Inkyu Park

List of Publications by Year in Descending Order

166 papers	9,027 citations	40 h-index	93 g-index
191 ext. papers	11,001 ext. citations	8.4 avg, IF	6.59 L-index

#	Paper	IF	Citations
166	High Accuracy Real-Time Multi-Gas Identification by a Batch-Uniform Gas Sensor Array and Deep Learning Algorithm.. *ACS Sensors*, **2022**,	9.2	3
165	Collectively Exhaustive Hybrid Triboelectric Nanogenerator Based on Flow-Induced Impacting-Sliding Cylinder for Ocean Energy Harvesting (Adv. Energy Mater. 3/2022). *Advanced Energy Materials*, **2022**, 12, 2270008	21.8	0
164	Wafer-scale, highly uniform, and well-arrayed suspended nanostructures for enhancing the performance of electronic devices.. *Nanoscale*, **2022**,	7.7	1
163	Solution-Processable Ag-Mediated ZnO Nanowires for Scalable Low-Temperature Fabrication of Flexible Devices. *ACS Applied Electronic Materials*, **2022**, 4, 910-916	4	3
162	Skin-interfaced Wearable Biosensors: A Mini-Review. *Journal of Sensor Science and Technology*, **2022**, 31, 71-78	0.3	0
161	Artificial Olfactory Neuron for an In-Sensor Neuromorphic Nose.. *Advanced Science*, **2022**, e2106017	13.6	7
160	Spherical Micro/Nano Hierarchical Structures for Energy and Water Harvesting Devices.. *Small Methods*, **2022**, e2200248	12.8	1
159	Mechanical characteristics of metal nanoparticle thin film on flexible substrate exposed to saline solution. *Nanotechnology*, **2021**, 32, 055701	3.4	1
158	Customizable, conformal, and stretchable 3D electronics via predistorted pattern generation and thermoforming. *Science Advances*, **2021**, 7, eabj0694	14.3	8
157	Pt Nanostructures Fabricated by Local Hydrothermal Synthesis for Low-Power Catalytic-Combustion Hydrogen Sensors. *ACS Applied Nano Materials*, **2021**, 4, 7-12	5.6	5
156	Ultra-Wide Range Pressure Sensor Based on a Microstructured Conductive Nanocomposite for Wearable Workout Monitoring. *Advanced Healthcare Materials*, **2021**, 10, e2001461	10.1	10
155	Fast Flexible Bottom-Gated Hydrogen Sensor Based on Silicon Nanomembrane. *Advanced Materials Technologies*, **2021**, 6, 2000847	6.8	0
154	Robust nanotransfer printing by imidization-induced interlocking. *Applied Surface Science*, **2021**, 552, 149500	6.7	2
153	Shape-Controlled and Well-Arrayed Heterogeneous Nanostructures via Melting Point Modulation at the Nanoscale. *ACS Applied Materials & Interfaces*, **2021**, 13, 3358-3368	9.5	6
152	Low-power thermocatalytic hydrogen sensor based on electrodeposited cauliflower-like nanostructured Pt black. *Sensors and Actuators B: Chemical*, **2021**, 329, 129129	8.5	6
151	Large-Area Nanogap-Controlled 3D Nanoarchitectures Fabricated Layer-by-Layer Nanoimprint. *ACS Nano*, **2021**, 15, 503-514	16.7	7
150	Morphology-controllable wrinkled hierarchical structure and its application to superhydrophobic triboelectric nanogenerator. *Nano Energy*, **2021**, 85, 105978	17.1	15

149	Biocompatible Nanotransfer Printing Based on Water Bridge Formation in Hyaluronic Acid and Its Application to Smart Contact Lenses. *ACS Applied Materials & Interfaces*, **2021**, 13, 35069-35078	9.5	1
148	Real-Time Internal Steam Pop Detection during Radiofrequency Ablation with a Radiofrequency Ablation Needle Integrated with a Temperature and Pressure Sensor: Preclinical and Clinical Pilot Tests. *Advanced Science*, **2021**, 8, e2100725	13.6	1
