Il-Doo Kim

List of Publications by Year
in descending order

219 papers	11,628 citations	19657 61 h-index	34986 98 g-index
232 all docs	232 docs citations	232 times ranked	13277 citing authors

#	Article	IF	Citations
1	Towards Watt-scale hydroelectric energy harvesting by Ti₃C₂T_x-based transpiration-driven electrokinetic power generators. Energy and Environmental Science, 2022, 15, 123-135.	30.8	70
2	Sacrificial Templateâ€Assisted Synthesis of Inorganic Nanosheets with Highâ€Loading Singleâ€Atom Catalysts: A General Approach. Advanced Functional Materials, 2022, 32, 2110485.	14.9	18
3	Largeâ€Area Synthesis of Ultrathin, Flexible, and Transparent Conductive Metalâ€“Organic Framework Thin Films via a Microfluidicâ€Based Solution Shearing Process. Advanced Materials, 2022, 34, e2107696.	21.0	27
4	Oxide/ZIFâ€8 Hybrid Nanofiber Yarns: Heightened Surface Activity for Exceptional Chemiresistive Sensing. Advanced Materials, 2022, 34, e2105869.	21.0	29
5	Ion-permselective conducting polymer-based electrokinetic generators with maximized utility of green water. Nano Energy, 2022, 94, 106946.	16.0	19
6	Searching for an Optimal Multiâ€Metallic Alloy Catalyst by Active Learning Combined with Experiments. Advanced Materials, 2022, 34, e2108900.	21.0	19
7	Tanks and Truth. ACS Nano, 2022, 16, 4975-4976.	14.6	0
8	Highâ€Performance, Flexible NO₂ Chemiresistors Achieved by Design of Imineâ€Incorporated nâ€Type Conjugated Polymers. Advanced Science, 2022, 9, e2200270.	11.2	28
9	Largeâ€Area Synthesis of Ultrathin, Flexible, and Transparent Conductive Metalâ€“Organic Framework Thin Films via a Microfluidicâ€Based Solution Shearing Process (Adv. Mater. 12/2022). Advanced Materials, 2022, 34, .	21.0	0
10	Porous Nanofiber Membrane: Rational Platform for Highly Sensitive Thermochromic Sensor. Advanced Functional Materials, 2022, 32, .	14.9	27
11	Photoenergy Harvesting by Photoacid Solution. Advanced Materials, 2022, 34, e2201734.	21.0	6
12	Violacein-embedded nanofiber filters with antiviral and antibacterial activities. Chemical Engineering Journal, 2022, 444, 136460.	12.7	19
13	Searching for an Optimal Multiâ€Metallic Alloy Catalyst by Active Learning Combined with Experiments (Adv. Mater. 19/2022). Advanced Materials, 2022, 34, .	21.0	4
14	Investigation of Ordering on Oxygenâ€Deficient LiNi _{0.5} Mn _{1.5} O _{4â€Î´} Thin Films for Boosting Electrochemical Performance in Allâ€Solidâ€State Thinâ€Film Batteries. Small, 2022, , 2201134.	10.0	3
15	Promoting Exâ€Solution from Metalâ€“Organicâ€Frameworkâ€Mediated Oxide Scaffolds for Highly Active and Robust Catalysts. Advanced Materials, 2022, 34, e2201109.	21.0	9
16	An angstrom-level d-spacing control of graphite oxide using organofillers for high-rate lithium storage. CheM, 2022, 8, 2393-2409.	11.7	27
17	Delayed Infiltration of Peripheral Monocyte Contributes to Phagocytosis and Transneuronal Degeneration in Chronic Stroke. Stroke, 2022, 53, 2377-2388.	2.0	13
18	Microscopic Insight into Tin Nanoparticle Magnesiation. ACS Applied Energy Materials, 2022, 5, 7944-7949.	5.1	2

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19	Porous Pdâ€“Sn Alloy Nanotube-Based Chemiresistor for Highly Stable and Sensitive H₂ Detection. ACS Applied Materials & Interfaces, 2022, 14, 28378-28388.	8.0	11
