

Jae-Sang Heo

List of Publications by Year in descending order

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Version: 2024-02-01

42
papers

2,485
citations

471509

17
h-index

345221

36
g-index

42
all docs

42
docs citations

42
times ranked

3639
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Flexible metal-oxide devices made by room-temperature photochemical activation of solâ€gel films. <i>Nature</i> , 2012, 489, 128-132. | 27.8 | 975 |
| 2 | Recent Progress of Textileâ€Based Wearable Electronics: A Comprehensive Review of Materials, Devices, and Applications. <i>Small</i> , 2018, 14, 1703034. | 10.0 | 470 |
| 3 | Environmentâ€Adaptable Artificial Visual Perception Behaviors Using a Lightâ€Adjustable Optoelectronic Neuromorphic Device Array. <i>Advanced Materials</i> , 2019, 31, e1906433. | 21.0 | 207 |
| 4 | Highly Sensitive Textile Strain Sensors and Wireless User-Interface Devices Using All-Polymeric Conducting Fibers. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 10190-10197. | 8.0 | 153 |
| 5 | Challenges in Design and Fabrication of Flexible/Stretchable Carbon- and Textile-Based Wearable Sensors for Health Monitoring: A Critical Review. <i>Sensors</i> , 2020, 20, 3927. | 3.8 | 65 |
| 6 | Fully-integrated wearable pressure sensor array enabled by highly sensitive textile-based capacitive ionotronic devices. <i>Nano Energy</i> , 2021, 79, 105479. | 16.0 | 62 |
| 7 | A Behaviorâ€Learned Crossâ€Reactive Sensor Matrix for Intelligent Skin Perception. <i>Advanced Materials</i> , 2020, 32, e2000969. | 21.0 | 61 |
| 8 | Water-Mediated Photochemical Treatments for Low-Temperature Passivation of Metal-Oxide Thin-Film Transistors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10403-10412. | 8.0 | 57 |
| 9 | Multi-spectral gate-triggered heterogeneous photonic neuro-transistors for power-efficient brain-inspired neuromorphic computing. <i>Nano Energy</i> , 2019, 66, 104097. | 16.0 | 48 |
| 10 | Highly sensitive textile-based strain sensors using poly(3,4-ethylenedioxythiophene):polystyrene sulfonate/silver nanowire-coated nylon threads with poly-<sc>l</sc>-lysine surface modification. <i>RSC Advances</i> , 2017, 7, 53373-53378. | 3.6 | 47 |
| 11 | Threadâ€Like CMOS Logic Circuits Enabled by Reelâ€Processed Singleâ€Walled Carbon Nanotube Transistors via Selective Doping. <i>Advanced Materials</i> , 2017, 29, 1701822. | 21.0 | 37 |
| 12 | Paper-Based Flexible Electrode Using Chemically-Modified Graphene and Functionalized Multiwalled Carbon Nanotube Composites for Electrophysiological Signal Sensing. <i>Information (Switzerland)</i> , 2019, 10, 325. | 2.9 | 28 |
| 13 | Textile-Based Stretchable and Flexible Glove Sensor for Monitoring Upper Extremity Prosthesis Functions. <i>IEEE Sensors Journal</i> , 2020, 20, 1754-1760. | 4.7 | 28 |
| 14 | Flexible Metal Oxide Semiconductor Devices Made by Solution Methods. <i>Chemistry - A European Journal</i> , 2020, 26, 9126-9156. | 3.3 | 28 |
| 15 | Photochemically Activated Flexible Metal-Oxide Transistors and Circuits Using Low Impurity Aqueous System. <i>IEEE Electron Device Letters</i> , 2015, 36, 162-164. | 3.9 | 23 |
| 16 | Highly Efficient Photo-Induced Charge Separation Enabled by Metalâ€Chalcogenide Interfaces in Quantum-Dot/Metal-Oxide Hybrid Phototransistors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 16620-16629. | 8.0 | 21 |
| 17 | Highly Sensitive Textile-Based Capacitive Pressure Sensors Using PVDF-HFP/Ionic Liquid Composite Films. <i>Sensors</i> , 2021, 21, 442. | 3.8 | 19 |
| 18 | Measurement of Exciton and Trion Energies in Multistacked hBN/WS ₂ Coupled Quantum Wells for Resonant Tunneling Diodes. <i>ACS Nano</i> , 2020, 14, 16114-16121. | 14.6 | 15 |