147	Machine learning-enabled textile-based graphene gas sensing with energy harvesting-assisted IoT application. *Nano Energy*, **2021**, 86, 106035	17.1	22
146	Sensitivity-Controllable Liquid-Metal-Based Pressure Sensor for Wearable Applications. *ACS Applied Electronic Materials*, **2021**, 3, 4027-4036	4	6
145	Battery-free, wireless soft sensors for continuous multi-site measurements of pressure and temperature from patients at risk for pressure injuries. *Nature Communications*, **2021**, 12, 5008	17.4	21
144	Self-powered strain sensor based on the piezo-transmittance of a mechanical metamaterial. *Nano Energy*, **2021**, 89, 106447	17.1	7
143	All-soft multiaxial force sensor based on liquid metal for electronic skin. *Micro and Nano Systems Letters*, **2021**, 9,	2	3
142	Stretchable Printed Circuit Board Based on Leak-Free Liquid Metal Interconnection and Local Strain Control.. *ACS Applied Materials & Interfaces*, **2021**,	9.5	5
141	Tunable Resonator: Self-Powered Humidity Sensor Using Chitosan-Based Plasmonic Metal□Hydrogel□Metal Filters (Advanced Optical Materials 9/2020). *Advanced Optical Materials*, **2020**, 8, 2070038	8.1	1
140	Wearable and Stretchable Strain Sensors: Materials, Sensing Mechanisms, and Applications. *Advanced Intelligent Systems*, **2020**, 2, 2000039	6	120
139	Self-Powered Gas Sensor Based on a Photovoltaic Cell and a Colorimetric Film with Hierarchical Micro/Nanostructures. *ACS Applied Materials & Interfaces*, **2020**, 12, 39024-39032	9.5	9
138	Ultrathin, Biocompatible, and Flexible Pressure Sensor with a Wide Pressure Range and Its Biomedical Application. *ACS Sensors*, **2020**, 5, 481-489	9.2	34
137	Microscale Biosensor Array Based on Flexible Polymeric Platform toward Lab-on-a-Needle: Real-Time Multiparameter Biomedical Assays on Curved Needle Surfaces. *ACS Sensors*, **2020**, 5, 1363-1373	9.2	19
136	Electrochemical Actuators: Heterogeneous Conductance-Based Locally Shape-Morphable Soft Electrothermal Actuator (Adv. Mater. Technol. 2/2020). *Advanced Materials Technologies*, **2020**, 5, 2070013	6.8	1
135	Self-Powered Humidity Sensor Using Chitosan-Based Plasmonic Metal□Hydrogel□Metal Filters. *Advanced Optical Materials*, **2020**, 8, 1901932	8.1	52
134	Microporous Elastomer Filter Coated with Metal Organic Frameworks for Improved Selectivity and Stability of Metal Oxide Gas Sensors. *ACS Applied Materials & Interfaces*, **2020**, 12, 13338-13347	9.5	18
133	Nanotransfer Printing on Textile Substrate with Water-Soluble Polymer Nanotemplate. *ACS Nano*, **2020**, 14, 2191-2201	16.7	11
132	Monolithic Micro Light-Emitting Diode/Metal Oxide Nanowire Gas Sensor with Microwatt-Level Power Consumption. *ACS Sensors*, **2020**, 5, 563-570	9.2	46

131	3D Layer-By-Layer Pd-Containing Nanocomposite Platforms for Enhancing the Performance of Hydrogen Sensors. *ACS Sensors*, **2020**, 5, 2367-2377	9.2	15
130	Wearable self-powered pressure sensor by integration of piezo-transmittance microporous elastomer with organic solar cell. *Nano Energy*, **2020**, 74, 104749	17.1	20
129	Biopsy needle integrated with multi-modal physical/chemical sensor array. *Biosensors and Bioelectronics*, **2020**, 148, 111822	11.8	8
128	Wearable Strain Sensors Using Light Transmittance Change of Carbon Nanotube-Embedded Elastomers with Microcracks. *ACS Applied Materials & Interfaces*, **2020**, 12, 10908-10917	9.5	36
