

Seung Hwan Ko

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5973563/publications.pdf>

Version: 2024-02-01

246
papers

18,381
citations

13827

67
h-index

14156

128
g-index

255
all docs

255
docs citations

255
times ranked

16360
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoforest of Hydrothermally Grown Hierarchical ZnO Nanowires for a High Efficiency Dye-Sensitized Solar Cell. <i>Nano Letters</i> , 2011, 11, 666-671.	4.5	960
2	Highly Stretchable and Highly Conductive Metal Electrode by Very Long Metal Nanowire Percolation Network. <i>Advanced Materials</i> , 2012, 24, 3326-3332.	11.1	909
3	Very long Ag nanowire synthesis and its application in a highly transparent, conductive and flexible metal electrode touch panel. <i>Nanoscale</i> , 2012, 4, 6408.	2.8	670
4	Highly Stretchable and Transparent Metal Nanowire Heater for Wearable Electronics Applications. <i>Advanced Materials</i> , 2015, 27, 4744-4751.	11.1	667
5	All-inkjet-printed flexible electronics fabrication on a polymer substrate by low-temperature high-resolution selective laser sintering of metal nanoparticles. <i>Nanotechnology</i> , 2007, 18, 345202.	1.3	646
6	Highly Sensitive and Stretchable Multidimensional Strain Sensor with Prestrained Anisotropic Metal Nanowire Percolation Networks. <i>Nano Letters</i> , 2015, 15, 5240-5247.	4.5	527
7	Room-Temperature Nanosoldering of a Very Long Metal Nanowire Network by Conducting-Polymer-Assisted Joining for a Flexible Touch-Panel Application. <i>Advanced Functional Materials</i> , 2013, 23, 4171-4176.	7.8	449
8	Fast Plasmonic Laser Nanowelding for a Cu-Nanowire Percolation Network for Flexible Transparent Conductors and Stretchable Electronics. <i>Advanced Materials</i> , 2014, 26, 5808-5814.	11.1	410
9	Nonvacuum, Maskless Fabrication of a Flexible Metal Grid Transparent Conductor by Low-Temperature Selective Laser Sintering of Nanoparticle Ink. <i>ACS Nano</i> , 2013, 7, 5024-5031.	7.3	389
10	A Hyper-Stretchable Elastic-Composite Energy Harvester. <i>Advanced Materials</i> , 2015, 27, 2866-2875.	11.1	350
11	Direct Nanoimprinting of Metal Nanoparticles for Nanoscale Electronics Fabrication. <i>Nano Letters</i> , 2007, 7, 1869-1877.	4.5	297
12	Highly Stretchable or Transparent Conductor Fabrication by a Hierarchical Multiscale Hybrid Nanocomposite. <i>Advanced Functional Materials</i> , 2014, 24, 5671-5678.	7.8	297
13	Stretchable and Transparent Kirigami Conductor of Nanowire Percolation Network for Electronic Skin Applications. <i>Nano Letters</i> , 2019, 19, 6087-6096.	4.5	276
14	Highly Stretchable and Transparent Electromagnetic Interference Shielding Film Based on Silver Nanowire Percolation Network for Wearable Electronics Applications. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 44609-44616.	4.0	270
15	Highly Stretchable and Transparent Supercapacitor by Ag-Au Core-Shell Nanowire Network with High Electrochemical Stability. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15449-15458.	4.0	243
16	Conductor microstructures by laser curing of printed gold nanoparticle ink. <i>Applied Physics Letters</i> , 2004, 84, 801-803.	1.5	238
17	Sensitive Wearable Temperature Sensor with Seamless Monolithic Integration. <i>Advanced Materials</i> , 2020, 32, e1905527.	11.1	221
18	Patterning by controlled cracking. <i>Nature</i> , 2012, 485, 221-224.	13.7	213

#	ARTICLE	IF	CITATIONS
19	Ag/Au/Polypyrrole Core-shell Nanowire Network for Transparent, Stretchable and Flexible Supercapacitor in Wearable Energy Devices. <i>Scientific Reports</i> , 2017, 7, 41981.	1.6	212
20	Biomimetic Color Changing Anisotropic Soft Actuators with Integrated Metal Nanowire Percolation Network Transparent Heaters for Soft Robotics. <i>Advanced Functional Materials</i> , 2018, 28, 1801847.	7.8	198
21	High Efficiency, Transparent, Reusable, and Active PM2.5 Filters by Hierarchical Ag Nanowire Percolation Network. <i>Nano Letters</i> , 2017, 17, 4339-4346.	4.5	196
22	Large-Scale Synthesis and Characterization of Very Long Silver Nanowires via Successive Multistep Growth. <i>Crystal Growth and Design</i> , 2012, 12, 5598-5605.	1.4	184
23	Air stable high resolution organic transistors by selective laser sintering of ink-jet printed metal nanoparticles. <i>Applied Physics Letters</i> , 2007, 90, 141103.	1.5	182
24	Nanoscale Electronics: Digital Fabrication by Direct Femtosecond Laser Processing of Metal Nanoparticles. <i>Advanced Materials</i> , 2011, 23, 3176-3181.	11.1	176
25	Nanoscale Patterning and Electronics on Flexible Substrate by Direct Nanoimprinting of Metallic Nanoparticles. <i>Advanced Materials</i> , 2008, 20, 489-496.	11.1	174
26	Solution-Processible Crystalline NiO Nanoparticles for High-Performance Planar Perovskite Photovoltaic Cells. <i>Scientific Reports</i> , 2016, 6, 30759.	1.6	166
27	One-Step Fabrication of Copper Electrode by Laser-Induced Direct Local Reduction and Agglomeration of Copper Oxide Nanoparticle. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23664-23670.	1.5	165
28	Subwavelength light focusing using random nanoparticles. <i>Nature Photonics</i> , 2013, 7, 454-458.	15.6	160
29	Low-Temperature Oxidation-Free Selective Laser Sintering of Cu Nanoparticle Paste on a Polymer Substrate for the Flexible Touch Panel Applications. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 11575-11582.	4.0	160
30	Fabrication of multilayer passive and active electric components on polymer using inkjet printing and low temperature laser processing. <i>Sensors and Actuators A: Physical</i> , 2007, 134, 161-168.	2.0	156
31	Simple hydrothermal synthesis of very-long and thin silver nanowires and their application in high quality transparent electrodes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11365-11371.	5.2	154
32	Experimental study on spreading and evaporation of inkjet printed pico-liter droplet on a heated substrate. <i>International Journal of Heat and Mass Transfer</i> , 2009, 52, 431-441.	2.5	150
33	A deep-learned skin sensor decoding the epicentral human motions. <i>Nature Communications</i> , 2020, 11, 2149.	5.8	148
34	Metal nanoparticle direct inkjet printing for low-temperature 3D micro metal structure fabrication. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 125010.	1.5	141
35	Flexible supercapacitor fabrication by room temperature rapid laser processing of roll-to-roll printed metal nanoparticle ink for wearable electronics application. <i>Journal of Power Sources</i> , 2014, 246, 562-568.	4.0	134
36	Transparent Soft Actuators/Sensors and Camouflage Skins for Imperceptible Soft Robotics. <i>Advanced Materials</i> , 2021, 33, e2002397.	11.1	131

