# Daeshik Kang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5980064/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 44 papers | 4,426 citations | 236833 25 h-index | 254106 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. Nature, 2014, 516, 222-226. | 13.7 | 1,196 |
| 2 | A soft, wearable microfluidic device for the capture, storage, and colorimetric sensing of sweat. Science Translational Medicine, 2016, 8, 366ra165. | 5.8 | 933 |
| 3 | Dramatically Enhanced Mechanosensitivity and Signalâ€toâ€Noise Ratio of Nanoscale Crackâ€Based Sensors: Effect of Crack Depth. Advanced Materials, 2016, 28, 8130-8137. | 11.1 | 276 |
| 4 | Battery-free, wireless sensors for full-body pressure and temperature mapping. Science Translational Medicine, 2018, 10, . | 5.8 | 247 |
| 5 | Thin, Soft, Skinâ€Mounted Microfluidic Networks with Capillary Bursting Valves for Chronoâ€Sampling of Sweat. Advanced Healthcare Materials, 2017, 6, 1601355. | 3.9 | 209 |
| 6 | Relation between blood pressure and pulse wave velocity for human arteries. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11144-11149. | 3.3 | 193 |
| 7 | Ultra-flexible perovskite solar cells with crumpling durability: toward a wearable power source. Energy and Environmental Science, 2019, 12, 3182-3191. | 15.6 | 136 |
| 8 | Soft, skin-mounted microfluidic systems for measuring secretory fluidic pressures generated at the surface of the skin by eccrine sweat glands. Lab on A Chip, 2017, 17, 2572-2580. | 3.1 | 117 |
| 9 | Soft Core/Shell Packages for Stretchable Electronics. Advanced Functional Materials, 2015, 25, 3698-3704. | 7.8 | 116 |
| 10 | Bioinspired Reversible Interlocker Using Regularly Arrayed High Aspectâ€Ratio Polymer Fibers. Advanced Materials, 2012, 24, 475-479. | 11.1 | 92 |
| 11 | Transparent ITO mechanical crack-based pressure and strain sensor. Journal of Materials Chemistry C, 2016, 4, 9947-9953. | 2.7 | 87 |
| 12 | Ultra-sensitive Pressure sensor based on guided straight mechanical cracks. Scientific Reports, 2017, 7, 40116. | 1.6 | 86 |
| 13 | Shapeâ€Controllable Microlens Arrays via Direct Transfer of Photocurable Polymer Droplets. Advanced Materials, 2012, 24, 1709-1715. | 11.1 | 85 |
| 14 | A semi-permanent and durable nanoscale-crack-based sensor by on-demand healing. Nanoscale, 2018, 10, 4354-4360. | 2.8 | 52 |
| 15 | Crack-based strain sensor with diverse metal films by inserting an inter-layer. RSC Advances, 2017, 7, 34810-34815. | 1.7 | 51 |
| 16 | Polyimide Encapsulation of Spider-Inspired Crack-Based Sensors for Durability Improvement. Applied Sciences (Switzerland), 2018, 8, 367. | 1.3 | 41 |
| 17 | Vital signal sensing and manipulation of a microscale organ with a multifunctional soft gripper. Science Robotics, 2021, 6, eabi6774. | 9.9 | 38 |
| 18 | Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. ACS Nano, 2018, 12, 4164-4171. | 7.3 | 36 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Strainâ€Visualization with Ultrasensitive Nanoscale Crackâ€Based Sensor Assembled with Hierarchical Thermochromic Membrane. Advanced Functional Materials, 2019, 29, 1903360. | 7.8 | 36 |
| 20 | Dry Transient Electronic Systems by Use of Materials that Sublime. Advanced Functional Materials, 2017, 27, 1606008. | 7.8 | 34 |
| 21 | Electroosmosis-Driven Hydrogel Actuators Using Hydrophobic/Hydrophilic Layer-By-Layer Assembly-Induced Crack Electrodes. ACS Nano, 2020, 14, 11906-11918. | 7.3 | 31 |