127	Heterogeneous Conductance-Based Locally Shape-Morphable Soft Electrothermal Actuator. *Advanced Materials Technologies*, **2020**, 5, 1900997	6.8	11
126	Synergetic Effect of Porous Elastomer and Percolation of Carbon Nanotube Filler toward High Performance Capacitive Pressure Sensors. *ACS Applied Materials & Interfaces*, **2020**, 12, 1698-1706	9.5	54
125	Microdome-Induced Strain Localization for Biaxial Strain Decoupling toward Stretchable and Wearable Human Motion Detection. *Langmuir*, **2020**, 36, 8939-8946	4	12
124	Low-temperature large-area fabrication of ZnO nanowires on flexible plastic substrates by solution-processible metal-seeded hydrothermal growth. *Nano Convergence*, **2020**, 7, 24	9.2	9
123	Chemo-Mechanically Operating Palladium-Polymer Nanograting Film for a Self-Powered H Gas Sensor. *ACS Nano*, **2020**,	16.7	9
122	Buffered Oxide Etchant Post-Treatment of a Silicon Nanofilm for Low-Cost and Performance-Enhanced Chemical Sensors. *ACS Applied Materials & Interfaces*, **2020**, 12, 37128-37136	9.5	1
121	Soft, skin-interfaced microfluidic systems with integrated immunoassays, fluorometric sensors, and impedance measurement capabilities. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 27906-27915	11.5	35
120	Wirelessly controlled, bioresorbable drug delivery device with active valves that exploit electrochemically triggered crevice corrosion. *Science Advances*, **2020**, 6, eabb1093	14.3	35
119	Nanoporous Silicon Thin Film-Based Hydrogen Sensor Using Metal-Assisted Chemical Etching with Annealed Palladium Nanoparticles. *ACS Applied Materials & Interfaces*, **2020**, 12, 43614-43623	9.5	7
118	Biocompatible and Highly Stretchable PVA/AgNWs Hydrogel Strain Sensors for Human Motion Detection. *Advanced Materials Technologies*, **2020**, 5, 2000426	6.8	36
117	Strain-Insensitive Soft Pressure Sensor for Health Monitoring Application Using 3D-Printed Microchannel Mold and Liquid Metal **2019**,		2
116	Self-Powered, Ultra-Reliable Hydrogen Sensor Exploiting Chemomechanical Nano-Transducer and Solar-Cell **2019**,		1
115	Heterogeneous Nanostructures Fabricated via Binding Energy-Controlled Nanowelding. *ACS Applied Materials & Interfaces*, **2019**, 11, 7261-7271	9.5	9
114	Low-hysteresis and low-interference soft tactile sensor using a conductive coated porous elastomer and a structure for interference reduction. *Sensors and Actuators A: Physical*, **2019**, 295, 541-550	3.9	15

113	Towards high performance of supercapacitor: New approach to design 3 D architectured electrodes with bacteria. *Journal of Industrial and Engineering Chemistry*, **2019**, 78, 232-238	6.3	9
112	Wearable, Ultrawide-Range, and Bending-Insensitive Pressure Sensor Based on Carbon Nanotube Network-Coated Porous Elastomer Sponges for Human Interface and Healthcare Devices. *ACS Applied Materials & Interfaces*, **2019**, 11, 23639-23648	9.5	78
111	Gas Sensor by Direct Growth and Functionalization of Metal Oxide/Metal Sulfide Core-Shell Nanowires on Flexible Substrates. *ACS Applied Materials & Interfaces*, **2019**, 11, 24298-24307	9.5	37
110	Biomimetic Turbinate-like Artificial Nose for Hydrogen Detection Based on 3D Porous Laser-Induced Graphene. *ACS Applied Materials & Interfaces*, **2019**, 11, 24386-24394	9.5	32
109	Half-Pipe Palladium Nanotube-Based Hydrogen Sensor Using a Suspended Nanofiber Scaffold. *ACS Applied Materials & Interfaces*, **2019**, 11, 13343-13349	9.5	26