#	ARTICLE	IF	CITATIONS
37	Shape morphing smart 3D actuator materials for micro soft robot. <i>Materials Today</i> , 2020, 41, 243-269.	8.3	130
38	Low-Cost Facile Fabrication of Flexible Transparent Copper Electrodes by Nanosecond Laser Ablation. <i>Advanced Materials</i> , 2015, 27, 2762-2767.	11.1	126
39	Nanorecycling: Monolithic Integration of Copper and Copper Oxide Nanowire Network Electrode through Selective Reversible Photothermochemical Reduction. <i>Advanced Materials</i> , 2015, 27, 6397-6403.	11.1	125
40	Recent progress in silver nanowire based flexible/wearable optoelectronics. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7445-7461.	2.7	125
41	Digital selective laser methods for nanomaterials: From synthesis to processing. <i>Nano Today</i> , 2016, 11, 547-564.	6.2	118
42	Next Generation Non-Vacuum, Maskless, Low Temperature Nanoparticle Ink Laser Digital Direct Metal Patterning for a Large Area Flexible Electronics. <i>PLoS ONE</i> , 2012, 7, e42315.	1.1	106
43	An evaluation of the exposure in nadir observation of the JEM-EUSO mission. <i>Astroparticle Physics</i> , 2013, 44, 76-90.	1.9	102
44	Highly Conductive Aluminum Textile and Paper for Flexible and Wearable Electronics. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7718-7723.	7.2	101
45	A dual-scale metal nanowire network transparent conductor for highly efficient and flexible organic light emitting diodes. <i>Nanoscale</i> , 2017, 9, 1978-1985.	2.8	101
46	Plasmonic-Tuned Flash Cu Nanowelding with Ultrafast Photochemical-Reducing and Interlocking on Flexible Plastics. <i>Advanced Functional Materials</i> , 2017, 27, 1701138.	7.8	98
47	Highly Stable Ni-Based Flexible Transparent Conducting Panels Fabricated by Laser Digital Patterning. <i>Advanced Functional Materials</i> , 2019, 29, 1806895.	7.8	97
48	Rapid, One-Step, Digital Selective Growth of ZnO Nanowires on 3D Structures Using Laser Induced Hydrothermal Growth. <i>Advanced Functional Materials</i> , 2013, 23, 3316-3323.	7.8	95
49	Biomimetic chameleon soft robot with artificial crypsis and disruptive coloration skin. <i>Nature Communications</i> , 2021, 12, 4658.	5.8	94
50	The Solid-State Neck Growth Mechanisms in Low Energy Laser Sintering of Gold Nanoparticles: A Molecular Dynamics Simulation Study. <i>Journal of Heat Transfer</i> , 2008, 130, .	1.2	93
51	ZnO nanowire network transistor fabrication on a polymer substrate by low-temperature, all-inorganic nanoparticle solution process. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	93
52	Simple ZnO Nanowires Patterned Growth by Microcontact Printing for High Performance Field Emission Device. <i>Journal of Physical Chemistry C</i> , 2011, 115, 11435-11441.	1.5	91
53	Bendable polymer electrolyte fuel cell using highly flexible Ag nanowire percolation network current collectors. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8541.	5.2	90
54	Stretchable/flexible silver nanowire electrodes for energy device applications. <i>Nanoscale</i> , 2019, 11, 20356-20378.	2.8	90

