

Seungyong Han

List of Publications by Year in descending order

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Version: 2024-02-01

53
papers

5,366
citations

186265

28
h-index

168389

53
g-index

56
all docs

56
docs citations

56
times ranked

7052
citing authors

#	ARTICLE	IF	CITATIONS
1	A soft, wearable microfluidic device for the capture, storage, and colorimetric sensing of sweat. <i>Science Translational Medicine</i> , 2016, 8, 366ra165.	12.4	933
2	Highly Stretchable and Transparent Metal Nanowire Heater for Wearable Electronics Applications. <i>Advanced Materials</i> , 2015, 27, 4744-4751.	21.0	667
3	Battery-free, skin-interfaced microfluidic/electronic systems for simultaneous electrochemical, colorimetric, and volumetric analysis of sweat. <i>Science Advances</i> , 2019, 5, eaav3294.	10.3	497
4	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.	21.0	410
5	Highly Stretchable or Transparent Conductor Fabrication by a Hierarchical Multiscale Hybrid Nanocomposite. <i>Advanced Functional Materials</i> , 2014, 24, 5671-5678.	14.9	297
6	Battery-free, wireless sensors for full-body pressure and temperature mapping. <i>Science Translational Medicine</i> , 2018, 10, .	12.4	247
7	Thin, Soft, Skin-Mounted Microfluidic Networks with Capillary Bursting Valves for Chrono-Sampling of Sweat. <i>Advanced Healthcare Materials</i> , 2017, 6, 1601355.	7.6	209
8	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.	14.9	198
9	Relation between blood pressure and pulse wave velocity for human arteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 11144-11149.	7.1	193
10	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.	3.1	165
11	Subwavelength light focusing using random nanoparticles. <i>Nature Photonics</i> , 2013, 7, 454-458.	31.4	160
12	Multimodal Sensing with a Three-Dimensional Piezoresistive Structure. <i>ACS Nano</i> , 2019, 13, 10972-10979.	14.6	134
13	Nanorecycling: Monolithic Integration of Copper and Copper Oxide Nanowire Network Electrode through Selective Reversible Photothermochemical Reduction. <i>Advanced Materials</i> , 2015, 27, 6397-6403.	21.0	125
14	Recent progress in silver nanowire based flexible/wearable optoelectronics. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7445-7461.	5.5	125
15	Mechanically Reinforced Skin-Electronics with Networked Nanocomposite Elastomer. <i>Advanced Materials</i> , 2016, 28, 10257-10265.	21.0	108
16	Stretchable/flexible silver nanowire electrodes for energy device applications. <i>Nanoscale</i> , 2019, 11, 20356-20378.	5.6	90
17	Full-Field Subwavelength Imaging Using a Scattering Superlens. <i>Physical Review Letters</i> , 2014, 113, 113901.	7.8	81
18	Highly stretchable and oxidation-resistive Cu nanowire heater for replication of the feeling of heat in a virtual world. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8281-8291.	10.3	55

#	ARTICLE	IF	CITATIONS
19	Concentrator photovoltaic module architectures with capabilities for capture and conversion of full global solar radiation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8210-E8218.	7.1	48
20	A Transparent and Flexible Capacitive Force Touch Pad from High Aspect Ratio Copper Nanowires with Enhanced Oxidation Resistance for Applications in Wearable Electronics. Small Methods, 2018, 2, 1800077.	8.6	45
21	Directional Shape Morphing Transparent Walking Soft Robot. Soft Robotics, 2019, 6, 760-767.	8.0	45
22	Study on the oxidation of copper nanowire network electrodes for skin mountable flexible, stretchable and wearable electronics applications. Nanotechnology, 2019, 30, 074001.	2.6	42
23	Vital signal sensing and manipulation of a microscale organ with a multifunctional soft gripper. Science Robotics, 2021, 6, eabi6774.	17.6	38
24	Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. ACS Nano, 2018, 12, 4164-4171.	14.6	36
25	Graphene- and Carbon-Nanotube-Based Transparent Electrodes for Semitransparent Solar Cells. Materials, 2018, 11, 1503.	2.9	36
26	Anode-Free Sodium Metal Batteries Based on Nanohybrid Core-Shell Templates. Small, 2019, 15, e1901274.	10.0	34
27	Biocompatible Cost-Effective Electrophysiological Monitoring with Oxidation-Free Cu-Au Core-Shell Nanowire. Advanced Materials Technologies, 2020, 5, 2000661.	5.8	33
28	Electroosmosis-Driven Hydrogel Actuators Using Hydrophobic/Hydrophilic Layer-By-Layer Assembly-Induced Crack Electrodes. ACS Nano, 2020, 14, 11906-11918.	14.6	31
29	Semipermanent Copper Nanowire Network with an Oxidation-Proof Encapsulation Layer. Advanced Materials Technologies, 2019, 4, 1800422.	5.8	29
30	Mechano-thermo-chromic device with supersaturated salt hydrate crystal phase change. Science Advances, 2019, 5, eaav4916.	10.3	26
31	Foot Plantar Pressure Measurement System Using Highly Sensitive Crack-Based Sensor. Sensors, 2019, 19, 5504.	3.8	26
32	Actuating compact wearable augmented reality devices by multifunctional artificial muscle. Nature Communications, 2022, 13, .	12.8	24
33	Effect of Metal Thickness on the Sensitivity of Crack-Based Sensors. Sensors, 2018, 18, 2872.	3.8	22
34	ZnO/CuO/M (M = Ag, Au) Hierarchical Nanostructure by Successive Photoreduction Process for Solar Hydrogen Generation. Nanomaterials, 2018, 8, 323.	4.1	16
35	Micropatterning of Metal Nanoparticle Ink by Laser-Induced Thermocapillary Flow. Nanomaterials, 2018, 8, 645.	4.1	14
36	Design of Polarization-Independent and Wide-Angle Broadband Absorbers for Highly Efficient Reflective Structural Color Filters. Materials, 2019, 12, 1050.	2.9	13