20	Three-Dimensional, Submicron Porous Electrode with a Density Gradient to Enhance Charge Carrier Transport. ACS Nano, 2022, 16, 9762-9771.	14.6	17
21	Graphene Liquid Cell Electron Microscopy: Progress, Applications, and Perspectives. ACS Nano, 2021, 15, 288-308.	14.6	45
22	3D periodic polyimide nano-networks for ultrahigh-rate and sustainable energy storage. Energy and Environmental Science, 2021, 14, 5894-5902.	30.8	26
23	Unravelling high volumetric capacity of Co₃O₄ nanograin-interconnected secondary particles for lithium-ion battery anodes. Journal of Materials Chemistry A, 2021, 9, 6242-6251.	10.3	18
24	Reducing Time to Discovery: Materials and Molecular Modeling, Imaging, Informatics, and Integration. ACS Nano, 2021, 15, 3971-3995.	14.6	36
25	Ensemble Design of Electrodeâ€“Electrolyte Interfaces: Toward High-Performance Thin-Film All-Solid-State Liâ€“Metal Batteries. ACS Nano, 2021, 15, 4561-4575.	14.6	38
26	Celebrating 50 Years of KAIST: Collective Intelligence and Innovation for Confronting Contemporary Issues. ACS Nano, 2021, 15, 1895-1907.	14.6	1
27	Polyelemental Nanoparticles as Catalysts for a Liâ€“O₂ Battery. ACS Nano, 2021, 15, 4235-4244.	14.6	38
28	Straightforward strategy toward a shape-deformable carbon-free cathode for flexible Liâ€“air batteries in ambient air. Nano Energy, 2021, 83, 105821.	16.0	12
29	Pyrolysis of Enzymolysisâ€Treated Wood: Hierarchically Assembled Porous Carbon Electrode for Advanced Energy Storage Devices. Advanced Functional Materials, 2021, 31, 2101077.	14.9	109
30	Surface Activity-Tuned Metal Oxide Chemiresistor: Toward Direct and Quantitative Halitosis Diagnosis. ACS Nano, 2021, 15, 14207-14217.	14.6	74
31	Hierarchically Assembled Cobalt Oxynitride Nanorods and N-Doped Carbon Nanofibers for Efficient Bifunctional Oxygen Electrocatalysis with Exceptional Regenerative Efficiency. ACS Nano, 2021, 15, 11218-11230.	14.6	45
32	Woodâ€Derived, Conductivity and Hierarchical Pore Integrated Thick Electrode Enabling High Areal/Volumetric Energy Density for Hybrid Capacitors. Small, 2021, 17, e2102532.	10.0	49
33	Large-area synthesis of nanoscopic catalyst-decorated conductive MOF film using microfluidic-based solution shearing. Nature Communications, 2021, 12, 4294.	12.8	36
34	Confinement of Ultrasmall Bimetallic Nanoparticles in Conductive Metalâ€“Organic Frameworks via Siteâ€Specific Nucleation. Advanced Materials, 2021, 33, e2101216.	21.0	23
35	Confinement of Ultrasmall Bimetallic Nanoparticles in Conductive Metalâ€“Organic Frameworks via Siteâ€Specific Nucleation (Adv. Mater. 38/2021). Advanced Materials, 2021, 33, 2170302.	21.0	3
36	Synergistic Integration of Chemoâ€Resistive and SERS Sensing for Labelâ€Free Multiplex Gas Detection. Advanced Materials, 2021, 33, e2105199.	21.0	25

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37	Molecular engineering of carbonyl organic electrodes for rechargeable metal-ion batteries: fundamentals, recent advances, and challenges. Energy and Environmental Science, 2021, 14, 4228-4267.	30.8	100
38	Synergistic Interactions of Different Electroactive Components for Superior Lithium Storage Performance. ACS Applied Materials & Interfaces, 2021, 13, 587-596.	8.0	13