#	ARTICLE	IF	CITATIONS
55	Nanosecond laser ablation of gold nanoparticle films. <i>Applied Physics Letters</i> , 2006, 89, 141126.	1.5	89
56	Metal-Oxide Nanomaterials Synthesis and Applications in Flexible and Wearable Sensors. <i>ACS Nanoscience Au</i> , 2022, 2, 64-92.	2.0	86
57	In-tandem deposition and sintering of printed gold nanoparticle inks induced by continuous Gaussian laser irradiation. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 1259-1261.	1.1	84
58	Selective Laser Direct Patterning of Silver Nanowire Percolation Network Transparent Conductor for Capacitive Touch Panel. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 2317-2323.	0.9	83
59	Laser-Induced Hydrothermal Growth of Heterogeneous Metal-Oxide Nanowire on Flexible Substrate by Laser Absorption Layer Design. <i>ACS Nano</i> , 2015, 9, 6059-6068.	7.3	82
60	Full-Field Subwavelength Imaging Using a Scattering Superlens. <i>Physical Review Letters</i> , 2014, 113, 113901.	2.9	81
61	Laser annealed composite titanium dioxide electrodes for dye-sensitized solar cells on glass and plastics. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	80
62	Melt-mediated coalescence of solution-deposited ZnO nanoparticles by excimer laser annealing for thin-film transistor fabrication. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 94, 111-115.	1.1	79
63	Lithography-free high-resolution organic transistor arrays on polymer substrate by low energy selective laser ablation of inkjet-printed nanoparticle film. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 92, 579-587.	1.1	77
64	Synthesis of hierarchical TiO ₂ nanowires with densely-packed and omnidirectional branches. <i>Nanoscale</i> , 2013, 5, 11147.	2.8	77
65	Graphene as a material for energy generation and control: Recent progress in the control of graphene thermal conductivity by graphene defect engineering. <i>Materials Today Energy</i> , 2019, 12, 431-442.	2.5	76
66	Low-haze, annealing-free, very long Ag nanowire synthesis and its application in a flexible transparent touch panel. <i>Nanotechnology</i> , 2016, 27, 295201.	1.3	73
67	Microelectrode fabrication by laser direct curing of tiny nanoparticle self-generated from organometallic ink. <i>Optics Express</i> , 2011, 19, 2573.	1.7	72
68	Stretchable Skin-Like Cooling/Heating Device for Reconstruction of Artificial Thermal Sensation in Virtual Reality. <i>Advanced Functional Materials</i> , 2020, 30, 1909171.	7.8	71
69	Monolithic digital patterning of polydimethylsiloxane with successive laser pyrolysis. <i>Nature Materials</i> , 2021, 20, 100-107.	13.3	71
70	Hierarchical weeping willow nano-tree growth and effect of branching on dye-sensitized solar cell efficiency. <i>Nanotechnology</i> , 2012, 23, 194005.	1.3	69
71	Performance enhancement in bendable fuel cell using highly conductive Ag nanowires. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 7422-7427.	3.8	69
72	All-solid-state flexible supercapacitors by fast laser annealing of printed metal nanoparticle layers. <i>Journal of Materials Chemistry A</i> , 2015, 3, 8339-8345.	5.2	68

#	ARTICLE	IF	CITATIONS
73	An efficient reduced graphene-oxide filter for PM _{2.5} removal. Journal of Materials Chemistry A, 2018, 6, 16975-16982.	5.2	67
74	High-Throughput Near-Field Optical Nanoprocessing of Solution-Deposited Nanoparticles. Small, 2010, 6, 1812-1821.	5.2	66
75	3D micro-structures by piezoelectric inkjet printing of gold nanofluids. Journal of Micromechanics and Microengineering, 2012, 22, 055022.	1.5	66
76	Selective Sintering of Metal Nanoparticle Ink for Maskless Fabrication of an Electrode Micropattern Using a Spatially Modulated Laser Beam by a Digital Micromirror Device. ACS Applied Materials & Interfaces, 2014, 6, 2786-2790.	4.0	65
77	Damage-Free Low Temperature Pulsed Laser Printing of Gold Nanoinks On Polymers. Journal of Heat Transfer, 2005, 127, 724-732.	1.2	64
78	Transparent wearable three-dimensional touch by self-generated multiscale structure. Nature Communications, 2019, 10, 2582.	5.8	64
79	A Liquid Metal Based Multimodal Sensor and Haptic Feedback Device for Thermal and Tactile Sensation Generation in Virtual Reality. Advanced Functional Materials, 2021, 31, 2007772.	7.8	64
80	Maskless Fabrication of Highly Robust, Flexible Transparent Cu Conductor by Random Crack Network Assisted Cu Nanoparticle Patterning and Laser Sintering. Advanced Electronic Materials, 2016, 2, 1600277.	2.6	63
81	Digital selective transformation and patterning of highly conductive hydrogel bioelectronics by laser-induced phase separation. Science Advances, 2022, 8, .	4.7	63
82	Solution Processed Aluminum Paper for Flexible Electronics. Langmuir, 2012, 28, 13127-13135.	1.6	61
83	Flexible resistive pressure sensor with silver nanowire networks embedded in polymer using natural formation of air gap. Composites Science and Technology, 2019, 174, 50-57.	3.8	61
84	Random nanocrack, assisted metal nanowire-bundled network fabrication for a highly flexible and transparent conductor. RSC Advances, 2016, 6, 57434-57440.	1.7	60
85	From design for manufacturing (DFM) to manufacturing for design (MFD) via hybrid manufacturing and smart factory: A review and perspective of paradigm shift. International Journal of Precision Engineering and Manufacturing - Green Technology, 2016, 3, 209-222.	2.7	59
86	Flexible and Transparent Cu Electronics by Low-Temperature Acid-Assisted Laser Processing of Cu Nanoparticles. Advanced Materials Technologies, 2017, 2, 1600222.	3.0	59
87	High resolution selective multilayer laser processing by nanosecond laser ablation of metal nanoparticle films. Journal of Applied Physics, 2007, 102, .	1.1	57
88	Focused Energy Field Method for the Localized Synthesis and Direct Integration of 1D Nanomaterials on Microelectronic Devices. Advanced Materials, 2015, 27, 1207-1215.	11.1	55
89	Highly stretchable and oxidation-resistive Cu nanowire heater for replication of the feeling of heat in a virtual world. Journal of Materials Chemistry A, 2020, 8, 8281-8291.	5.2	55
90	Digital Selective Growth of ZnO Nanowire Arrays from Inkjet-Printed Nanoparticle Seeds on a Flexible Substrate. Langmuir, 2012, 28, 4787-4792.	1.6	54

