Do Hwan Kim

List of Publications by Citations

65 papers	3,975 citations	26 h-index	63 g-index
73 ext. papers	4,725 ext. citations	13.6 avg, IF	5.49 L-index

#	Paper	IF	Citations
65	Flexible polymer transistors with high pressure sensitivity for application in electronic skin and health monitoring. *Nature Communications*, **2013**, 4, 1859	17.4	1446
64	Stretchable and Multimodal All Graphene Electronic Skin. *Advanced Materials*, **2016**, 28, 2601-8	24	385
63	Linearly and Highly Pressure-Sensitive Electronic Skin Based on a Bioinspired Hierarchical Structural Array. *Advanced Materials*, **2016**, 28, 5300-6	24	371
62	Highly Sensitive and Multimodal All-Carbon Skin Sensors Capable of Simultaneously Detecting Tactile and Biological Stimuli. *Advanced Materials*, **2015**, 27, 4178-85	24	293
61	Transparent, low-power pressure sensor matrix based on coplanar-gate graphene transistors. *Advanced Materials*, **2014**, 26, 4735-40	24	160
60	An Ultrasensitive, Visco-Poroelastic Artificial Mechanotransducer Skin Inspired by Piezo2 Protein in Mammalian Merkel Cells. *Advanced Materials*, **2017**, 29, 1605973	24	93
59	Thiolene Cross-Linked Polymer Gate Dielectrics for Low-Voltage Organic Thin-Film Transistors. *Chemistry of Materials*, **2013**, 25, 4806-4812	9.6	80
58	Comparison of the Photovoltaic Characteristics and Nanostructure of Fullerenes Blended with Conjugated Polymers with Siloxane-Terminated and Branched Aliphatic Side Chains. *Chemistry of Materials*, **2013**, 25, 431-440	9.6	71
57	Waterproof, Highly Tough, and Fast Self-Healing Polyurethane for Durable Electronic Skin. *ACS Applied Materials & Interfaces*, **2020**, 12, 11072-11083	9.5	68
56	A bioinspired hydrogen bond-triggered ultrasensitive ionic mechanoreceptor skin. *Nature Communications*, **2019**, 10, 4019	17.4	67
55	Flexible piezocapacitive sensors based on wrinkled microstructures: toward low-cost fabrication of pressure sensors over large areas. *RSC Advances*, **2017**, 7, 39420-39426	3.7	57
54	An Ultrastable Ionic Chemiresistor Skin with an Intrinsically Stretchable Polymer Electrolyte. *Advanced Materials*, **2018**, 30, e1706851	24	54
53	Ionic Tactile Sensors for Emerging Human-Interactive Technologies: A Review of Recent Progress. *Advanced Functional Materials*, **2020**, 30, 1904532	15.6	54
52	Sequentially solution-processed, nanostructured polymer photovoltaics using selective solvents. *Energy and Environmental Science*, **2014**, 7, 1103	35.4	49
51	A Highly Sensitive Tactile Sensor Using a Pyramid-Plug Structure for Detecting Pressure, Shear Force, and Torsion. *Advanced Materials Technologies*, **2019**, 4, 1800284	6.8	47
50	Multifunctional Smart Textronics with Blow-Spun Nonwoven Fabrics. *Advanced Functional Materials* , **2019**, 29, 1900025	15.6	41
49	High-Performance Stablen-Type Indenofluorenedione Field-Effect Transistors. *Chemistry of Materials*, **2011**, 23, 4038-4044	9.6	41