39	Nanoparticle Ex-solution for Supported Catalysts: Materials Design, Mechanism and Future Perspectives. ACS Nano, 2021, 15, 81-110.	14.6	95
40	Reduced Graphene-Oxide-Encapsulated MoS2/Carbon Nanofiber Composite Electrode for High-Performance Na-Ion Batteries. Nanomaterials, 2021, 11, 2691.	4.1	10
41	Synergistic Integration of Chemoâ€Resistive and SERS Sensing for Labelâ€Free Multiplex Gas Detection (Adv. Mater. 44/2021). Advanced Materials, 2021, 33, 2170350.	21.0	1
42	Non-Equilibrium Sodiation Pathway of CuSbS₂. ACS Nano, 2021, 15, 17472-17479.	14.6	5
43	Rational design approaches of two-dimensional metal oxides for chemiresistive gas sensors: A comprehensive review. MRS Bulletin, 2021, 46, 1080-1094.	3.5	6
44	A Critical Review on Functionalization of Airâ€Cathodes for Nonaqueous Liâ€"O₂ Batteries. Advanced Functional Materials, 2020, 30, 1808303.	14.9	132
45	Self-operating transpiration-driven electrokinetic power generator with an artificial hydrological cycle. Energy and Environmental Science, 2020, 13, 527-534.	30.8	122
46	Recent advances in ABO3 perovskites: their gas-sensing performance as resistive-type gas sensors. Springer Series in Emerging Cultural Perspectives in Work, Organizational, and Personnel Studies, 2020, 57, 24-39.	1.5	58
47	Tree Gumâ€"Graphene Oxide Nanocomposite Films as Gas Barriers. ACS Applied Nano Materials, 2020, 3, 633-640.	5.0	33
48	Stable and High-Capacity Si Electrodes with Free-Standing Architecture for Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 208-217.	5.1	9
49	Pore-Size-Tuned Graphene Oxide Membrane as a Selective Molecular Sieving Layer: Toward Ultraselective Chemiresistors. Analytical Chemistry, 2020, 92, 957-965.	6.5	38
50	Dopantâ€Driven Positive Reinforcement in Exâ€Solution Process: New Strategy to Develop Highly Capable and Durable Catalytic Materials. Advanced Materials, 2020, 32, e2003983.	21.0	26
51	Catalytic Materials: Dopantâ€Driven Positive Reinforcement in Exâ€Solution Process: New Strategy to Develop Highly Capable and Durable Catalytic Materials (Adv. Mater. 46/2020). Advanced Materials, 2020, 32, 2070342.	21.0	1
52	Free-Standing Carbon Nanofibers Protected by a Thin Metallic Iridium Layer for Extended Life-Cycle Liâ€"Oxygen Batteries. ACS Applied Materials & Interfaces, 2020, 12, 55756-55765.	8.0	16
53	Colorimetric Dye-Loaded Nanofiber Yarn: Eye-Readable and Weavable Gas Sensing Platform. ACS Nano, 2020, 14, 16907-16918.	14.6	74
54	2D Materials Decorated with Ultrathin and Porous Graphene Oxide for High Stability and Selective Surface Activity. Advanced Materials, 2020, 32, e2002723.	21.0	33

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55	Chemiresistive Hydrogen Sensors: Fundamentals, Recent Advances, and Challenges. ACS Nano, 2020, 14, 14284-14322.	14.6	143
56	Sustainable Personal Protective Clothing for Healthcare Applications: A Review. ACS Nano, 2020, 14, 12313-12340.	14.6	252
57	An iron-doped NASICON type sodium ion battery cathode for enhanced sodium storage performance and its full cell applications. Journal of Materials Chemistry A, 2020, 8, 20436-20445.	10.3	48
