

Heesuk Kim

List of Publications by Year in descending order

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Version: 2024-02-01

57
papers

2,812
citations

172457

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52
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all docs

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docs citations

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times ranked

4746
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible and Robust Thermoelectric Generators Based on All-Carbon Nanotube Yarn without Metal Electrodes. <i>ACS Nano</i> , 2017, 11, 7608-7614.	14.6	191
2	Remarkable Conversion Between n- and p-Type Reduced Graphene Oxide on Varying the Thermal Annealing Temperature. <i>Chemistry of Materials</i> , 2015, 27, 7362-7369.	6.7	177
3	High-performance compliant thermoelectric generators with magnetically self-assembled soft heat conductors for self-powered wearable electronics. <i>Nature Communications</i> , 2020, 11, 5948.	12.8	169
4	High-performance Thermoelectric Paper Based on Double Carrier-filtering Processes at Nanowire Heterojunctions. <i>Advanced Energy Materials</i> , 2016, 6, 1502181.	19.5	157
5	Enhanced thermoelectric performance of PEDOT:PSS/PANI-CSA polymer multilayer structures. <i>Energy and Environmental Science</i> , 2016, 9, 2806-2811.	30.8	121
6	Colloidal Spherical Quantum Wells with Near-Unity Photoluminescence Quantum Yield and Suppressed Blinking. <i>ACS Nano</i> , 2016, 10, 9297-9305.	14.6	119
7	High-concentration boron doping of graphene nanoplatelets by simple thermal annealing and their supercapacitive properties. <i>Scientific Reports</i> , 2015, 5, 9817.	3.3	116
8	Nitrogen-Doped Graphene Nanosheets from Bulk Graphite using Microwave Irradiation. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 6361-6368.	8.0	110
9	Covalent Photochemical Functionalization of Amorphous Carbon Thin Films for Integrated Real-Time Biosensing. <i>Langmuir</i> , 2006, 22, 9598-9605.	3.5	96
10	Significantly reduced thermal conductivity and enhanced thermoelectric properties of single- and bi-layer graphene nanomeshes with sub-10 nm neck-width. <i>Nano Energy</i> , 2017, 35, 26-35.	16.0	90
11	A [2,2]paracyclophane triarylamine-based hole-transporting material for high performance perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 24215-24220.	10.3	87
12	Enhancement of Electrical and Thermomechanical Properties of Silver Nanowire Composites by the Introduction of Nonconductive Nanoparticles: Experiment and Simulation. <i>ACS Nano</i> , 2013, 7, 851-856.	14.6	84
13	Photochemical Functionalization of Gallium Nitride Thin Films with Molecular and Biomolecular Layers. <i>Langmuir</i> , 2006, 22, 8121-8126.	3.5	74
14	Covalent functionalization and biomolecular recognition properties of DNA-modified silicon nanowires. <i>Nanotechnology</i> , 2005, 16, 1868-1873.	2.6	73
15	Mass Transport Control by Surface Graphene Oxide for Selective CO ₂ Reduction. <i>ACS Catalysis</i> , 2020, 10, 3222-3231.	11.2	57
16	Controlled oxidation level of reduced graphene oxides and its effect on thermoelectric properties. <i>Macromolecular Research</i> , 2014, 22, 1104-1108.	2.4	51
17	Grafting of molecular layers to oxidized gallium nitride surfaces via phosphonic acid linkages. <i>Surface Science</i> , 2008, 602, 2382-2388.	1.9	49
18	Catalytic, Conductive, and Transparent Platinum Nanofiber Webs for FTO-Free Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 3176-3181.	8.0	46