#	ARTICLE	IF	CITATIONS
91	Recent advances in liquid-metal-based wearable electronics and materials. <i>IScience</i> , 2021, 24, 102698.	1.9	54
92	Challenges and Strategies in Developing an Enzymatic Wearable Sweat Glucose Biosensor as a Practical Point-Of-Care Monitoring Tool for Type II Diabetes. <i>Nanomaterials</i> , 2022, 12, 221.	1.9	54
93	Nanoparticle Selective Laser Processing for a Flexible Display Fabrication. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 05EC03.	0.8	53
94	Application of the specific thermal properties of Ag nanoparticles to high-resolution metal patterning. <i>Thermochimica Acta</i> , 2012, 542, 52-56.	1.2	53
95	A Review on Hierarchical Origami and Kirigami Structure for Engineering Applications. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2019, 6, 147-161.	2.7	53
96	Nanowire reinforced nanoparticle nanocomposite for highly flexible transparent electrodes: borrowing ideas from macrocomposites in steel-wire reinforced concrete. <i>Journal of Materials Chemistry C</i> , 2017, 5, 791-798.	2.7	52
97	Direct selective growth of ZnO nanowire arrays from inkjet-printed zinc acetate precursor on a heated substrate. <i>Nanoscale Research Letters</i> , 2013, 8, 489.	3.1	51
98	Advances in air filtration technologies: structure-based and interaction-based approaches. <i>Materials Today Advances</i> , 2021, 9, 100134.	2.5	51
99	The coalescence of supported gold nanoparticles induced by nanosecond laser irradiation. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 90, 247-253.	1.1	48
100	Controllable Ag nanostructure patterning in a microfluidic channel for real-time SERS systems. <i>Nanoscale</i> , 2014, 6, 2895.	2.8	47
101	Thermally Controlled, Active Imperceptible Artificial Skin in Visible to Infrared Range. <i>Advanced Functional Materials</i> , 2020, 30, 2003328.	7.8	47
102	Transparent Air Filters with Active Thermal Sterilization. <i>Nano Letters</i> , 2022, 22, 524-532.	4.5	47
103	Digital selective growth of a ZnO nanowire array by large scale laser decomposition of zinc acetate. <i>Nanoscale</i> , 2013, 5, 3698.	2.8	45
104	Flexible fuel cell using stiffness-controlled endplate. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 6013-6019.	3.8	45
105	A Transparent and Flexible Capacitive Force Touch Pad from High Aspect Ratio Copper Nanowires with Enhanced Oxidation Resistance for Applications in Wearable Electronics. <i>Small Methods</i> , 2018, 2, 1800077.	4.6	45
106	Directional Shape Morphing Transparent Walking Soft Robot. <i>Soft Robotics</i> , 2019, 6, 760-767.	4.6	45
107	Recent Progress in Transparent Conductors Based on Nanomaterials: Advancements and Challenges. <i>Advanced Materials Technologies</i> , 2020, 5, 1900939.	3.0	44
108	Non-vacuum, single-step conductive transparent ZnO patterning by ultra-short pulsed laser annealing of solution-deposited nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 107, 161-171.	1.1	43

#	ARTICLE	IF	CITATIONS
109	A three-dimensional metal grid mesh as a practical alternative to ITO. <i>Nanoscale</i> , 2016, 8, 14257-14263.	2.8	43
110	Recent Advances in Sustainable Wearable Energy Devices with Nanoscale Materials and Macroscale Structures. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	43
111	Nanomaterial enabled laser transfer for organic light emitting material direct writing. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	42
112	Study on the oxidation of copper nanowire network electrodes for skin mountable flexible, stretchable and wearable electronics applications. <i>Nanotechnology</i> , 2019, 30, 074001.	1.3	42
113	Thermal sintering of solution-deposited nanoparticle silver ink films characterized by spectroscopic ellipsometry. <i>Applied Physics Letters</i> , 2008, 93, 234104.	1.5	41
114	In Situ Monitoring of Laser-Assisted Hydrothermal Growth of ZnO Nanowires: Thermally Deactivating Growth Kinetics. <i>Small</i> , 2014, 10, 741-749.	5.2	39
115	Smart Stretchable Electronics for Advanced Human-Machine Interface. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000157.	3.3	38
116	Advances in protective layer-coating on metal nanowires with enhanced stability and their applications. <i>Applied Materials Today</i> , 2021, 22, 100909.	2.3	38
117	Explosive crystallization in the presence of melting. <i>Physical Review B</i> , 2006, 73, .	1.1	36
118	Mechanical and environmental durability of roll-to-roll printed silver nanoparticle film using a rapid laser annealing process for flexible electronics. <i>Microelectronics Reliability</i> , 2014, 54, 2871-2880.	0.9	36
119	Nanowire-on-Nanowire: All-Nanowire Electronics by On-Demand Selective Integration of Hierarchical Heterogeneous Nanowires. <i>ACS Nano</i> , 2017, 11, 12311-12317.	7.3	36
120	Moiré-Free Imperceptible and Flexible Random Metal Grid Electrodes with Large Figure-of-Merit by Photonic Sintering Control of Copper Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 15773-15780.	4.0	35
121	Highly Customizable Transparent Silver Nanowire Patterning via Inkjet-Printed Conductive Polymer Templates Formed on Various Surfaces. <i>Advanced Materials Technologies</i> , 2020, 5, 2000042.	3.0	35
122	Nanoscale Heaters: Single Nanowire Resistive Nano-Heater for Highly Localized Thermo-Chemical Reactions: Localized Hierarchical Heterojunction Nanowire Growth (<i>Small</i> 24/2014). <i>Small</i> , 2014, 10, 5014-5014.	5.2	34
123	Metal Nanowire-Coated Metal Woven Mesh for High-Performance Stretchable Transparent Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 40905-40913.	4.0	34
124	Fiber laser annealing of indium-tin-oxide nanoparticles for large area transparent conductive layers and optical film characterization. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 104, 29-38.	1.1	33
125	Biocompatible Cost-Effective Electrophysiological Monitoring with Oxidation-Free Cu-Au Core-Shell Nanowire. <i>Advanced Materials Technologies</i> , 2020, 5, 2000661.	3.0	33
126	Effect of assembly pressure on the performance of a bendable polymer electrolyte fuel cell based on a silver nanowire current collector. <i>Energy</i> , 2017, 134, 412-419.	4.5	32