48	Combinatorial Study of Temperature-Dependent Nanostructure and Electrical Conduction of Polymer Semiconductors: Even Bimodal Orientation Can Enhance 3D Charge Transport. *Advanced Functional Materials*, **2016**, 26, 4627-4634	15.6	41
47	An Ultra-Mechanosensitive Visco-Poroelastic Polymer Ion Pump for Continuous Self-Powering Kinematic Triboelectric Nanogenerators. *Advanced Energy Materials*, **2019**, 9, 1803786	21.8	38
46	Highly Sensitive Flexible Pressure Sensors Based on Printed Organic Transistors with Centro-Apically Self-Organized Organic Semiconductor Microstructures. *ACS Applied Materials & Interfaces*, **2017**, 9, 42996-43003	9.5	38
45	Crack-Enhanced Microfluidic Stretchable E-Skin Sensor. *ACS Applied Materials & Interfaces*, **2017**, 9, 44678-44686	9.5	36
44	Tailoring Morphology and Structure of Inkjet-Printed Liquid-Crystalline Semiconductor/Insulating Polymer Blends for High-Stability Organic Transistors. *Advanced Functional Materials*, **2016**, 26, 3003-3011	15.6	34
43	Biomimetics for high-performance flexible tactile sensors and advanced artificial sensory systems. *Journal of Materials Chemistry C*, **2019**, 7, 14816-14844	7.1	33
42	Influence of Dielectric Layers on Charge Transport through Diketopyrrolopyrrole-Containing Polymer Films: Dielectric Polarizability vs Capacitance. *ACS Applied Materials & Interfaces*, **2016**, 8, 30344-30350	9.5	27
41	Piezopotential-Programmed Multilevel Nonvolatile Memory As Triggered by Mechanical Stimuli. *ACS Nano*, **2016**, 10, 11037-11043	16.7	26
40	Ultrasensitive, Low-Power Oxide Transistor-Based Mechanotransducer with Microstructured, Deformable Ionic Dielectrics. *ACS Applied Materials & Interfaces*, **2018**, 10, 31472-31479	9.5	26
39	High Resolution a-IGZO TFT Pixel Circuit for Compensating Threshold Voltage Shifts and OLED Degradations. *IEEE Journal of the Electron Devices Society*, **2017**, 5, 372-377	2.3	25
38	Universal three-dimensional crosslinker for all-photopatterned electronics. *Nature Communications*, **2020**, 11, 1520	17.4	24
37	Conformable and ionic textiles using sheath-core carbon nanotube microyarns for highly sensitive and reliable pressure sensors. *RSC Advances*, **2017**, 7, 23820-23826	3.7	21
36	Highly Stretchable, High-Mobility, Free-Standing All-Organic Transistors Modulated by Solid-State Elastomer Electrolytes. *Advanced Functional Materials*, **2019**, 29, 1808909	15.6	21
35	Enhanced Sensitivity of Iontronic Graphene Tactile Sensors Facilitated by Spreading of Ionic Liquid Pinned on Graphene Grid. *Advanced Functional Materials*, **2020**, 30, 1908993	15.6	20
34	Solvent-Free Processable and Photo-Patternable Hybrid Gate Dielectric for Flexible Top-Gate Organic Field-Effect Transistors. *ACS Applied Materials & Interfaces*, **2017**, 9, 5366-5374	9.5	19
33	Visco-Poroelastic Electrochemiluminescence Skin with Piezo-Ionic Effect. *Advanced Materials*, **2021**, 33, e2100321	24	18
32	Low-power, deformable, dynamic multicolor electrochromic skin. *Nano Energy*, **2020**, 78, 105199	17.1	14
31	Universal Route to Impart Orthogonality to Polymer Semiconductors for Sub-Micrometer Tandem Electronics. *Advanced Materials*, **2019**, 31, e1901400	24	12

30	Graphene Phototransistors Sensitized by Cu2SSe Nanocrystals with Short Amine Ligands. *Journal of Physical Chemistry C*, **2017**, 121, 5436-5443	3.8	11
29	Thermotropic Phase Transition of Benzodithiophene Copolymer Thin Films and Its Impact on Electrical and Photovoltaic Characteristics. *Chemistry of Materials*, **2015**, 27, 1223-1232	9.6	10
28	Scalable Superior Chemical Sensing Performance of Stretchable Ionotronic Skin via a Hole Receptor Effect. *Advanced Materials*, **2021**, 33, e2007605	24	10
27	Unveiling Viscoelastic Response of Capacitive-type Pressure Sensor by Controlling Cross-Linking Density and Surface Structure of Elastomer. *ACS Applied Polymer Materials*, **2020**, 2, 2190-2198	4.3	9
26	Deformable Ionic Polymer Artificial Mechanotransducer with an Interpenetrating Nanofibrillar Network. *ACS Applied Materials & Interfaces*, **2019**, 11, 29350-29359	9.5	9
25	All-Printed Electronic Skin Based on Deformable and Ionic Mechanotransducer Array. *Macromolecular Bioscience*, **2020**, 20, e2000147	5.5	7
24	High-capacitance polyurethane ionogels for low-voltage operated organic transistors and pressure sensors. *Journal of Materials Chemistry C*, **2020**, 8, 17107-17113	7.1	7
23	Intense pulsed light induced crystallization of a liquid-crystalline polymer semiconductor for efficient production of flexible thin-film transistors. *Physical Chemistry Chemical Physics*, **2016**, 18, 4627-34	3.6	6
22	Intense-pulsed-UV-converted perhydropolysilazane gate dielectrics for organic field-effect transistors and logic gates.. *RSC Advances*, **2019**, 9, 3169-3175	3.7	5
21	Organic Transistors: 25th Anniversary Article: Microstructure Dependent Bias Stability of Organic Transistors (Adv. Mater. 11/2014). *Advanced Materials*, **2014**, 26, 1634-1634	24	5
20	Crystalline nanostructure and morphology of TriF-IF-dione for high-performance stable n-type field-effect transistors. *Journal of Materials Chemistry*, **2012**, 22, 14617		5
19	A Self-Healing and Ionic Liquid Affiliative Polyurethane toward a Piezo 2 Protein Inspired Ionic Skin. *Advanced Functional Materials*,2106341	15.6	5
18	Electrical transport characteristics of chemically robust PDPP-DTT embedded in a bridged silsesquioxane network. *Journal of Materials Chemistry C*, **2019**, 7, 14889-14896	7.1	5
17	Design of Wavy Ag Microwire Array for Mechanically Stable, Multimodal Vibrational Haptic Interface. *Advanced Functional Materials*, **2019**, 29, 1902703	15.6	4
16	Ultralow Voltage Driving Circuits Based on Coplanar a-InGaZnO TFTs with Photopatternable Ionic Polymer Gate Dielectric. *Advanced Electronic Materials*, **2019**, 5, 1900359	6.4	4
15	Electroplated core-shell nanowire network electrodes for highly efficient organic light-emitting diodes.. *Nano Convergence*, **2022**, 9, 1	9.2	4
14	Interpenetrating Polymer Semiconductor Nanonetwork Channel for Ultrasensitive, Selective, and Fast Recovered Chemodetection. *ACS Applied Materials & Interfaces*, **2020**, 12, 55107-55115	9.5	2
13	Interference-Free, Multimodal Electronic Skin Matrix with Low-Power, Monolithic Integrated Circuits. *Advanced Materials Technologies*,2101020	6.8	2