108	Scratch to sensitize: scratch-induced sensitivity enhancement in semiconductor thin-film sensors. *Nanoscale*, **2019**, 11, 15374-15381	7.7	1
107	Printed fabric heater based on Ag nanowire/carbon nanotube composites. *Nanotechnology*, **2019**, 30, 455707	3.4	21
106	Electromechanical enhancement of metal nanoparticle thin film by composite formation with short metal nanowires. *Functional Composites and Structures*, **2019**, 1, 035006	3.5	2
105	Joule-Heated and Suspended Silicon Nanowire Based Sensor for Low-Power and Stable Hydrogen Detection. *ACS Applied Materials & Interfaces*, **2019**, 11, 42349-42357	9.5	12
104	Strain Sensor Based on Optical Intensity Change Through the Carbon Nanotube Embedded Elastomer **2019**,		1
103	Highly Sensitive and Wearable Liquid Metal-Based Pressure Sensor for Health Monitoring Applications: Integration of a 3D-Printed Microbump Array with the Microchannel. *Advanced Healthcare Materials*, **2019**, 8, e1900978	10.1	54
102	Low Power Thermo-Catalytic Gas Sensor Based on Suspended Noble-Metal Nanotubes for H2 Sensing **2019**,		2
101	Excellent detection of H2S gas at ppb concentrations using ZnFe2O4 nanofibers loaded with reduced graphene oxide. *Sensors and Actuators B: Chemical*, **2019**, 282, 876-884	8.5	57
100	Biopsy Needle Integrated with Electrical Impedance Sensing Microelectrode Array towards Real-time Needle Guidance and Tissue Discrimination. *Scientific Reports*, **2018**, 8, 264	4.9	15
99	Palladium-Decorated Silicon Nanomesh Fabricated by Nanosphere Lithography for High Performance, Room Temperature Hydrogen Sensing. *Small*, **2018**, 14, 1703691	11	35
98	High-Sensitivity and Low-Power Flexible Schottky Hydrogen Sensor Based on Silicon Nanomembrane. *ACS Applied Materials & Interfaces*, **2018**, 10, 12870-12877	9.5	22
97	Fully integrated and portable semiconductor-type multi-gas sensing module for IoT applications. *Sensors and Actuators B: Chemical*, **2018**, 265, 660-667	8.5	30
96	Flexible Ultraviolet and Ambient Light Sensor Based on a Nanomaterial Network Fabricated Using Selective and Localized Wet Chemical Reactions. *Langmuir*, **2018**, 34, 4132-4141	4	3

95	A flexible comb electrode triboelectric electret nanogenerator with separated microfibers for a self-powered position, motion direction and acceleration tracking sensor. *Journal of Materials Chemistry A*, **2018**, 6, 16548-16555	13	26
94	First Lateral Contact Probing of 55- mu m Fine Pitch Micro-Bumps. *Journal of Microelectromechanical Systems*, **2018**, 27, 1114-1123	2.5	3
93	Zinc Oxide-Enhanced Piezoelectret Polypropylene Microfiber for Mechanical Energy Harvesting. *ACS Applied Materials & Interfaces*, **2018**, 10, 19940-19947	9.5	21
92	Flexible optical pressure sensor and its application to wearable human motion detecting device **2018**,		1
91	Feedback control of local hotspot temperature using resistive on-substrate nanoheater/thermometer. *Review of Scientific Instruments*, **2018**, 89, 064902	1.7	3
90	Soft Nanocomposite Based Multi-point, Multi-directional Strain Mapping Sensor Using Anisotropic Electrical Impedance Tomography. *Scientific Reports*, **2017**, 7, 39837	4.9	58
89	Highly aligned suspended nanowire array for self-heating type gas sensors **2017**,		2
88	Flexible multi-modal micro-biosensor towards accurate cancer tissue targeting during biopsy process **2017**,		2