#	ARTICLE	IF	CITATIONS
127	Performance variation of bendable polymer electrolyte fuel cell based on Ag nanowire current collector under mixed bending and twisting load. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 1884-1890.	3.8	32
128	Functional Materials and Devices for XR (VR/AR/MR) Applications. <i>Advanced Functional Materials</i> , 2021, 31, 2106546.	7.8	32
129	Low temperature thermal engineering of nanoparticle ink for flexible electronics applications. <i>Semiconductor Science and Technology</i> , 2016, 31, 073003.	1.0	29
130	Semipermanent Copper Nanowire Network with an Oxidation-Proof Encapsulation Layer. <i>Advanced Materials Technologies</i> , 2019, 4, 1800422.	3.0	29
131	Soft multi-modal thermoelectric skin for dual functionality of underwater energy harvesting and thermoregulation. <i>Nano Energy</i> , 2022, 95, 107002.	8.2	29
132	Two orders of magnitude suppression of graphene's thermal conductivity by heavy dopants (Si). <i>Carbon</i> , 2018, 138, 98-107.	5.4	28
133	Thermo-Haptic Materials and Devices for Wearable Virtual and Augmented Reality. <i>Advanced Functional Materials</i> , 2021, 31, 2007376.	7.8	28
134	Silver nanoparticle piezoresistive sensors fabricated by roll-to-roll slot-die coating and laser direct writing. <i>Optics Express</i> , 2014, 22, 8919.	1.7	27
135	Biohybrid Actuators for Soft Robotics: Challenges in Scaling Up. <i>Actuators</i> , 2020, 9, 96.	1.2	27
136	High-temperature, thin, flexible and transparent Ni-based heaters patterned by laser-induced reductive sintering on colorless polyimide. <i>Journal of Materials Chemistry C</i> , 2021, 9, 5652-5661.	2.7	27
137	Direct Micro/Nano Patterning of Multiple Colored Quantum Dots by Large Area and Multilayer Imprinting. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11728-11733.	1.5	26
138	Mechano-thermo-chromic device with supersaturated salt hydrate crystal phase change. <i>Science Advances</i> , 2019, 5, eaav4916.	4.7	26
139	Multi-Bandgap Monolithic Metal Nanowire Percolation Network Sensor Integration by Reversible Selective Laser-Induced Redox. <i>Nano-Micro Letters</i> , 2022, 14, 49.	14.4	26
140	Digital 3D Local Growth of Iron Oxide Micro- and Nanorods by Laser-Induced Photothermal Chemical Liquid Growth. <i>Journal of Physical Chemistry C</i> , 2014, 118, 15448-15454.	1.5	25
141	Dynamic Pore Modulation of Stretchable Electrospun Nanofiber Filter for Adaptive Machine Learned Respiratory Protection. <i>ACS Nano</i> , 2021, 15, 15730-15740.	7.3	25
142	Significant thermoelectric conversion efficiency enhancement of single layer graphene with substitutional silicon dopants. <i>Nano Energy</i> , 2021, 87, 106188.	8.2	25
143	Thermally stable Ag@ZrO ₂ core-shell via atomic layer deposition. <i>Materials Letters</i> , 2017, 188, 372-374.	1.3	24
144	Effect of graphene-substrate conformity on the in-plane thermal conductivity of supported graphene. <i>Carbon</i> , 2017, 125, 39-48.	5.4	24