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37	Soft Directional Adhesion Gripper Fabricated by 3D Printing Process for Gripping Flexible Printed Circuit Boards. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2022, 9, 1151-1163.	4.9	13
38	FEP Encapsulated Crack-Based Sensor for Measurement in Moisture-Laden Environment. <i>Materials</i> , 2019, 12, 1516.	2.9	12
39	Digital Laser Micropainting for Reprogrammable Optoelectronic Applications. <i>Advanced Functional Materials</i> , 2021, 31, .	14.9	11
40	Nature-inspired rollable electronics. <i>NPG Asia Materials</i> , 2019, 11, .	7.9	10
41	Design of a Sensitive Balloon Sensor for Safe Human-Robot Interaction. <i>Sensors</i> , 2021, 21, 2163.	3.8	8
42	Functional Encapsulating Structure for Wireless and Immediate Monitoring of the Fluid Penetration. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	6
43	Shear-Assisted Laser Transfer of Metal Nanoparticle Ink to an Elastomer Substrate. <i>Materials</i> , 2018, 11, 2511.	2.9	4
44	Solution processes for ultrabroadband and omnidirectional graded-index glass lenses with near-zero reflectivity in high concentration photovoltaics. <i>Scientific Reports</i> , 2018, 8, 14907.	3.3	4
45	Design of a Biologically Inspired Water-Walking Robot Powered by Artificial Muscle. <i>Micromachines</i> , 2022, 13, 627.	2.9	4
46	Flexible Electronics: Fast Plasmonic Laser Nanowelding for a Cu-Nanowire Percolation Network for Flexible Transparent Conductors and Stretchable Electronics (<i>Adv. Mater.</i> 33/2014). <i>Advanced Materials</i> , 2014, 26, 5888-5888.	21.0	3
47	Microfluidic Networks: Thin, Soft, Skin-Mounted Microfluidic Networks with Capillary Bursting Valves for Chrono-Sampling of Sweat (<i>Adv. Healthcare Mater.</i> 5/2017). <i>Advanced Healthcare Materials</i> , 2017, 6, .	7.6	3
48	Wearable Electronics: Biocompatible Cost-Effective Electrophysiological Monitoring with Oxidation-Free Cu-Au Core-Shell Nanowire (<i>Adv. Mater. Technol.</i> 12/2020). <i>Advanced Materials Technologies</i> , 2020, 5, 2070073.	5.8	3
49	Nanocomposites: Highly Stretchable or Transparent Conductor Fabrication by a Hierarchical Multiscale Hybrid Nanocomposite (<i>Adv. Funct. Mater.</i> 36/2014). <i>Advanced Functional Materials</i> , 2014, 24, 5618-5618.	14.9	2
50	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.	21.0	2
51	Intagliated Cu substrate containing multifunctional lithiophilic trenches for Li metal anodes. <i>Chemical Engineering Journal</i> , 2022, 428, 130939.	12.7	2
52	Sodium Metal Batteries: Anode-Free Sodium Metal Batteries Based on Nanohybrid Core-Shell Templates (<i>Small</i> 37/2019). <i>Small</i> , 2019, 15, 1970201.	10.0	0
53	Digital Laser Micropainting: Digital Laser Micropainting for Reprogrammable Optoelectronic Applications (<i>Adv. Funct. Mater.</i> 1/2021). <i>Advanced Functional Materials</i> , 2021, 31, 2170002.	14.9	0