87	Surface micro-structured, stretchable strain sensor towards biaxial sensitivity and performance enhancement **2017**,		1
86	Highly integrated SNO2 nanotubes using templated ZNO nanowires for low power gas sensors **2017**,		1
85	Ultra-low power hydrogen sensor by suspended and palladium coated silicon nanowire **2017**,		1
84	Micropatterning of metal oxide nanofibers by electrohydrodynamic (EHD) printing towards highly integrated and multiplexed gas sensor applications. *Sensors and Actuators B: Chemical*, **2017**, 250, 574-583	8.5	54
83	Three-Dimensional Continuous Conductive Nanostructure for Highly Sensitive and Stretchable Strain Sensor. *ACS Applied Materials & Interfaces*, **2017**, 9, 17369-17378	9.5	93
82	Facile three-dimensional nanoarchitecturing of double-bent gold strips on roll-to-roll nanoimprinted transparent nanogratings for flexible and scalable plasmonic sensors. *Nanoscale*, **2017**, 9, 1398-1402	7.7	25
81	Virus-Templated Self-Mineralization of Ligand-Free Colloidal Palladium Nanostructures for High Surface Activity and Stability. *Advanced Functional Materials*, **2017**, 27, 1703262	15.6	12
80	Temperature-Controlled Direct Imprinting of Ag Ionic Ink: Flexible Metal Grid Transparent Conductors with Enhanced Electromechanical Durability. *Scientific Reports*, **2017**, 7, 11220	4.9	14
79	Localized Liquid-Phase Synthesis of Porous SnO Nanotubes on MEMS Platform for Low-Power, High Performance Gas Sensors. *ACS Applied Materials & Interfaces*, **2017**, 9, 27111-27119	9.5	53
78	3D printing of multiaxial force sensors using carbon nanotube (CNT)/thermoplastic polyurethane (TPU) filaments. *Sensors and Actuators A: Physical*, **2017**, 263, 493-500	3.9	154

77	Transparent, Flexible Strain Sensor Based on a Solution-Processed Carbon Nanotube Network. *ACS Applied Materials & Interfaces*, **2017**, 9, 26279-26285	9.5	97
76	Self-powered gas sensor using thin-film photovoltaic cell and microstructured colorimetric film **2017**,		2
75	Enhanced sensing of gas molecules by a 99.9% semiconducting carbon nanotube-based field-effect transistor sensor. *Applied Physics Letters*, **2017**, 111, 022102	3.4	12
74	Development of multi-spot impedance sensing biopsy needle based on attachable and flexible sensor film. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 4788-4791	0.9	2
73	A room temperature hydrogen sulfide gas sensor based on electrospun polyaniline/polyethylene oxide nanofibers directly written on flexible substrates. *RSC Advances*, **2016**, 6, 104131-104138	3.7	34
72	Highly Sensitive, Flexible, and Wearable Pressure Sensor Based on a Giant Piezocapacitive Effect of Three-Dimensional Microporous Elastomeric Dielectric Layer. *ACS Applied Materials & Interfaces*, **2016**, 8, 16922-31	9.5	287
71	In-situ integration and surface modification of functional nanomaterials by localized hydrothermal reaction for integrated and high performance chemical sensors. *Sensors and Actuators B: Chemical*, **2016**, 226, 579-588	8.5	15
70	Polymeric Biomaterials for Medical Implants and Devices. *ACS Biomaterials Science and Engineering*, **2016**, 2, 454-472	5.5	358
69	Polyaniline-polystyrene nanofibers directly written on cheap flexible substrates by electrospinning, a low-cost and sensitive hydrogen sulfide gas sensor **2016**,		2
