

Daeshik Kang

List of Publications by Year in descending order

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Version: 2024-02-01

44
papers

4,426
citations

236925

25
h-index

254184

43
g-index

46
all docs

46
docs citations

46
times ranked

6236
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrasensitive mechanical crack-based sensor inspired by the spider sensory system. <i>Nature</i> , 2014, 516, 222-226.	27.8	1,196
2	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
3	Dramatically Enhanced Mechanosensitivity and Signal-to-Noise Ratio of Nanoscale Crack-Based Sensors: Effect of Crack Depth. <i>Advanced Materials</i> , 2016, 28, 8130-8137.	21.0	276
4	Battery-free, wireless sensors for full-body pressure and temperature mapping. <i>Science Translational Medicine</i> , 2018, 10, .	12.4	247
5	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
6	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
7	Ultra-flexible perovskite solar cells with crumpling durability: toward a wearable power source. <i>Energy and Environmental Science</i> , 2019, 12, 3182-3191.	30.8	136
8	Soft, skin-mounted microfluidic systems for measuring secretory fluidic pressures generated at the surface of the skin by eccrine sweat glands. <i>Lab on A Chip</i> , 2017, 17, 2572-2580.	6.0	117
9	Soft Core/Shell Packages for Stretchable Electronics. <i>Advanced Functional Materials</i> , 2015, 25, 3698-3704.	14.9	116
10	Bioinspired Reversible Interlocker Using Regularly Arrayed High Aspect-Ratio Polymer Fibers. <i>Advanced Materials</i> , 2012, 24, 475-479.	21.0	92
11	Transparent ITO mechanical crack-based pressure and strain sensor. <i>Journal of Materials Chemistry C</i> , 2016, 4, 9947-9953.	5.5	87
12	Ultra-sensitive Pressure sensor based on guided straight mechanical cracks. <i>Scientific Reports</i> , 2017, 7, 40116.	3.3	86
13	Shape-Controllable Microlens Arrays via Direct Transfer of Photocurable Polymer Droplets. <i>Advanced Materials</i> , 2012, 24, 1709-1715.	21.0	85
14	A semi-permanent and durable nanoscale-crack-based sensor by on-demand healing. <i>Nanoscale</i> , 2018, 10, 4354-4360.	5.6	52
15	Crack-based strain sensor with diverse metal films by inserting an inter-layer. <i>RSC Advances</i> , 2017, 7, 34810-34815.	3.6	51
16	Polyimide Encapsulation of Spider-Inspired Crack-Based Sensors for Durability Improvement. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 367.	2.5	41
17	Vital signal sensing and manipulation of a microscale organ with a multifunctional soft gripper. <i>Science Robotics</i> , 2021, 6, eabi6774.	17.6	38
18	Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. <i>ACS Nano</i> , 2018, 12, 4164-4171.	14.6	36

#	ARTICLE	IF	CITATIONS
19	Strain-Visualization with Ultrasensitive Nanoscale Crack-Based Sensor Assembled with Hierarchical Thermochromic Membrane. <i>Advanced Functional Materials</i> , 2019, 29, 1903360.	14.9	36
20	Dry Transient Electronic Systems by Use of Materials that Sublime. <i>Advanced Functional Materials</i> , 2017, 27, 1606008.	14.9	34
21	Electroosmosis-Driven Hydrogel Actuators Using Hydrophobic/Hydrophilic Layer-By-Layer Assembly-Induced Crack Electrodes. <i>ACS Nano</i> , 2020, 14, 11906-11918.	14.6	31
22	Semipermanent Copper Nanowire Network with an Oxidation-Proof Encapsulation Layer. <i>Advanced Materials Technologies</i> , 2019, 4, 1800422.	5.8	29
23	Analysis of Preload-Dependent Reversible Mechanical Interlocking Using Beetle-Inspired Wing Locking Device. <i>Langmuir</i> , 2012, 28, 2181-2186.	3.5	27
24	Uniaxially crumpled graphene as a platform for guided myotube formation. <i>Microsystems and Nanoengineering</i> , 2019, 5, 53.	7.0	26
25	Foot Plantar Pressure Measurement System Using Highly Sensitive Crack-Based Sensor. <i>Sensors</i> , 2019, 19, 5504.	3.8	26
26	Actuating compact wearable augmented reality devices by multifunctional artificial muscle. <i>Nature Communications</i> , 2022, 13, .	12.8	24
27	Collapse of microfluidic channels/reservoirs in thin, soft epidermal devices. <i>Extreme Mechanics Letters</i> , 2017, 11, 18-23.	4.1	23
28	Artificial Slanted Nanocilia Array as a Mechanotransducer for Controlling Cell Polarity. <i>ACS Nano</i> , 2017, 11, 730-741.	14.6	22
29	Effect of Metal Thickness on the Sensitivity of Crack-Based Sensors. <i>Sensors</i> , 2018, 18, 2872.	3.8	22
30	Directional Clustering of Slanted Nanopillars by Elastocapillarity. <i>Small</i> , 2016, 12, 3764-3769.	10.0	15
31	Metal-elastomer bilayered switches by utilizing the superexponential behavior of crack widening. <i>Journal of Materials Chemistry C</i> , 2017, 5, 10920-10925.	5.5	15
32	Artificial stretchable armor for skin-interfaced wearable devices and soft robotics. <i>Extreme Mechanics Letters</i> , 2022, 50, 101537.	4.1	15
33	Design of Polarization-Independent and Wide-Angle Broadband Absorbers for Highly Efficient Reflective Structural Color Filters. <i>Materials</i> , 2019, 12, 1050.	2.9	13
34	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
35	FEP Encapsulated Crack-Based Sensor for Measurement in Moisture-Laden Environment. <i>Materials</i> , 2019, 12, 1516.	2.9	12
36	Nanoscale Sensors: Dramatically Enhanced Mechanosensitivity and Signal-to-Noise Ratio of Nanoscale Crack-Based Sensors: Effect of Crack Depth (<i>Adv. Mater.</i> 37/2016). <i>Advanced Materials</i> , 2016, 28, 8068-8068.	21.0	10

#	ARTICLE	IF	CITATIONS
37	Nature-inspired rollable electronics. NPG Asia Materials, 2019, 11, .	7.9	10
38	Design of a Sensitive Balloon Sensor for Safe Human-Robot Interaction. Sensors, 2021, 21, 2163.	3.8	8
39	Epidermal Systems: Soft Core/Shell Packages for Stretchable Electronics (Adv. Funct. Mater. 24/2015). Advanced Functional Materials, 2015, 25, 3697-3697.	14.9	6
40	Functional Encapsulating Structure for Wireless and Immediate Monitoring of the Fluid Penetration. Advanced Functional Materials, 2022, 32, .	14.9	6
41	Design of a Biologically Inspired Water-Walking Robot Powered by Artificial Muscle. Micromachines, 2022, 13, 627.	2.9	4
42	Microfluidic Networks: Thin, Soft, Skin-Mounted Microfluidic Networks with Capillary Bursting Valves for Chrono-Sampling of Sweat (Adv. Healthcare Mater. 5/2017). Advanced Healthcare Materials, 2017, 6, .	7.6	3
43	Photocurable PUA (Poly Urethaneacrylat) cantilever integrated with ultra-high sensitive crack-based sensor. , 2017, , .		1
44	Transient Electronics: Dry Transient Electronic Systems by Use of Materials that Sublime (Adv. Funct.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	14.9	0