#	ARTICLE	IF	CITATIONS
145	Digitally patterned resistive micro heater as a platform for zinc oxide nanowire based micro sensor. Applied Surface Science, 2018, 447, 1-7.	3.1	24
146	Self-assembled stretchable photonic crystal for a tunable color filter. Optics Letters, 2018, 43, 3501.	1.7	24
147	Long-Term Sustainable Aluminum Precursor Solution for Highly Conductive Thin Films on Rigid and Flexible Substrates. ACS Applied Materials & Interfaces, 2014, 6, 15480-15487.	4.0	23
148	Metallic Nanowire Coupled CsPbBr ₃ Quantum Dots Plasmonic Nanolaser. Advanced Functional Materials, 2021, 31, 2102375.	7.8	23
149	Laser induced short plane acoustic wave focusing in water. Applied Physics Letters, 2007, 91, .	1.5	22
150	Nanosecond laser ablation of silver nanoparticle film. Optical Engineering, 2013, 52, 024302.	0.5	22
151	Evolvable Skin Electronics by In Situ and In Operando Adaptation. Advanced Functional Materials, 2022, 32, 2106329.	7.8	21
152	Improvement of light-harvesting efficiency in dye-sensitized solar cells using silica beads embedded in a TiO ₂ nanoporous structure. Journal Physics D: Applied Physics, 2013, 46, 024006.	1.3	20
153	Review of the Multi-scale Nano-structure Approach to the Development of High Efficiency Solar Cells. Smart Science, 2014, 2, 54-62.	1.9	20
154	Monolithic digital patterning of polyimide by laser-induced pyrolytic jetting. Chemical Engineering Journal, 2022, 428, 131050.	6.6	20
155	Overcoming the "retention vs. voltage" trade-off in nonvolatile organic memory: Ag nanoparticles covered with dipolar self-assembled monolayers as robust charge storage nodes. Organic Electronics, 2013, 14, 3260-3266.	1.4	19
156	Ultrasonication assisted production of silver nanowires with low aspect ratio and their optical properties. Ultrasonics Sonochemistry, 2015, 22, 35-40.	3.8	19
157	Enhanced Thermoelectric Conversion Efficiency of CVD Graphene with Reduced Grain Sizes. Nanomaterials, 2018, 8, 557.	1.9	19
158	Vacuum-assisted microcontact printing (µCP) for aligned patterning of nano and biochemical materials. Journal of Materials Chemistry C, 2013, 1, 268-274.	2.7	18
159	Low-Temperature Rapid Fabrication of ZnO Nanowire UV Sensor Array by Laser-Induced Local Hydrothermal Growth. Journal of Nanomaterials, 2013, 2013, 1-7.	1.5	18
160	Recent progress in controlled nano/micro cracking as an alternative nano-patterning method for functional applications. Nanoscale Horizons, 2020, 5, 1036-1049.	4.1	18
161	Hierarchically Structured Conductive Polymer Binders with Silver Nanowires for High-Performance Silicon Anodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 17340-17347.	4.0	17
162	Laser based hybrid inkjet printing of nanoink for flexible electronics. , 2005, 5713, 97.		16

#	ARTICLE	IF	CITATIONS
163	Optimum design of ordered bulk heterojunction organic photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2011, 95, 3021-3024.	3.0	16
164	Reinforcing Ag nanoparticle thin films with very long Ag nanowires. <i>Nanotechnology</i> , 2013, 24, 415704.	1.3	16
165	Direct Micro Metal Patterning on Plastic Substrates by Electrohydrodynamic Jet Printing for Flexible Electronic Applications. <i>ECS Journal of Solid State Science and Technology</i> , 2015, 4, P3052-P3056.	0.9	16
166	ZnO/CuO/M (M = Ag, Au) Hierarchical Nanostructure by Successive Photoreduction Process for Solar Hydrogen Generation. <i>Nanomaterials</i> , 2018, 8, 323.	1.9	16
167	Selective Photo-thermal Conversion of Tungsten Oxide Sol Precursor for Electrochromic Smart Window Applications. <i>Acta Materialia</i> , 2020, 201, 528-534.	3.8	16
168	Energy Harvesting Untethered Soft Electronic Devices. <i>Advanced Healthcare Materials</i> , 2021, 10, e2002286.	3.9	16
169	Selective Thermochemical Growth of Hierarchical ZnO Nanowire Branches on Silver Nanowire Backbone Percolation Network Heaters. <i>Journal of Physical Chemistry C</i> , 2017, 121, 22542-22549.	1.5	15
170	Highly stable silver-platinum core-shell nanowires for H_2 detection. <i>Nanoscale</i> , 2021, 13, 13129-13141.	2.8	15
171	Zinc Oxide Nanowire Forest for Pool Boiling Heat Transfer. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 11PE11.	0.8	15
172	Large-area nanoimprinting on various substrates by reconfigurable maskless laser direct writing. <i>Nanotechnology</i> , 2012, 23, 344012.	1.3	14
173	Control and Manipulation of Nano Cracks Mimicking Optical Wave. <i>Scientific Reports</i> , 2015, 5, 17292.	1.6	14
174	Micropatterning of Metal Nanoparticle Ink by Laser-Induced Thermocapillary Flow. <i>Nanomaterials</i> , 2018, 8, 645.	1.9	14
175	Bending-durable membrane-electrode assembly using metal nanowires for bendable polymer electrolyte membrane fuel cell. <i>Energy</i> , 2019, 172, 874-880.	4.5	14
176	Bioinspired Soft Robotic Fish for Wireless Underwater Control of Gliding Locomotion. <i>Advanced Intelligent Systems</i> , 2022, 4, .	3.3	14
177	From Chaos to Control: Programmable Crack Patterning with Molecular Order in Polymer Substrates. <i>Advanced Materials</i> , 2021, 33, e2008434.	11.1	13
178	Pulsed laser annealing of semiconductor structures for functional devices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 3264-3270.	0.8	12
179	Flexible Electronics: Highly Stretchable and Highly Conductive Metal Electrode by Very Long Metal Nanowire Percolation Network (<i>Adv. Mater.</i> 25/2012). <i>Advanced Materials</i> , 2012, 24, 3325-3325.	11.1	12
180	Flexible Superhydrophobic Polymeric Surfaces with Micro-Nanohybrid Structures Using Black Silicon. <i>Macromolecular Materials and Engineering</i> , 2013, 298, 311-317.	1.7	12

