Ji Won Suk

List of Publications by Year
in descending order

78 papers	17,958 citations	87723 38 h-index	71532 76 g-index
79 all docs	79 docs citations	79 times ranked	26619 citing authors

#	Article	IF	Citations
1	Graphene and Graphene Oxide: Synthesis, Properties, and Applications. Advanced Materials, 2010, 22, 3906-3924.	11.1	8,959
2	Transfer of CVD-Grown Monolayer Graphene onto Arbitrary Substrates. ACS Nano, 2011, 5, 6916-6924.	7.3	1,258
3	Mechanical Properties of Monolayer Graphene Oxide. ACS Nano, 2010, 4, 6557-6564.	7.3	994
4	Graphene Films with Large Domain Size by a Two-Step Chemical Vapor Deposition Process. Nano Letters, 2010, 10, 4328-4334.	4.5	896
5	Raman Measurements of Thermal Transport in Suspended Monolayer Graphene of Variable Sizes in Vacuum and Gaseous Environments. ACS Nano, 2011, 5, 321-328.	7.3	474
6	Biocompatible, Robust Freeâ€Standing Paper Composed of a TWEEN/Graphene Composite. Advanced Materials, 2010, 22, 1736-1740.	11.1	363
7	Enhancement of the Electrical Properties of Graphene Grown by Chemical Vapor Deposition via Controlling the Effects of Polymer Residue. Nano Letters, 2013, 13, 1462-1467.	4.5	324
8	Synthesis and Characterization of Large-Area Graphene and Graphite Films on Commercial Cuâ€“Ni Alloy Foils. Nano Letters, 2011, 11, 3519-3525.	4.5	294
9	Oxygen-activated growth and bandgap tunability of large single-crystal bilayer graphene. Nature Nanotechnology, 2016, 11, 426-431.	15.6	287
10	Improved Electrical Conductivity of Graphene Films Integrated with Metal Nanowires. Nano Letters, 2012, 12, 5679-5683.	4.5	283
11	Millimeterâ€Size Singleâ€Crystal Graphene by Suppressing Evaporative Loss of Cu During Low Pressure Chemical Vapor Deposition. Advanced Materials, 2013, 25, 2062-2065.	11.1	279
12	Grapheneâ€Based Actuators. Small, 2010, 6, 210-212.	5.2	261
13	Inductive Tuning of Fano-Resonant Metasurfaces Using Plasmonic Response of Graphene in the Mid-Infrared. Nano Letters, 2013, 13, 1111-1117.	4.5	238
14	Selective-Area Fluorination of Graphene with Fluoropolymer and Laser Irradiation. Nano Letters, 2012, 12, 2374-2378.	4.5	222
15	Interfacial capacitance of single layer graphene. Energy and Environmental Science, 2011, 4, 4685.	15.6	220
16	Chlorination of Reduced Graphene Oxide Enhances the Dielectric Constant of Reduced Graphene Oxide/Polymer Composites. Advanced Materials, 2013, 25, 2308-2313.	11.1	176
17	Domain (Grain) Boundaries and Evidence of â€œTwinlikeâ€•Structures in Chemically Vapor Deposited Grown Graphene. ACS Nano, 2011, 5, 2433-2439.	7.3	173
18	Thermoacoustic Sound Generation from Monolayer Graphene for Transparent and Flexible Sound Sources. Advanced Materials, 2012, 24, 6342-6347.	11.1	144