58	Focused Electric-Field Polymer Writing: Toward Ultralarge, Multistimuli-Responsive Membranes. ACS Nano, 2020, 14, 12173-12183.	14.6	18
59	Single-Atom Pt Stabilized on One-Dimensional Nanostructure Support via Carbon Nitride/SnO₂ Heterojunction Trapping. ACS Nano, 2020, 14, 11394-11405.	14.6	98
60	Lithiumâ€"Air Batteries: Air-Breathing Challenges and Perspective. ACS Nano, 2020, 14, 14549-14578.	14.6	126
61	The Design and Science of Polyelemental Nanoparticles. ACS Nano, 2020, 14, 6407-6413.	14.6	53
62	High-density Fibrous Polyimide Sponges with Superior Mechanical and Thermal Properties. ACS Applied Materials & Interfaces, 2020, 12, 19006-19014.	8.0	92
63	Ultralight, Structurally Stable Electrospun Sponges with Tailored Hydrophilicity as a Novel Material Platform. ACS Applied Materials & Interfaces, 2020, 12, 18002-18011.	8.0	21
64	Electrospun fibers based on carbohydrate gum polymers and their multifaceted applications. Carbohydrate Polymers, 2020, 247, 116705.	10.2	39
65	Multifunctional Inorganic Nanomaterial Aerogel Assembled into fSWNT Hydrogel Platform for Ultraselective NO₂ Sensing. ACS Applied Materials & Interfaces, 2020, 12, 10637-10647.	8.0	10
66	Recycling non-food-grade tree gum wastes into nanoporous carbon for sustainable energy harvesting. Green Chemistry, 2020, 22, 1198-1208.	9.0	33
67	Lowâ€Thermalâ€Budget Doping: Lowâ€Thermalâ€Budget Doping of 2D Materials in Ambient Air Exemplified by Synthesis of Boronâ€Doped Reduced Graphene Oxide (Adv. Sci. 7/2020). Advanced Science, 2020, 7, 2070039.	11.2	0
68	Carbon anchored conducting polymer composite linkage for high performance water energy harvesters. Nano Energy, 2020, 74, 104827.	16.0	13
69	Design of Hollow Nanofibrous Structures using Electrospinning: An Aspect of Chemical Sensor Applications. ChemNanoMat, 2020, 6, 1014-1027.	2.8	16
70	Growing Contributions of Nano in 2020. ACS Nano, 2020, 14, 16163-16164.	14.6	1
71	Heterogeneous, Porous 2D Oxide Sheets via Rapid Galvanic Replacement: Toward Superior HCHO Sensing Application. Advanced Functional Materials, 2019, 29, 1903012.	14.9	41
72	Janus Graphene Liquid Crystalline Fiber with Tunable Properties Enabled by Ultrafast Flash Reduction. Small, 2019, 15, e1901529.	10.0	27

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73	Transpiration Driven Electrokinetic Power Generator. ACS Nano, 2019, 13, 12703-12709.	14.6	134
74	Gallium Nitride Nanoparticles Embedded in a Carbon Nanofiber Anode for Ultralong-Cycle-Life Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 44263-44269.	8.0	19
75	Chemiresistors: Catalytic Metal Nanoparticles Embedded in Conductive Metalâ€"Organic Frameworks for Chemiresistors: Highly Active and Conductive Porous Materials (Adv. Sci. 21/2019). Advanced Science, 2019, 6, 1970126.	11.2	3
76	2D Oxide Sensors: Heterogeneous, Porous 2D Oxide Sheets via Rapid Galvanic Replacement: Toward Superior HCHO Sensing Application (Adv. Funct. Mater. 42/2019). Advanced Functional Materials, 2019, 29, 1970290.	14.9	0
77	CuFeO₂â€"NiFe₂O₄ hybrid electrode for lithium-ion batteries with ultra-stable electrochemical performance. RSC Advances, 2019, 9, 27257-27263.	3.6	11
78	A feasible strategy to prepare quantum dot-incorporated carbon nanofibers as free-standing platforms. Nanoscale Advances, 2019, 1, 3948-3956.	4.6	1
