensing performance as resistive-type gas sensors. <i>Springer Series in Emerging Cultural Perspectives in Work, Organizational, and Personnel Studies</i> , <b>2020</b> , 57, 24-39	1.3	18
100	Pore-Size-Tuned Graphene Oxide Membrane as a Selective Molecular Sieving Layer: Toward Ultrasensitive Chemiresistors. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 957-965	7.8	18
99	2D Materials Decorated with Ultrathin and Porous Graphene Oxide for High Stability and Selective Surface Activity. <i>Advanced Materials</i> , <b>2020</b> , 32, e2002723	24	18
98	Polyelemental Nanoparticles as Catalysts for a Li-O Battery. <i>ACS Nano</i> , <b>2021</b> , 15, 4235-4244	16.7	18
97	Graphene Liquid Cell Electron Microscopy: Progress, Applications, and Perspectives. <i>ACS Nano</i> , <b>2021</b> , 15, 288-308	16.7	18
96	Cu Microbelt Network Embedded in Colorless Polyimide Substrate: Flexible Heater Platform with High Optical Transparency and Superior Mechanical Stability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 39650-39656	9.5	17
95	Heterogeneous Metal Oxide-Graphene Thorn-Bush Single Fiber as a Freestanding Chemiresistor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 10208-10217	9.5	17
94	Material-Independent Nanotransfer onto a Flexible Substrate Using Mechanical-Interlocking Structure. <i>ACS Nano</i> , <b>2018</b> , 12, 4387-4397	16.7	17
93	A facile route for growth of CNTs on Si@hard carbon for conductive agent incorporating anodes for lithium-ion batteries. <i>Nanoscale</i> , <b>2015</b> , 7, 11286-90	7.7	17
92	Highly Conducting In <sub>2</sub> O <sub>3</sub> Nanowire Network with Passivating ZrO <sub>2</sub> Thin Film for Solution-Processed Field Effect Transistors. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1600218	6.4	17
91	Ultrastable Graphene-Encapsulated 3 nm Nanoparticles by In Situ Chemical Vapor Deposition. <i>Advanced Materials</i> , <b>2018</b> , 30, e1805023	24	17
90	Glass-Fabric Reinforced Ag Nanowire/Siloxane Composite Heater Substrate: Sub-10 nm Metal@Metal Oxide Nanosheet for Sensitive Flexible Sensing Platform. <i>Small</i> , <b>2018</b> , 14, e1802260	11	16
89	Electrospun fibers based on carbohydrate gum polymers and their multifaceted applications. <i>Carbohydrate Polymers</i> , <b>2020</b> , 247, 116705	10.3	15
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79	Nitrogen-Dopant-Induced Organic-Inorganic Hybrid Perovskite Crystal Growth on Carbon Nanotubes. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1902489	15.6	11
78	Graphene Liquid Cell Electron Microscopy of Initial Lithiation in CoO Nanoparticles. <i>ACS Omega</i> , <b>2019</b> , 4, 6784-6788	3.9	11
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