68	Recent Trends of Light-enhanced Metal Oxide Gas Sensors: Review. *Journal of Sensor Science and Technology*, **2016**, 25, 103-109	0.3	31
67	Stretchable, Skin-Mountable, and Wearable Strain Sensors and Their Potential Applications: A Review. *Advanced Functional Materials*, **2016**, 26, 1678-1698	15.6	1692
66	Extremely Robust and Patternable Electrodes for Copy-Paper-Based Electronics. *ACS Applied Materials & Interfaces*, **2016**, 8, 19031-7	9.5	39
65	Quantitative probing of tip-induced local cooling with a resistive nanoheater/thermometer. *Applied Physics Letters*, **2016**, 109, 253114	3.4	5
64	Temperature measurement of Joule heated silicon micro/nanowires using selectively decorated quantum dots. *Nanotechnology*, **2016**, 27, 505705	3.4	2
63	High-Performance, Solution-Processed, Embedded Multiscale Metallic Transparent Conductors. *ACS Applied Materials & Interfaces*, **2016**, 8, 10937-45	9.5	18
62	Self-heated silicon nanowires for high performance hydrogen gas detection. *Nanotechnology*, **2015**, 26, 095501	3.4	40
61	Fabrication of heterogeneous nanomaterial array by programmable heating and chemical supply within microfluidic platform towards multiplexed gas sensing application. *Scientific Reports*, **2015**, 5, 8149	4.9	20
60	Multiplexed gas sensor based on heterogeneous metal oxide nanomaterial array enabled by localized liquid-phase reaction. *ACS Applied Materials & Interfaces*, **2015**, 7, 10152-61	9.5	42

59	Ultra-stretchable and skin-mountable strain sensors using carbon nanotubes-Ecoflex nanocomposites. *Nanotechnology*, **2015**, 26, 375501	3.4	488
58	A bottom-gate silicon nanowire field-effect transistor with functionalized palladium nanoparticles for hydrogen gas sensors. *Solid-State Electronics*, **2015**, 114, 76-79	1.7	26
57	Nanotextured Polymer Substrate for Flexible and Mechanically Robust Metal Electrodes by Nanoimprint Lithography. *ACS Applied Materials & Interfaces*, **2015**, 7, 25171-9	9.5	12
56	Direct metal micropatterning on needle-type structures towards bioimpedance and chemical sensing applications. *Journal of Micromechanics and Microengineering*, **2015**, 25, 015002	2	8
55	Molecular Delivery: Rapid, High-Throughput, and Direct Molecular Beacon Delivery to Human Cancer Cells Using a Nanowire-Incorporated and Pneumatic Pressure-Driven Microdevice (Small 46/2015). *Small*, **2015**, 11, 6214-6214	11	
54	Computational analysis of metallic nanowire-elastomer nanocomposite based strain sensors. *AIP Advances*, **2015**, 5, 117233	1.5	14
53	Investigation of optimal hydrogen sensing performance in semiconducting carbon nanotube network transistors with palladium electrodes. *Applied Physics Letters*, **2015**, 107, 193108	3.4	9
52	Rapid, High-Throughput, and Direct Molecular Beacon Delivery to Human Cancer Cells Using a Nanowire-Incorporated and Pneumatic Pressure-Driven Microdevice. *Small*, **2015**, 11, 6215-24	11	14
51	Laser-Induced Hydrothermal Growth of Heterogeneous Metal-Oxide Nanowire on Flexible Substrate by Laser Absorption Layer Design. *ACS Nano*, **2015**, 9, 6059-68	16.7	64
50	Carbon nanotubes-ecoflex nanocomposite for strain sensing with ultra-high stretchability **2015**,		6
49	Exogenous Gene Integration for Microalgal Cell Transformation Using a Nanowire-Incorporated Microdevice. *ACS Applied Materials & Interfaces*, **2015**, 7, 27554-61	9.5	14