79	Highly efficient and stable solid-state Liâ€"O₂ batteries using a perovskite solid electrolyte. Journal of Materials Chemistry A, 2019, 7, 3150-3160.	10.3	43
80	Nitrogenâ€Dopantâ€Induced Organicâ€"Inorganic Hybrid Perovskite Crystal Growth on Carbon Nanotubes. Advanced Functional Materials, 2019, 29, 1902489.	14.9	18
81	A General Synthesis of Crumpled Metal Oxide Nanosheets as Superior Chemiresistive Sensing Layers. Advanced Functional Materials, 2019, 29, 1903128.	14.9	61
82	Atomic-scale combination of germanium-zinc nanofibers for structural and electrochemical evolution. Nature Communications, 2019, 10, 2364.	12.8	44
83	Mixture of quantum dots and ZnS nanoparticles as emissive layer for improved quantum dots light emitting diodes. RSC Advances, 2019, 9, 15177-15183.	3.6	6
84	Nanoscience and Nanotechnology at the Korea Advanced Institute of Science and Technology. ACS Nano, 2019, 13, 3741-3745.	14.6	6
85	Musselâ€Inspired Polydopamineâ€Treated Reinforced Composite Membranes with Selfâ€Supported CeO_x Radical Scavengers for Highly Stable PEM Fuel Cells. Advanced Functional Materials, 2019, 29, 1806929.	14.9	66
86	Graphene Liquid Cell Electron Microscopy of Initial Lithiation in Co₃O₄ Nanoparticles. ACS Omega, 2019, 4, 6784-6788.	3.5	11
87	Unveiling the Origin of Superior Electrochemical Performance in Polycrystalline Dense SnO₂ Nanospheres as Anodes for Lithium-ion Batteries. ACS Applied Energy Materials, 2019, 2, 2004-2012.	5.1	14
88	Heterogeneous Metal Oxideâ€"Graphene Thorn-Bush Single Fiber as a Freestanding Chemiresistor. ACS Applied Materials & Interfaces, 2019, 11, 10208-10217.	8.0	27
89	Preparation of Graphene Liquid Cells for the Observation of Lithium-ion Battery Material. Journal of Visualized Experiments, 2019, , .	0.3	3
90	Effect of annealing temperature on the interfacial interaction of LiNi0.5Mn1.5O4 thin film cathode with stainless-steel substrate. Journal of Electroceramics, 2019, 42, 104-112.	2.0	7

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91	High-rate formation cycle of Co3O4 nanoparticle for superior electrochemical performance in lithium-ion batteries. Electrochimica Acta, 2019, 295, 7-13.	5.2	32
92	Recent Developments in 2D Nanomaterials for Chemiresistive-Type Gas Sensors. Electronic Materials Letters, 2018, 14, 221-260.	2.2	197
93	Metal nanotrough embedded colorless polyimide films: transparent conducting electrodes with exceptional flexibility and high conductivity. Nanoscale, 2018, 10, 7927-7932.	5.6	12
94	Mulberry Paperâ€Based Supercapacitor Exhibiting High Mechanical and Chemical Toughness for Largeâ€Scale Energy Storage Applications. Advanced Energy Materials, 2018, 8, 1800064.	19.5	53
95	Rational design of protective In2O3 layer-coated carbon nanopaper membrane: Toward stable cathode for long-cycle Li-O2 batteries. Nano Energy, 2018, 46, 193-202.	16.0	58
96	Nitrogenâ€Doped Single Graphene Fiber with Platinum Water Dissociation Catalyst for Wearable Humidity Sensor. Small, 2018, 14, e1703934.	10.0	105
97	Three-Dimensional Nanofibrous Air Electrode Assembled With Carbon Nanotubes-Bridged Hollow Fe₂O₃ Nanoparticles for High-Performance Lithiumâ€"Oxygen Batteries. ACS Applied Materials & Interfaces, 2018, 10, 6531-6540.	8.0	55