12	Skin-inspired electrochemical tactility and luminescence. *Electrochimica Acta*, **2022**, 415, 140259	6.7	2
11	Artificial Skin: An Ultrasensitive, Visco-Poroelastic Artificial Mechanotransducer Skin Inspired by Piezo2 Protein in Mammalian Merkel Cells (Adv. Mater. 13/2017). *Advanced Materials*, **2017**, 29,	24	1
10	Triboelectric Nanogenerators: An Ultra-Mechanosensitive Visco-Poroelastic Polymer Ion Pump for Continuous Self-Powering Kinematic Triboelectric Nanogenerators (Adv. Energy Mater. 17/2019). *Advanced Energy Materials*, **2019**, 9, 1970059	21.8	1
9	Iontronic Graphene Tactile Sensors: Enhanced Sensitivity of Iontronic Graphene Tactile Sensors Facilitated by Spreading of Ionic Liquid Pinned on Graphene Grid (Adv. Funct. Mater. 14/2020). *Advanced Functional Materials*, **2020**, 30, 2070089	15.6	1
8	Tetrabranched Photo-Crosslinker Enables Micrometer-Scale Patterning of Light-Emitting Super Yellow for High-Resolution OLEDs. *ACS Photonics*, **2021**, 8, 2519-2528	6.3	1
7	Ferroelectric ion gel-modulated long-term plasticity in organic synaptic transistors. *Materials Chemistry and Physics*, **2022**, 287, 126227	4.4	1
6	Wireless-Powered VOCs Sensor Based on Energy-Harvesting Metamaterial. *Advanced Electronic Materials*, **2021**, 7, 2001240	6.4	0
5	Multifunctional Tactile Sensors: A Highly Sensitive Tactile Sensor Using a Pyramid-Plug Structure for Detecting Pressure, Shear Force, and Torsion (Adv. Mater. Technol. 3/2019). *Advanced Materials Technologies*, **2019**, 4, 1970019	6.8	
4	Liquid-Crystalline Semiconductors: Tailoring Morphology and Structure of Inkjet-Printed Liquid-Crystalline Semiconductor/Insulating Polymer Blends for High-Stability Organic Transistors (Adv. Funct. Mater. 18/2016). *Advanced Functional Materials*, **2016**, 26, 3180-3180	15.6	
3	Organic Electronics: Universal Route to Impart Orthogonality to Polymer Semiconductors for Sub-Micrometer Tandem Electronics (Adv. Mater. 28/2019). *Advanced Materials*, **2019**, 31, 1970204	24	
2	Gas Sensing: Scalable Superior Chemical Sensing Performance of Stretchable Ionotronic Skin via a Hole Receptor Effect (Adv. Mater. 13/2021). *Advanced Materials*, **2021**, 33, 2170102	24	
1	Sensors: An Ultrastable Ionic Chemiresistor Skin with an Intrinsically Stretchable Polymer Electrolyte (Adv. Mater. 20/2018). *Advanced Materials*, **2018**, 30, 1870140	24	