48	Focused energy field method for the localized synthesis and direct integration of 1D nanomaterials on microelectronic devices. *Advanced Materials*, **2015**, 27, 1207-15	24	47
47	Microfabricated and Nanoengineered Chemical Sensors for Air Quality Monitoring System. *KAIST Research Series*, **2015**, 141-170		
46	**2014**,		1
45	Highly integrated synthesis of heterogeneous nanostructures on nanowire heater array. *Nanoscale*, **2014**, 6, 14428-32	7.7	6
44	A stretchable strain sensor based on a metal nanoparticle thin film for human motion detection. *Nanoscale*, **2014**, 6, 11932-9	7.7	434
43	Highly stretchable and sensitive strain sensor based on silver nanowire-elastomer nanocomposite. *ACS Nano*, **2014**, 8, 5154-63	16.7	1544
42	Ag@Ni core-shell nanowire network for robust transparent electrodes against oxidation and sulfurization. *Small*, **2014**, 10, 4171-81	11	70

41	Piezoresistivity of AG NWS-PDMS nanocomposite **2014**,		7
40	Quantum dot-based immunoassay enhanced by high-density vertical ZnO nanowire array. *Biosensors and Bioelectronics*, **2014**, 55, 209-15	11.8	29
39	Interior-architectured ZnO nanostructure for enhanced electrical conductivity via stepwise fabrication process. *Nanoscale Research Letters*, **2014**, 9, 428	5	8
38	Sensitive and stable strain sensors based on the wavy structured electrodes **2014**,		4
37	Palladium nanoparticle decorated silicon nanowire field-effect transistor with side-gates for hydrogen gas detection. *Applied Physics Letters*, **2014**, 104, 013508	3.4	51
36	A multi-pair electrode based impedance sensing biopsy needle for tissue discrimination during biopsy process. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 1695-8	0.9	1
35	Flexible and sensitive foot pad for sole distributed force detection **2014**,		4
34	Strong localized surface plasmon resonance effects of Ag/TiO2 core-shell nanowire arrays in UV and visible light for photocatalytic activity. *Nanoscale*, **2014**, 6, 226-34	7.7	59
33	A self-heated silicon nanowire array: selective surface modification with catalytic nanoparticles by nanoscale Joule heating and its gas sensing applications. *Nanoscale*, **2013**, 5, 6851-6	7.7	42
32	Tensile characteristics of metal nanoparticle films on flexible polymer substrates for printed electronics applications. *Nanotechnology*, **2013**, 24, 085701	3.4	45
31	Direct micro/nano metal patterning based on two-step transfer printing of ionic metal nano-ink. *Nanotechnology*, **2012**, 23, 285301	3.4	18
30	Nanowire-integrated microfluidic devices for facile and reagent-free mechanical cell lysis. *Lab on A Chip*, **2012**, 12, 2914-21	7.2	60
29	Interfacial toughening of solution processed Ag nanoparticle thin films by organic residuals. *Nanotechnology*, **2012**, 23, 485704	3.4	30
28	Multimetallic alloy nanotubes with nanoporous framework. *ACS Nano*, **2012**, 6, 5659-67	16.7	66
27	A new route toward ultrasensitive, flexible chemical sensors: metal nanotubes by wet-chemical synthesis along sacrificial nanowire templates. *ACS Nano*, **2012**, 6, 598-608	16.7	117
26	Room-temperature compressive transfer printing of nanowires for nanoelectronic devices. *Langmuir*, **2012**, 28, 17851-8	4	4
25	Thermo-compressive transfer printing for facile alignment and robust device integration of nanowires. *Nanoscale*, **2012**, 4, 3444-9	7.7	6
24	Quantitative studies of long-term stable, top-down fabricated silicon nanowire pH sensors. *Applied Physics A: Materials Science and Processing*, **2012**, 107, 421-428	2.6	29