98	Nanoscale PtO₂ Catalysts-Loaded SnO₂ Multichannel Nanofibers toward Highly Sensitive Acetone Sensor. ACS Applied Materials & Interfaces, 2018, 10, 2016-2025.	8.0	96
99	Highly porous coral-like silicon particles synthesized by an ultra-simple thermal-reduction method. Journal of Materials Chemistry A, 2018, 6, 2834-2846.	10.3	31
100	Facile Synthesis of Pt-Functionalized Meso/Macroporous SnO₂ Hollow Spheres through in Situ Templating with SiO₂ for H₂S Sensors. ACS Applied Materials & Interfaces, 2018, 10, 18183-18191.	8.0	79
101	Material-Independent Nanotransfer onto a Flexible Substrate Using Mechanical-Interlocking Structure. ACS Nano, 2018, 12, 4387-4397.	14.6	21
102	Brush-Like Cobalt Nitride Anchored Carbon Nanofiber Membrane: Current Collector-Catalyst Integrated Cathode for Long Cycle Liâ€"O₂ Batteries. ACS Nano, 2018, 12, 128-139.	14.6	230
103	In Situ TEM Observation on the Growth of Solid Electrolyte Interphase (SEI) Layer on Co3O4 upon Sodiation and Magnesiation using Graphene Liquid Cell. Microscopy and Microanalysis, 2018, 24, 300-301.	0.4	1
104	In situ Transmission Electron Microscopy of Lithiation Dynamics in a SnCh Hollow Nanosphere. Microscopy and Microanalysis, 2018, 24, 1944-1945.	0.4	0
105	2D Nanopatterning: 2D Metal Chalcogenide Nanopatterns by Block Copolymer Lithography (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Ov	14.9	5
106	Wireless Real-Time Temperature Monitoring of Blood Packages: Silver Nanowire-Embedded Flexible Temperature Sensors. ACS Applied Materials & Interfaces, 2018, 10, 44678-44685.	8.0	58
107	Pt-Functionalized PdO Nanowires for Room Temperature Hydrogen Gas Sensors. ACS Sensors, 2018, 3, 2152-2158.	7.8	70
108	High-Power Aqueous Zinc-Ion Batteries for Customized Electronic Devices. ACS Nano, 2018, 12, 11838-11846.	14.6	158

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109	Ultrastable Grapheneâ€Encapsulated 3 nm Nanoparticles by In Situ Chemical Vapor Deposition. Advanced Materials, 2018, 30, e1805023.	21.0	24
110	2D Metal Chalcogenide Nanopatterns by Block Copolymer Lithography. Advanced Functional Materials, 2018, 28, 1804508.	14.9	41
111	Glassâ€Fabric Reinforced Ag Nanowire/Siloxane Composite Heater Substrate: Subâ€10 nm Metal@Metal Oxide Nanosheet for Sensitive Flexible Sensing Platform. Small, 2018, 14, e1802260.	10.0	17
112	Gas Sensors: Fewâ€Layered WS₂ Nanoplates Confined in Co, Nâ€Doped Hollow Carbon Nanocages: Abundant WS₂ Edges for Highly Sensitive Gas Sensors (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	14.9	2
113	Sub-Parts-per-Million Hydrogen Sulfide Colorimetric Sensor: Lead Acetate Anchored Nanofibers toward Halitosis Diagnosis. Analytical Chemistry, 2018, 90, 8769-8775.	6.5	47
114	Hierarchical Metalâ€"Organic Framework-Assembled Membrane Filter for Efficient Removal of Particulate Matter. ACS Applied Materials & Interfaces, 2018, 10, 19957-19963.	8.0	74
115	Bimodally Porous WO₃ Microbelts Functionalized with Pt Catalysts for Selective H₂S Sensors. ACS Applied Materials & Interfaces, 2018, 10, 20643-20651.	8.0	87
