Heesuk Kim

List of Publications by Year
in descending order

57 papers	2,812 citations	172457 29 h-index	175258 52 g-index
59 all docs	59 docs citations	59 times ranked	4746 citing authors

#	Article	IF	Citations
1	Microwave-assisted phenolation of acid-insoluble Klason lignin and its application in adhesion. Green Chemistry, 2022, 24, 2051-2061.	9.0	11
2	Intrinsically Stretchable and Printable Lithium-Ion Battery for Free-Form Configuration. ACS Nano, 2022, 16, 2271-2281.	14.6	19
3	Highly stretchable three-dimensional thermoelectric fabrics exploiting woven structure deformability and passivation-induced fiber elasticity. Nano Energy, 2022, 97, 107143.	16.0	24
4	Highly Integrated, Wearable Carbonâ€Nanotubeâ€Yarnâ€Based Thermoelectric Generators Achieved by Selective Inkjetâ€Printed Chemical Doping. Advanced Energy Materials, 2022, 12, .	19.5	19
5	High-Performance Thermoelectric Fabric Based on a Stitched Carbon Nanotube Fiber. ACS Applied Materials & Interfaces, 2021, 13, 6257-6264.	8.0	43
6	Highly Selective Multiplex Quantitative Polymerase Chain Reaction with a Nanomaterial Composite Hydrogel for Precise Diagnosis of Viral Infection. ACS Applied Materials & Interfaces, 2021, 13, 30295-30305.	8.0	4
7	Nanostructured Inorganic Chalcogenide-Carbon Nanotube Yarn having a High Thermoelectric Power Factor at Low Temperature. ACS Nano, 2021, 15, 13118-13128.	14.6	24
8	High-Performance, Wearable Thermoelectric Generator Based on a Highly Aligned Carbon Nanotube Sheet. ACS Applied Energy Materials, 2020, 3, 1199-1206.	5.1	43
9	Elastomeric high-Î¤ composites of low dielectric loss tangent: Experiment and simulation. Composites Part B: Engineering, 2020, 201, 108337.	12.0	11
10	High-performance compliant thermoelectric generators with magnetically self-assembled soft heat conductors for self-powered wearable electronics. Nature Communications, 2020, 11, 5948.	12.8	169
11	Enhanced Output Performance of All-Solution-Processed Organic Thermoelectrics: Spray Printing and Interface Engineering. ACS Applied Materials & Interfaces, 2020, 12, 26250-26257.	8.0	10
12	Mass Transport Control by Surface Graphene Oxide for Selective CO Production from Electrochemical CO₂ Reduction. ACS Catalysis, 2020, 10, 3222-3231.	11.2	57
13	Fabrication of a MoS₂/Graphene Nanoribbon Heterojunction Network for Improved Thermoelectric Properties. Advanced Materials Interfaces, 2019, 6, 1901333.	3.7	26
14	Carbon nanotube fibers with enhanced longitudinal carrier mobility for high-performance all-carbon thermoelectric generators. Nanoscale, 2019, 11, 16919-16927.	5.6	41
15	Stretchable Conductive Adhesives with Superior Electrical Stability as Printable Interconnects in Washable Textile Electronics. ACS Applied Materials & Interfaces, 2019, 11, 37043-37050.	8.0	35
16	High-performance thermoelectric bracelet based on carbon nanotube ink printed directly onto a flexible cable. Journal of Materials Chemistry A, 2018, 6, 19727-19734.	10.3	44
17	Coaxial struts and microfractured structures of compressible thermoelectric foams for self-powered pressure sensors. Nanoscale, 2018, 10, 18370-18377.	5.6	23
18	Enhanced electromechanical performance of P(VDF-TrFE-CTFE) thin films hybridized with highly dispersed carbon blacks. Composites Part B: Engineering, 2018, 152, 133-138.	12.0	17

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19	Significantly reduced thermal conductivity and enhanced thermoelectric properties of single- and bi-layer graphene nanomeshes with sub-10 nm neck-width. Nano Energy, 2017, 35, 26-35.	16.0	90
20	A mechanistic study on the carrier properties of nitrogen-doped graphene derivatives using thermoelectric effect. Carbon, 2017, 117, 447-453.	10.3	32
21	Benzyl viologen-assisted simultaneous exfoliation and n-doping of MoS₂nanosheets via a solution process. Journal of Materials Chemistry C, 2017, 5, 5395-5401.	5.5	12
22	Highly Ordered Nanoconfinement Effect from Evaporation-Induced Self-Assembly of Block Copolymers on In Situ Polymerized PEDOT:Tos. ACS Macro Letters, 2017, 6, 386-392.	4.8	19
23	Flexible and Robust Thermoelectric Generators Based on All-Carbon Nanotube Yarn without Metal Electrodes. ACS Nano, 2017, 11, 7608-7614.	14.6	191
24	Development of Selfâ€Doped Conjugated Polyelectrolytes with Controlled Work Functions and Application to Hole Transport Layer Materials for Highâ€Performance Organic Solar Cells. Advanced Materials Interfaces, 2016, 3, 1500703.	3.7	41
25	Enhanced thermoelectric performance of PEDOT:PSS/PANIâ€“CSA polymer multilayer structures. Energy and Environmental Science, 2016, 9, 2806-2811.	30.8	121
26	Colloidal Spherical Quantum Wells with Near-Unity Photoluminescence Quantum Yield and Suppressed Blinking. ACS Nano, 2016, 10, 9297-9305.	14.6	119
27	Highâ€Performance Thermoelectric Paper Based on Double Carrierâ€Filtering Processes at Nanowire Heterojunctions. Advanced Energy Materials, 2016, 6, 1502181.	19.5	157
28	Enhanced performance in capacitive force sensors using carbon nanotube/polydimethylsiloxane nanocomposites with high dielectric properties. Nanoscale, 2016, 8, 5667-5675.	5.6	45
29	Directed self-assembly of rhombic carbon nanotube nanomesh films for transparent and stretchable electrodes. Journal of Materials Chemistry C, 2015, 3, 2319-2325.	5.5	39
30	Enhanced thermopower in flexible tellurium nanowire films doped using single-walled carbon nanotubes with a rationally designed work function. Carbon, 2015, 94, 577-584.	10.3	37
31	High-concentration boron doping of graphene nanoplatelets by simple thermal annealing and their supercapacitive properties. Scientific Reports, 2015, 5, 9817.	3.3	116
32	A [2,2]paracyclophane triarylamine-based hole-transporting material for high performance perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 24215-24220.	10.3	87
33	Remarkable Conversion Between n- and p-Type Reduced Graphene Oxide on Varying the Thermal Annealing Temperature. Chemistry of Materials, 2015, 27, 7362-7369.	6.7	177
34	Effects of size and interparticle interaction of silica nanoparticles on dispersion and electrical conductivity of silver/epoxy nanocomposites. Journal of Applied Physics, 2014, 115, 154307.	2.5	21
35	Controlled oxidation level of reduced graphene oxides and its effect on thermoelectric properties. Macromolecular Research, 2014, 22, 1104-1108.	2.4	51
36	Graphene Oxide Nanosheet Wrapped White-Emissive Conjugated Polymer Nanoparticles. ACS Nano, 2014, 8, 4248-4256.	14.6	23