| 22 | Semipermanent Copper Nanowire Network with an Oxidationâ€Proof Encapsulation Layer. Advanced Materials Technologies, 2019, 4, 1800422. | 3.0 | 29 |
| 23 | Analysis of Preload-Dependent Reversible Mechanical Interlocking Using Beetle-Inspired Wing Locking Device. Langmuir, 2012, 28, 2181-2186. | 1.6 | 27 |
| 24 | Uniaxially crumpled graphene as a platform for guided myotube formation. Microsystems and Nanoengineering, 2019, 5, 53. | 3.4 | 26 |
| 25 | Foot Plantar Pressure Measurement System Using Highly Sensitive Crack-Based Sensor. Sensors, 2019, 19, 5504. | 2.1 | 26 |
| 26 | Actuating compact wearable augmented reality devices by multifunctional artificial muscle. Nature Communications, 2022, 13, . | 5.8 | 24 |
| 27 | Collapse of microfluidic channels/reservoirs in thin, soft epidermal devices. Extreme Mechanics Letters, 2017, 11, 18-23. | 2.0 | 23 |
| 28 | Artificial Slanted Nanocilia Array as a Mechanotransducer for Controlling Cell Polarity. ACS Nano, 2017, 11, 730-741. | 7.3 | 22 |
| 29 | Effect of Metal Thickness on the Sensitivity of Crack-Based Sensors. Sensors, 2018, 18, 2872. | 2.1 | 22 |
| 30 | Directional Clustering of Slanted Nanopillars by Elastocapillarity. Small, 2016, 12, 3764-3769. | 5.2 | 15 |
| 31 | Metalâ€“elastomer bilayered switches by utilizing the superexponential behavior of crack widening. Journal of Materials Chemistry C, 2017, 5, 10920-10925. | 2.7 | 15 |
| 32 | Artificial stretchable armor for skin-interfaced wearable devices and soft robotics. Extreme Mechanics Letters, 2022, 50, 101537. | 2.0 | 15 |
| 33 | Design of Polarization-Independent and Wide-Angle Broadband Absorbers for Highly Efficient Reflective Structural Color Filters. Materials, 2019, 12, 1050. | 1.3 | 13 |
| 34 | Soft Directional Adhesion Gripper Fabricated by 3D Printing Process for Gripping Flexible Printed Circuit Boards. International Journal of Precision Engineering and Manufacturing - Green Technology, 2022, 9, 1151-1163. | 2.7 | 13 |
| 35 | FEP Encapsulated Crack-Based Sensor for Measurement in Moisture-Laden Environment. Materials, 2019, 12, 1516. | 1.3 | 12 |
| 36 | Nanoscale Sensors: Dramatically Enhanced Mechanosensitivity and Signalâ€toâ€Noise Ratio of Nanoscale Crackâ€Based Sensors: Effect of Crack Depth (Adv. Mater. 37/2016). Advanced Materials, 2016, 28, 8068-8068. | 11.1 | 10 |

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|---|---|---|---|
| 37 | Nature-inspired rollable electronics. NPG Asia Materials, 2019, 11, . | 3.8 | 10 |
| 38 | Design of a Sensitive Balloon Sensor for Safe Humanâ€“Robot Interaction. Sensors, 2021, 21, 2163. | 2.1 | 8 |
| 39 | Epidermal Systems: Soft Core/Shell Packages for Stretchable Electronics (Adv. Funct. Mater. 24/2015). Advanced Functional Materials, 2015, 25, 3697-3697. | 7.8 | 6 |
| 40 | Functional Encapsulating Structure for Wireless and Immediate Monitoring of the Fluid Penetration. Advanced Functional Materials, 2022, 32, . | 7.8 | 6 |
| 41 | Design of a Biologically Inspired Water-Walking Robot Powered by Artificial Muscle. Micromachines, 2022, 13, 627. | 1.4 | 4 |
| 42 | Microfluidic Networks: Thin, Soft, Skinâ€Mounted Microfluidic Networks with Capillary Bursting Valves for Chronoâ€Sampling of Sweat (Adv. Healthcare Mater. 5/2017). Advanced Healthcare Materials, 2017, 6, . | 3.9 | 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 | 7.8 | 0 |