116	Bioinspired Cocatalysts Decorated WO₃ Nanotube Toward Unparalleled Hydrogen Sulfide Chemiresistor. ACS Sensors, 2018, 3, 1164-1173.	7.8	36
117	In Situ Coupling of Multidimensional MOFs for Heterogeneous Metal-Oxide Architectures: Toward Sensitive Chemiresistors. ACS Central Science, 2018, 4, 929-937.	11.3	59
118	Stress-Tolerant Nanoporous Germanium Nanofibers for Long Cycle Life Lithium Storage with High Structural Stability. ACS Nano, 2018, 12, 8169-8176.	14.6	42
119	Fewâ€Layered WS₂ Nanoplates Confined in Co, Nâ€Doped Hollow Carbon Nanocages: Abundant WS₂ Edges for Highly Sensitive Gas Sensors. Advanced Functional Materials, 2018, 28, 1802575.	14.9	93
120	An Impedance-Transduced Chemiresistor with a Porous Carbon Channel for Rapid, Nonenzymatic, Glucose Sensing. Analytical Chemistry, 2018, 90, 9338-9346.	6.5	13
121	Applications and Advances in Bioelectronic Noses for Odour Sensing. Sensors, 2018, 18, 103.	3.8	61
122	Perovskite La_{0.75}Sr_{0.25}Cr_{0.5}Mn_{0.5}O_{3âˆ'Î´} sensitized SnO₂ fiber-in-tube scaffold: highly selective and sensitive formaldehyde sensing. Journal of Materials Chemistry A, 2018, 6, 10543-10551.	10.3	29
123	Synergistic Coupling of Metallic Cobalt Nitride Nanofibers and IrO_x Nanoparticle Catalysts for Stable Oxygen Evolution. Chemistry of Materials, 2018, 30, 5941-5950.	6.7	57
124	Feasible Defect Engineering by Employing Metal Organic Framework Templates into One-Dimensional Metal Oxides for Battery Applications. ACS Applied Materials & Interfaces, 2018, 10, 20540-20549.	8.0	46
125	Graphene oxide templating: facile synthesis of morphology engineered crumpled SnO₂ nanofibers for superior chemiresistors. Journal of Materials Chemistry A, 2018, 6, 13825-13834.	10.3	28
126	Abnormal Optoelectric Properties of Two-Dimensional Protonic Ruthenium Oxide with a Hexagonal Structure. ACS Applied Materials & Interfaces, 2018, 10, 22661-22668.	8.0	7

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127	Nanoscale PdO Catalyst Functionalized Co₃O₄ Hollow Nanocages Using MOF Templates for Selective Detection of Acetone Molecules in Exhaled Breath. ACS Applied Materials & Interfaces, 2017, 9, 8201-8210.	8.0	240
128	Fast, Scalable Synthesis of Micronized Ge₃N₄@C with a High Tap Density for Excellent Lithium Storage. Advanced Functional Materials, 2017, 27, 1605975.	14.9	47
129	Optically Sintered 2D RuO₂ Nanosheets: Temperatureâ€Controlled NO₂ Reaction. Advanced Functional Materials, 2017, 27, 1606026.	14.9	54
130	Metalâ€"Organic Framework Templated Catalysts: Dual Sensitization of PdOâ€"ZnO Composite on Hollow SnO₂ Nanotubes for Selective Acetone Sensors. ACS Applied Materials & Interfaces, 2017, 9, 18069-18077.	8.0	173
131	Innovative Nanosensor for Disease Diagnosis. Accounts of Chemical Research, 2017, 50, 1587-1596.	15.6	202
132	Supercharging a MnO₂ Nanowire: An Amine-Altered Morphology Retains Capacity at High Rates and Mass Loadings. Langmuir, 2017, 33, 9324-9332.	3.5	3
133	Electrospun Nanostructures for High Performance Chemiresistive and Optical Sensors. Macromolecular Materials and Engineering, 2017, 302, 1600569.	3.6	55
134	2D WS₂-edge functionalized multi-channel carbon nanofibers: effect of WS₂ edge-abundant structure on room temperature NO₂ sensing. Journal of Materials Chemistry A, 2017, 5, 8725-8732.	10.3	122