#	ARTICLE	IF	CITATIONS
181	Single Nanowire Resistive Nanoheater for Highly Localized Thermochemical Reactions: Localized Hierarchical Heterojunction Nanowire Growth. <i>Small</i> , 2014, 10, 5015-5022.	5.2	12
182	ZnO nano-tree growth study for high efficiency solar cell. <i>Energy Procedia</i> , 2012, 14, 1093-1098.	1.8	11
183	Selective electro thermal growth of zinc oxide nanowire on photolithographically patterned electrode for microsensor applications. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2016, 3, 173-177.	2.7	11
184	Laser-Induced Crystalline-Phase Transformation for Hematite Nanorod Photoelectrochemical Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 48917-48927.	4.0	11
185	Digital Laser Micropainting for Reprogrammable Optoelectronic Applications. <i>Advanced Functional Materials</i> , 2021, 31, .	7.8	11
186	Laser induced plane acoustic wave generation, propagation, and interaction with rigid structures in water. <i>Journal of Applied Physics</i> , 2008, 104, 073104.	1.1	10
187	Facile Photoreduction Process for ZnO/Ag Hierarchical Nanostructured Photoelectrochemical Cell Integrated with Supercapacitor. <i>ECS Journal of Solid State Science and Technology</i> , 2015, 4, P424-P428.	0.9	10
188	Photoreduction Synthesis of Hierarchical Hematite/Silver Nanostructures for Photoelectrochemical Water Splitting. <i>Energy Technology</i> , 2016, 4, 271-277.	1.8	10
189	Boosted thermal conductance of polycrystalline graphene by spin-coated silver nanowires. <i>International Journal of Heat and Mass Transfer</i> , 2019, 134, 547-553.	2.5	10
190	Interfacial Thermal Contact Conductance inside the Graphene/Bi ₂ Te ₃ Heterostructure. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900275.	1.9	9
191	Significant thermal conductivity reduction of CVD graphene with relatively low hole densities fabricated by focused ion beam processing. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	9
192	Zinc Oxide Nanowire Forest for Pool Boiling Heat Transfer. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 11PE11.	0.8	8
193	Fabrication of submicron-sized metal patterns on a flexible polymer substrate by femtosecond laser sintering of metal nanoparticles. <i>International Journal of Nanomanufacturing</i> , 2013, 9, 468.	0.3	8
194	Highly Controlled Nanoporous Ag Electrode by Vaporization Control of 2-Ethoxyethanol for a Flexible Supercapacitor Application. <i>Langmuir</i> , 2017, 33, 1854-1860.	1.6	8
195	Robust flexible electrodes with 2D interlayers. <i>Nature Electronics</i> , 2021, 4, 95-96.	13.1	8
196	Recent Advances in 1D Nanomaterials-Based Bioelectronics for Healthcare Applications. <i>Advanced NanoBiomed Research</i> , 2022, 2, .	1.7	8
197	Pattern analysis of aligned nanowires in a microchannel. <i>Measurement Science and Technology</i> , 2013, 24, 035303.	1.4	7
198	Thermal conductivity reduction of multilayer graphene with fine grain sizes. <i>JMST Advances</i> , 2019, 1, 191-195.	0.6	7

#	ARTICLE	IF	CITATIONS
199	Operation Range-Optimized Silver Nanowire Through Junction Treatment. <i>Electronic Materials Letters</i> , 2020, 16, 491-497.	1.0	7
200	Fabrication of multilayer passive electric components using inkjet printing and low temperature laser processing on polymer. , 2006, , .		6
201	Reversible, Selective, Ultrawide-Range Variable Stiffness Control by Spatial Micro-Water Molecule Manipulation. <i>Advanced Science</i> , 2021, 8, e2102536.	5.6	6
202	Smart Wristband: Touch-and-Motion-Tracking Wearable 3D Input Device for Smart Glasses. <i>Lecture Notes in Computer Science</i> , 2014, , 109-118.	1.0	6
203	Assembly of Acircular SnO2Rod Using Optical Tweezers and Laser Curing of Metal Nanoparticles. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 05EA12.	0.8	5
204	Subtractive Laser Processing of Low Temperature Inkjet Printed Micro Electric Components of Functional Nano-Ink for Flexible Electronics. , 2005, , 1935.		4
205	Fabrication of Nano-scale Conductors by Selective Femtosecond Laser Sintering of Metal Nanoparticles. , 2010, , .		4
206	Electrical mobility of silver nanowires in transition and continuum regimes. <i>Journal of Aerosol Science</i> , 2014, 72, 21-31.	1.8	4
207	Advanced Inkjet Technology for 3D Micro-metal Structure Fabrication. , 2015, , 425-439.		4
208	Shear-Assisted Laser Transfer of Metal Nanoparticle Ink to an Elastomer Substrate. <i>Materials</i> , 2018, 11, 2511.	1.3	4
209	Facile fabrication of flexible metal grid transparent electrode using inkjet-printed dot array as sacrificial layer. <i>Scientific Reports</i> , 2022, 12, 1572.	1.6	4
210	Laser-induced acoustic wave generation/propagation/interaction in water in various internal channels. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 100, 391-400.	1.1	3
211	Crazy colour printing without ink. <i>Nature</i> , 2019, 570, 312-313.	13.7	3
212	Status of Research on Selective Laser Sintering of Nanomaterials for Flexible Electronics Fabrication. <i>Transactions of the Korean Society of Mechanical Engineers, B</i> , 2011, 35, 533-538.	0.0	3
213	Fabrication of Inkjet Printed Flexible Electronics by Low Temperature Subtractive Laser Processing. , 2005, , 599.		2
214	Effect of carrier gas temperature on pentacene thin film formation by organic vapor-jet printing techniques. <i>Thermochimica Acta</i> , 2012, 542, 74-79.	1.2	2
215	Hybrid subtractive micro-patterning of a self-assembled SiO2 nano/microsphere monolayer. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 105006.	1.5	2
216	Nanowires: Nanorecycling: Monolithic Integration of Copper and Copper Oxide Nanowire Network Electrode through Selective Reversible Photothermochemical Reduction (<i>Adv. Mater.</i> 41/2015). <i>Advanced Materials</i> , 2015, 27, 6396-6396.	11.1	2