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37	Enhanced thermoelectric properties of the flexible tellurium nanowire film hybridized with single-walled carbon nanotube. Synthetic Metals, 2014, 198, 340-344.	3.9	20
38	Formation of electrically conducting, transparent films using silver nanoparticles connected by carbon nanotubes. Thin Solid Films, 2014, 562, 445-450.	1.8	4
39	Nitrogen-Doped Graphene Nanosheets from Bulk Graphite using Microwave Irradiation. ACS Applied Materials & Interfaces, 2014, 6, 6361-6368.	8.0	110
40	Monte Carlo Simulation Studies on the Effect of Entropic Attraction on the Electric Conductivity in Polymer Nano-Composites. Journal of Nanoscience and Nanotechnology, 2014, 14, 5103-5108.	0.9	2
41	Electroless Chemical Grafting of Nitrophenyl Groups on <I>n</I>-Doped Hydrogenated Amorphous Silicon Surfaces. Journal of Nanoscience and Nanotechnology, 2014, 14, 6309-6313.	0.9	2
42	Catalytic, Conductive, and Transparent Platinum Nanofiber Webs for FTO-Free Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 3176-3181.	8.0	46
43	Enhancement of Electrical and Thermomechanical Properties of Silver Nanowire Composites by the Introduction of Nonconductive Nanoparticles: Experiment and Simulation. ACS Nano, 2013, 7, 851-856.	14.6	84
44	Effect of multiwalled carbon nanotubes on the thermoelectric properties of a bismuth telluride matrix. Current Applied Physics, 2013, 13, S111-S114.	2.4	44
45	Highly stretchable dielectric nanocomposites based on single-walled carbon nanotube/ionic liquid gels. Composites Science and Technology, 2013, 83, 40-46.	7.8	40
46	Preparation of poly(methyl methacrylate)/clay nanocomposites using supercritical fluid process. Composite Interfaces, 2012, 19, 565-572.	2.3	6
47	Facile preparation of epoxy nanocomposites with highly dispersed graphite nanosheets and their dielectric properties. Macromolecular Research, 2012, 20, 1197-1200.	2.4	6
48	Acid-treated SWCNT/polyurethane nanoweb as a stretchable and transparent Conductor. RSC Advances, 2012, 2, 10717.	3.6	29
49	Photochemical Grafting of Organic Alkenes to Single-Crystal TiO₂ Surfaces: A Mechanistic Study. Langmuir, 2012, 28, 12085-12093.	3.5	12
50	Effects of silica particles on the electrical percolation threshold and thermomechanical properties of epoxy/silver nanocomposites. Applied Physics Letters, 2011, 99, 043104.	3.3	30
51	Photochemical Grafting and Patterning of Biomolecular Layers onto TiO2 Thin Films. ACS Applied Materials & Interfaces, 2009, 1, 1013-1022.	8.0	35
52	Grafting of molecular layers to oxidized gallium nitride surfaces via phosphonic acid linkages. Surface Science, 2008, 602, 2382-2388.	1.9	49
53	Covalent molecular functionalization of diamond thin-film transistors. Diamond and Related Materials, 2007, 16, 1608-1615.	3.9	18
54	Covalent Photochemical Functionalization of Amorphous Carbon Thin Films for Integrated Real-Time Biosensing. Langmuir, 2006, 22, 9598-9605.	3.5	96

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55	Photochemical Functionalization of Gallium Nitride Thin Films with Molecular and Biomolecular Layers. Langmuir, 2006, 22, 8121-8126.	3.5	74
56	Covalent functionalization and biomolecular recognition properties of DNA-modified silicon nanowires. Nanotechnology, 2005, 16, 1868-1873.	2.6	73
57	Artificial Trinuclear Metallopeptidase Synthesized by Cross-Linkage of a Molecular Bowl with a Polystyrene Derivative. Journal of the American Chemical Society, 2000, 122, 7742-7749.	13.7	26