135	Rational Design of 1-D Co3O4 Nanofibers@Low content Graphene Composite Anode for High Performance Li-Ion Batteries. Scientific Reports, 2017, 7, 45105.	3.3	49
136	Formation of a Surficial Bifunctional Nanolayer on Nb₂O₅ for Ultrastable Electrodes for Lithiumâ€Ion Battery. Small, 2017, 13, 1603610.	10.0	74
137	Cu Microbelt Network Embedded in Colorless Polyimide Substrate: Flexible Heater Platform with High Optical Transparency and Superior Mechanical Stability. ACS Applied Materials & Interfaces, 2017, 9, 39650-39656.	8.0	29
138	MOF derived ZnCo₂O₄ porous hollow spheres functionalized with Ag nanoparticles for a long-cycle and high-capacity lithium ion battery anode. Journal of Materials Chemistry A, 2017, 5, 22717-22725.	10.3	69
139	Metalâ€"Organic Framework-Templated PdO-Co₃O₄ Nanocubes Functionalized by SWCNTs: Improved NO₂ Reaction Kinetics on Flexible Heating Film. ACS Applied Materials & Interfaces, 2017, 9, 40593-40603.	8.0	55
140	Direct Realization of Complete Conversion and Agglomeration Dynamics of SnO₂ Nanoparticles in Liquid Electrolyte. ACS Omega, 2017, 2, 6329-6336.	3.5	26
141	Ultrasmall titanium oxide/titanium oxynitride composite nanoparticle-embedded carbon nanofiber mats as high-capacity and free-standing electrodes for lithium sulfur batteries. RSC Advances, 2017, 7, 44804-44808.	3.6	11
142	How can nanotechnology be applied to sensors for breath analysis?. Nanomedicine, 2017, 12, 2695-2697.	3.3	4
143	Accelerating Palladium Nanowire H₂ Sensors Using Engineered Nanofiltration. ACS Nano, 2017, 11, 9276-9285.	14.6	190
144	Expanding depletion region via doping: Zn-doped Cu2O buffer layer in Cu2O photocathodes for photoelectrochemical water splitting. Korean Journal of Chemical Engineering, 2017, 34, 3214-3219.	2.7	20

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145	Elaborate Manipulation for Sub-10 nm Hollow Catalyst Sensitized Heterogeneous Oxide Nanofibers for Room Temperature Chemical Sensors. ACS Applied Materials & Interfaces, 2017, 9, 24821-24829.	8.0	12
146	Mesoporous SnO₂ Nanotubes via Electrospinningâ€"Etching Route: Highly Sensitive and Selective Detection of H₂S Molecule. ACS Applied Materials & Interfaces, 2017, 9, 26304-26313.	8.0	95
147	Nanomechanical Encoding Method Using Enhanced Thermal Concentration on a Metallic Nanobridge. ACS Nano, 2017, 11, 7781-7789.	14.6	12
148	Exceptional Highâ€Performance of Ptâ€Based Bimetallic Catalysts for Exclusive Detection of Exhaled Biomarkers. Advanced Materials, 2017, 29, 1700737.	21.0	113
149	Metal Organic Framework-Templated Chemiresistor: Sensing Type Transition from P-to-N Using Hollow Metal Oxide Polyhedron via Galvanic Replacement. Journal of the American Chemical Society, 2017, 139, 11868-11876.	13.7	136
150	Real Time Observation of Initial Conversion Reaction of Co3O4 Nanoparticles Using Graphene Liquid Cell Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 1968-1969.	0.4	0
151	In Situ High-Resolution Transmission Electron Microscopy (TEM) Observation of Sn Nanoparticles on SnO₂ Nanotubes Under Lithiation. Microscopy and Microanalysis, 2017, 23, 1107-1115.	0.4	21
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