#	ARTICLE	IF	CITATIONS
217	The Effect of Particle Morphology on Unipolar Diffusion Charging of Silver Nanowires. <i>Aerosol Science and Technology</i> , 2015, 49, 290-298.	1.5	2
218	A Review on Investigation of Graphene Thermal Property: Recent Development in Measurement Techniques. <i>Multiscale Science and Engineering</i> , 2019, 1, 267-279.	0.9	2
219	In situ crystal growth during explosive crystallization. , 2006, 6106, 252.		1
220	The neck growth mechanisms in low energy laser sintering of gold nanoparticles: a molecular dynamics simulation study. , 2007, , .		1
221	Poster: Wearable input device for smart glasses based on a wristband-type motion-aware touch panel. , 2014, , .		1
222	Maskless digital manufacturing of organic thin film transistor by femtosecond laser direct patterning. , 2014, , .		1
223	Flexible and highly sensitive multi-dimensional strain sensor with intersecting metal nanowire arrays. , 2017, , .		1
224	Perspectiveâ€”A Brief Perspective on the Fabrication of Hierarchical Nanostructure for Solar Water Splitting Photoelectrochemical Cells. <i>ECS Journal of Solid State Science and Technology</i> , 2018, 7, Q131-Q135.	0.9	1
225	Preface for the Soft and Green Manufacturing and Applications. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2021, 8, 743-744.	2.7	1
226	Development of Low-Shrink Epoxy Putty to Solve Appearance-Quality Defects of Carbon-Fiber-Reinforced Plastic Automotive Exterior Parts. <i>Materials</i> , 2021, 14, 6419.	1.3	1
227	Air Stable High Resolution OFET (Organic Field Effect Transistor) Fabrication Using Inkjet Printing and Low Temperature Selective Laser Sintering Process. , 2006, , 201.		0
228	Low Temperature OFET (Organic Field Effect Transistor) Fabrication by Metal Nanoparticle Imprinting. , 2007, , 947.		0
229	Laser-assisted maskless fabrication of flexible electronics. , 2007, , .		0
230	Lithography-free high-resolution inkjet-printed OFET (organic field effect transistor) fabrication on polymer by laser processing. , 2007, , .		0
231	Patterning microconductor using nanosecond laser ablation of metal nanoparticle film. , 2007, , .		0
232	Pulsed laser induced acoustic wave propagation and interaction in liquid: experiment and simulation. <i>Proceedings of SPIE</i> , 2008, , .	0.8	0
233	Laser micro/nanoprocessing for functional electronics. <i>Proceedings of SPIE</i> , 2008, , .	0.8	0
234	Large Area Flexible Electronics Fabrication by Selective Laser Sintering of Nanoparticles with a Scanning Mirror. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1196, 28.	0.1	0

#	ARTICLE	IF	CITATIONS
235	Organic Light Emitting Material Direct Writing by Nanomaterial Enabled Laser Transfer. Materials Research Society Symposia Proceedings, 2009, 1179, 44.	0.1	0
236	Fabrication of submicron-sized metal patterns on a flexible polymer substrate by femtosecond laser sintering of metal nanoparticles. , 2012, , .		0
237	Nanowires: Rapid, One-Step, Digital Selective Growth of ZnO Nanowires on 3D Structures Using Laser Induced Hydrothermal Growth (Adv. Funct. Mater. 26/2013). Advanced Functional Materials, 2013, 23, 3315-3315.	7.8	0
238	Highly Conductive Aluminum Textile and Paper for Flexible and Wearable Electronics (Angew. Chem. 30/2013). Angewandte Chemie, 2013, 125, 8042-8042.	1.6	0
239	Recent progress in laser assisted digital selective nanomaterial processing. , 2017, , .		0
240	Low Temperature Process and Material Development for Flexible/Stretchable Transparent Conductor. Digest of Technical Papers SID International Symposium, 2020, 51, 1044-1047.	0.1	0
241	Editorial: Window Electrodes for Emerging Thin Film Photovoltaics. Frontiers in Materials, 2020, 7, .	1.2	0
242	Nanomaterial Enabled Laser Transfer of Temperature Sensitive Organic Light Emitting Diode Materials. , 2009, , .		0
243	Subwavelength Light Control via Wavefront Shaping in Complex Media. , 2013, , .		0
244	Mechano-thermo-chromic device with supersaturated salt hydrate crystal for next-generation smart window applications. , 2020, , .		0
245	Metal nanowire based electronic devices. , 2021, , .		0
246	Recent Advances in 1D Nanomaterial-Based Bioelectronics for Healthcare Applications. Advanced NanoBiomed Research, 2022, 2, .	1.7	0