23	Novel fabrication method of diverse one-dimensional Pt/ZnO hybrid nanostructures and its sensor application. *Nanotechnology*, **2011**, 22, 035601	3.4	25
22	Direct synthesis and integration of functional nanostructures in microfluidic devices. *Lab on A Chip*, **2011**, 11, 1946-51	7.2	45
21	Localized temperature and chemical reaction control in nanoscale space by nanowire array. *Nano Letters*, **2011**, 11, 4818-25	11.5	52
20	Facile synthesis of noble metal nanotubes by using ZnO nanowires as sacrificial scaffolds and their electrocatalytic properties. *Chemical Communications*, **2011**, 47, 6299-301	5.8	29
19	Improving the stretchability of as-deposited Ag coatings on poly-ethylene-terephthalate substrates through use of an acrylic primer. *Journal of Applied Physics*, **2011**, 109, 073511	2.5	40
18	Top-down fabricated silicon nanowire sensors for real-time chemical detection. *Nanotechnology*, **2010**, 21, 015501	3.4	136
17	Ultrafast self-assembly of microscale particles by open-channel flow. *Langmuir*, **2010**, 26, 4661-7	4	36
16	Self-Assembled Ultra-thin Silica Layers for On-Chip Chromatography. *Materials Research Society Symposia Proceedings*, **2009**, 1191, 54		
15	Templated assembly of metal nanoparticles in nanoimprinted patterns for metal nanowire fabrication. *Nanotechnology*, **2009**, 20, 355302	3.4	19
14	Sub-10 nm nanoimprint lithography by wafer bowing. *Nano Letters*, **2008**, 8, 3865-9	11.5	70
13	ZnO nanowire network transistor fabrication on a polymer substrate by low-temperature, all-inorganic nanoparticle solution process. *Applied Physics Letters*, **2008**, 92, 154102	3.4	88
12	Nanoscale Patterning and Electronics on Flexible Substrate by Direct Nanoimprinting of Metallic Nanoparticles. *Advanced Materials*, **2008**, 20, 489-496	24	156
11	Selective surface functionalization of silicon nanowires via nanoscale joule heating. *Nano Letters*, **2007**, 7, 3106-11	11.5	105
10	Direct nanoimprinting of metal nanoparticles for nanoscale electronics fabrication. *Nano Letters*, **2007**, 7, 1869-77	11.5	262
9	Low temperature, low pressure nanoimprinting of chitosan as a biomaterial for bionanotechnology applications. *Applied Physics Letters*, **2007**, 90, 093902	3.4	35
8	Towards the silicon nanowire-based sensor for intracellular biochemical detection. *Biosensors and Bioelectronics*, **2007**, 22, 2065-70	11.8	88
7	Low Temperature OFET (Organic Field Effect Transistor) Fabrication by Metal Nanoparticle Imprinting **2007**, 947		
6	Nanoscale Joule Heating Along Silicon Nanowire and Its Nanoscale Heater Application **2007**, 1101		

5	Micro/Nanoscale Structure Fabrication by Direct Nanoimprinting of Metallic and Semiconducting Nanoparticles **2007**, 307		
4	nDSE-based overlay alignment: enabling technology for nano metrology and fabrication **2006**,		1
3	Thermal oxidation of tantalum films at various oxidation states from 300 to 700℃. *Journal of Applied Physics*, **2005**, 98, 114908	2.5	49
2	Collectively Exhaustive Hybrid Triboelectric Nanogenerator Based on Flow-Induced Impacting-Sliding Cylinder for Ocean Energy Harvesting. *Advanced Energy Materials*,2103076	21.8	6
1	Irregular Microdome Structure-Based Sensitive Pressure Sensor Using Internal Popping of Microspheres. *Advanced Functional Materials*,2201147	15.6	6