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19	Enhanced performance in capacitive force sensors using carbon nanotube/polydimethylsiloxane nanocomposites with high dielectric properties. <i>Nanoscale</i> , 2016, 8, 5667-5675.	5.6	45
20	Effect of multiwalled carbon nanotubes on the thermoelectric properties of a bismuth telluride matrix. <i>Current Applied Physics</i> , 2013, 13, S111-S114.	2.4	44
21	High-performance thermoelectric bracelet based on carbon nanotube ink printed directly onto a flexible cable. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19727-19734.	10.3	44
22	High-Performance, Wearable Thermoelectric Generator Based on a Highly Aligned Carbon Nanotube Sheet. <i>ACS Applied Energy Materials</i> , 2020, 3, 1199-1206.	5.1	43
23	High-Performance Thermoelectric Fabric Based on a Stitched Carbon Nanotube Fiber. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6257-6264.	8.0	43
24	Development of Self-Doped Conjugated Polyelectrolytes with Controlled Work Functions and Application to Hole Transport Layer Materials for High-Performance Organic Solar Cells. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500703.	3.7	41
25	Carbon nanotube fibers with enhanced longitudinal carrier mobility for high-performance all-carbon thermoelectric generators. <i>Nanoscale</i> , 2019, 11, 16919-16927.	5.6	41
26	Highly stretchable dielectric nanocomposites based on single-walled carbon nanotube/ionic liquid gels. <i>Composites Science and Technology</i> , 2013, 83, 40-46.	7.8	40
27	Directed self-assembly of rhombic carbon nanotube nanomesh films for transparent and stretchable electrodes. <i>Journal of Materials Chemistry C</i> , 2015, 3, 2319-2325.	5.5	39
28	Enhanced thermopower in flexible tellurium nanowire films doped using single-walled carbon nanotubes with a rationally designed work function. <i>Carbon</i> , 2015, 94, 577-584.	10.3	37
29	Photochemical Grafting and Patterning of Biomolecular Layers onto TiO ₂ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 1013-1022.	8.0	35
30	Stretchable Conductive Adhesives with Superior Electrical Stability as Printable Interconnects in Washable Textile Electronics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37043-37050.	8.0	35
31	A mechanistic study on the carrier properties of nitrogen-doped graphene derivatives using thermoelectric effect. <i>Carbon</i> , 2017, 117, 447-453.	10.3	32
32	Effects of silica particles on the electrical percolation threshold and thermomechanical properties of epoxy/silver nanocomposites. <i>Applied Physics Letters</i> , 2011, 99, 043104.	3.3	30
33	Acid-treated SWCNT/polyurethane nanoweb as a stretchable and transparent Conductor. <i>RSC Advances</i> , 2012, 2, 10717.	3.6	29
34	Artificial Trinuclear Metallopeptidase Synthesized by Cross-Linkage of a Molecular Bowl with a Polystyrene Derivative. <i>Journal of the American Chemical Society</i> , 2000, 122, 7742-7749.	13.7	26
35	Fabrication of a MoS ₂ /Graphene Nanoribbon Heterojunction Network for Improved Thermoelectric Properties. <i>Advanced Materials Interfaces</i> , 2019, 6, 1901333.	3.7	26
36	Nanostructured Inorganic Chalcogenide-Carbon Nanotube Yarn having a High Thermoelectric Power Factor at Low Temperature. <i>ACS Nano</i> , 2021, 15, 13118-13128.	14.6	24

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37	Highly stretchable three-dimensional thermoelectric fabrics exploiting woven structure deformability and passivation-induced fiber elasticity. <i>Nano Energy</i> , 2022, 97, 107143.	16.0	24
38	Graphene Oxide Nanosheet Wrapped White-Emissive Conjugated Polymer Nanoparticles. <i>ACS Nano</i> , 2014, 8, 4248-4256.	14.6	23
39	Coaxial struts and microfractured structures of compressible thermoelectric foams for self-powered pressure sensors. <i>Nanoscale</i> , 2018, 10, 18370-18377.	5.6	23
40	Effects of size and interparticle interaction of silica nanoparticles on dispersion and electrical conductivity of silver/epoxy nanocomposites. <i>Journal of Applied Physics</i> , 2014, 115, 154307.	2.5	21
41	Enhanced thermoelectric properties of the flexible tellurium nanowire film hybridized with single-walled carbon nanotube. <i>Synthetic Metals</i> , 2014, 198, 340-344.	3.9	20
42	Highly Ordered Nanoconfinement Effect from Evaporation-Induced Self-Assembly of Block Copolymers on In Situ Polymerized PEDOT:Tos. <i>ACS Macro Letters</i> , 2017, 6, 386-392.	4.8	19
43	Intrinsically Stretchable and Printable Lithium-Ion Battery for Free-Form Configuration. <i>ACS Nano</i> , 2022, 16, 2271-2281.	14.6	19
44	Highly Integrated, Wearable Carbon Nanotube Yarn-Based Thermoelectric Generators Achieved by Selective Inkjet-Printed Chemical Doping. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	19
45	Covalent molecular functionalization of diamond thin-film transistors. <i>Diamond and Related Materials</i> , 2007, 16, 1608-1615.	3.9	18
46	Enhanced electromechanical performance of P(VDF-TrFE-CTFE) thin films hybridized with highly dispersed carbon blacks. <i>Composites Part B: Engineering</i> , 2018, 152, 133-138.	12.0	17
47	Photochemical Grafting of Organic Alkenes to Single-Crystal TiO ₂ Surfaces: A Mechanistic Study. <i>Langmuir</i> , 2012, 28, 12085-12093.	3.5	12
48	Benzyl viologen-assisted simultaneous exfoliation and n-doping of MoS ₂ nanosheets via a solution process. <i>Journal of Materials Chemistry C</i> , 2017, 5, 5395-5401.	5.5	12
49	Elastomeric high- $\hat{\rho}$ composites of low dielectric loss tangent: Experiment and simulation. <i>Composites Part B: Engineering</i> , 2020, 201, 108337.	12.0	11
50	Microwave-assisted phenolation of acid-insoluble Klason lignin and its application in adhesion. <i>Green Chemistry</i> , 2022, 24, 2051-2061.	9.0	11
51	Enhanced Output Performance of All-Solution-Processed Organic Thermoelectrics: Spray Printing and Interface Engineering. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 26250-26257.	8.0	10
52	Preparation of poly(methyl methacrylate)/clay nanocomposites using supercritical fluid process. <i>Composite Interfaces</i> , 2012, 19, 565-572.	2.3	6
53	Facile preparation of epoxy nanocomposites with highly dispersed graphite nanosheets and their dielectric properties. <i>Macromolecular Research</i> , 2012, 20, 1197-1200.	2.4	6
54	Formation of electrically conducting, transparent films using silver nanoparticles connected by carbon nanotubes. <i>Thin Solid Films</i> , 2014, 562, 445-450.	1.8	4

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55	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
56	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
57	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