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|----|---|------|-----------|
| 19 | 1-Dimensional fiber-based field-effect transistors made by low-temperature photochemically activated sol-gel metal-oxide materials for electronic textiles. RSC Advances, 2016, 6, 18596-18600. | 3.6 | 13 |
| 20 | Optimized Activation of Solution-Processed Amorphous Oxide Semiconductors for Flexible Transparent Conductive Electrodes. Advanced Electronic Materials, 2018, 4, 1700386. | 5.1 | 12 |
| 21 | A Site-Specific Charge Carrier Control in Monolithic Integrated Amorphous Oxide Semiconductors and Circuits with Locally Induced Optical-Doping Process. Advanced Functional Materials, 2019, 29, 1904770. | 14.9 | 11 |
| 22 | Suppression of Interfacial Disorders in Solution-Processed Metal Oxide Thin-Film Transistors by Mg Doping. ACS Applied Materials & Interfaces, 2019, 11, 48054-48061. | 8.0 | 11 |
| 23 | An Ultra-Flexible Solution-Processed Metal-Oxide/Carbon Nanotube Complementary Circuit Amplifier with Highly Reliable Electrical and Mechanical Stability. Advanced Electronic Materials, 2020, 6, 1900845. | 5.1 | 11 |
| 24 | Enhanced Interfacial Integrity of Amorphous Oxide Thin-Film Transistors by Elemental Diffusion of Ternary Oxide Semiconductors. ACS Applied Materials & Interfaces, 2020, 12, 57996-58004. | 8.0 | 11 |
| 25 | Photochemical Molecular Tailoring for Efficient Diffusion and Reorganization of Organic Nanocrystals for Ultra-Flexible Organic Semiconductor Arrays. Small, 2017, 13, 1602467. | 10.0 | 10 |
| 26 | Frequency-Stable Ionic-Type Hybrid Gate Dielectrics for High Mobility Solution-Processed Metal-Oxide Thin-Film Transistors. Materials, 2017, 10, 612. | 2.9 | 9 |
| 27 | Enhanced Electro-Optical Performance of Inorganic Perovskite/a-InGaZnO Phototransistors Enabled by Sn-Pb Binary Incorporation with a Selective Photonic Deactivation. ACS Applied Materials & Interfaces, 2020, 12, 58038-58048. | 8.0 | 9 |
| 28 | Highly-Sensitive Textile Pressure Sensors Enabled by Suspended-Type All Carbon Nanotube Fiber Transistor Architecture. Micromachines, 2020, 11, 1103. | 2.9 | 9 |
| 29 | Wide-Range Motion Recognition Through Insole Sensor Using Multi-Walled Carbon Nanotubes and Polydimethylsiloxane Composites. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 581-588. | 6.3 | 7 |
| 30 | High-Speed and Low-Temperature Atmospheric Photo-Annealing of Large-Area Solution-Processed IGZO Thin-Film Transistors by Using Programmable Pulsed Operation of Xenon Flash Lamp. Journal of the Korean Physical Society, 2019, 74, 1052-1058. | 0.7 | 6 |
| 31 | Stable Logic Operation of Fiber-Based Single-Walled Carbon Nanotube Transistor Circuits Toward Thread-Like CMOS Circuitry. Materials, 2018, 11, 1878. | 2.9 | 4 |
| 32 | Facile organic surfactant removal of various dimensionality nanomaterials using low-temperature photochemical treatment. RSC Advances, 2019, 9, 730-737. | 3.6 | 4 |
| 33 | Catalytic Metal-Accelerated Crystallization of High-Performance Solution-Processed Earth-Abundant Metal Oxide Semiconductors. ACS Applied Materials & Interfaces, 2020, 12, 25000-25010. | 8.0 | 4 |
| 34 | Locally Controlled Sensing Properties of Stretchable Pressure Sensors Enabled by Micro-Patterned Piezoresistive Device Architecture. Sensors, 2020, 20, 6588. | 3.8 | 3 |
| 35 | Skin-Compatible Amorphous Oxide Thin-Film-Transistors with a Stress-Released Elastic Architecture. Applied Sciences (Switzerland), 2021, 11, 5501. | 2.5 | 3 |
| 36 | Highly Sensitive Flexible/Stretchable Smart Insole Pressure Sensor with Multi-walled Carbon Nanotubes and Polydimethylsiloxane Double-layer Composites. , 2020, , . | | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Conformally Gated Surface Conducting Behaviors of Single-Walled Carbon Nanotube Thin-Film-Transistors. Materials, 2021, 14, 3361. | 2.9 | 1 |
| 38 | PP: WITHDRAWN: PQ: Printed Organic Singleâ€crystal TFTs with Bottomâ€contact Structure. Digest of Technical Papers SID International Symposium, 2012, 43, 1354-1356. | 0.3 | 0 |
| 39 | Enhanced Bias Stability of Solution-Processed Zinc-Tin-Oxide Thin Film Transistors Using Self-Assembled Monolayer as a Selective Channel Passivation. Journal of Nanoscience and Nanotechnology, 2013, 13, 7056-7058. | 0.9 | 0 |
| 40 | Low-Voltage Driven Reflective-Type Flexible Display Devices with Micro-Structured Inner Reflectors and Pillar-Shaped Spacers. Journal of Nanoscience and Nanotechnology, 2016, 16, 11372-11376. | 0.9 | 0 |
| 41 | Pˆ: Resistive Type 2D Mapping Positional Strain Sensor Array for Advanced Tactile Displays. Digest of Technical Papers SID International Symposium, 2018, 49, 1909-1912. | 0.3 | 0 |
| 42 | Frontispiece: Flexible Metal Oxide Semiconductor Devices Made by Solution Methods. Chemistry - A European Journal, 2020, 26, . | 3.3 | 0 |