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19	Enhanced Dielectric Performance in Polymer Composite Films with Carbon Nanotubeâ€Reduced Graphene Oxide Hybrid Filler. Small, 2014, 10, 3405-3411.	5.2	116
20	Simultaneous Transfer and Doping of CVD-Grown Graphene by Fluoropolymer for Transparent Conductive Films on Plastic. ACS Nano, 2012, 6, 1284-1290.	7.3	113
21	Nanotube fracture during the failure of carbon nanotube/alumina composites. Carbon, 2011, 49, 3709-3716.	5.4	105
22	Selective Mechanical Transfer of Graphene from Seed Copper Foil Using Rate Effects. ACS Nano, 2015, 9, 1325-1335.	7.3	104
23	The effect of concentration of graphene nanoplatelets on mechanical and electrical properties of reduced graphene oxide papers. Carbon, 2012, 50, 4573-4578.	5.4	90
24	Graphene: Substrate preparation and introduction. Journal of Structural Biology, 2011, 174, 234-238.	1.3	84
25	Fingerprintâ€Inspired Conducting Hierarchical Wrinkles for Energyâ€Harvesting Eâ€Skin. Advanced Functional Materials, 2019, 29, 1903580.	7.8	79
26	Graphene Synthesis via Magnetic Inductive Heating of Copper Substrates. ACS Nano, 2013, 7, 7495-7499.	7.3	77
27	Ultra Long-Range Interactions between Large Area Graphene and Silicon. ACS Nano, 2014, 8, 11234-11242.	7.3	75
28	Multifunctional Smart Textronics with Blowâ€Spun Nonwoven Fabrics. Advanced Functional Materials, 2019, 29, 1900025.	7.8	71
29	Mechanical measurements of ultra-thin amorphous carbon membranes using scanning atomic force microscopy. Carbon, 2012, 50, 2220-2225.	5.4	69
30	Capillary flow control using hydrophobic patterns. Journal of Micromechanics and Microengineering, 2007, 17, N11-N15.	1.5	65
31	Flexible and Transparent Dielectric Film with a High Dielectric Constant Using Chemical Vapor Deposition-Grown Graphene Interlayer. ACS Nano, 2014, 8, 269-274.	7.3	63
32	Clean Transfer of Wafer-Scale Graphene via Liquid Phase Removal of Polycyclic Aromatic Hydrocarbons. ACS Nano, 2015, 9, 4726-4733.	7.3	61
33	The influence of nanoscale defects on the fracture of multi-walled carbon nanotubes under tensile loading. Diamond and Related Materials, 2010, 19, 748-751.	1.8	55
34	Large Arrays and Properties of 3â€Terminal Graphene Nanoelectromechanical Switches. Advanced Materials, 2014, 26, 1571-1576.	11.1	55
35	Recycling performance of graphene oxide-chitosan hybrid hydrogels for removal of cationic and anionic dyes. Nano Convergence, 2020, 7, 4.	6.3	54
36	Oxidative Doping Renders Graphene Hydrophilic, Facilitating Its Use As a Support in Biological TEM. Nano Letters, 2011, 11, 4319-4323.	4.5	52

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37	Probing the adhesion interactions of graphene on silicon oxide by nanoindentation. Carbon, 2016, 103, 63-72.	5.4	50
38	A chlorinated barium titanate-filled polymer composite with a high dielectric constant and its application to electroluminescent devices. Journal of Materials Chemistry C, 2013, 1, 5078.	2.7	40
39	Adhesion properties of 2D materials. Journal Physics D: Applied Physics, 2019, 52, 364002.	1.3	39
40	Polycrystalline Few-Layer Graphene as a Durable Anticorrosion Film for Copper. Nano Letters, 2021, 21, 1161-1168.	4.5	39
41	A comparative study of paper-based microfluidic devices with respect to channel geometry. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 492, 190-198.	2.3	38
42	Electrical Measurements of Thermally Reduced Graphene Oxide Powders under Pressure. Nanomaterials, 2019, 9, 1387.	1.9	38
43	Double Helix Twisted and Coiled Soft Actuator from Spandex and Nylon. Advanced Engineering Materials, 2018, 20, 1800536.	1.6	37
44	Microsystem for nanofiber electromechanical measurements. Sensors and Actuators A: Physical, 2009, 155, 1-7.	2.0	35
45	Low-Temperature Synthesis of Wafer-Scale MoS₂â€“WS₂ Vertical Heterostructures by Single-Step Penetrative Plasma Sulfurization. ACS Nano, 2021, 15, 707-718.	7.3	34
46	Scalable Exfoliation of Bulk MoS2 to Single- and Few-Layers Using Toroidal Taylor Vortices. Nanomaterials, 2018, 8, 587.	1.9	30
47	PDMS-paraffin/graphene laminated films with electrothermally switchable haze. Carbon, 2016, 96, 805-811.	5.4	27
48	Fracture of polycrystalline graphene membranes by in situ nanoindentation in a scanning electron microscope. Physica Status Solidi - Rapid Research Letters, 2015, 9, 564-569.	1.2	25
49	Measurements of the Electrical Conductivity of Monolayer Graphene Flakes Using Conductive Atomic Force Microscopy. Nanomaterials, 2021, 11, 2575.	1.9	23
50	Evaluation of elastic modulus of ultra-thin vermiculite membranes by contact mode atomic force microscopy imaging. Thin Solid Films, 2013, 527, 205-209.	0.8	22
51	Using coin cells for ultracapacitor electrode material testing. Journal of Applied Electrochemistry, 2011, 41, 681-686.	1.5	19
52	Adhesion and Self-Healing between Monolayer Molybdenum Disulfide and Silicon Oxide. Scientific Reports, 2017, 7, 14740.	1.6	18
53	Enhanced dynamic performance of twisted and coiled soft actuators using graphene coating. Composites Part B: Engineering, 2019, 178, 107499.	5.9	18
54	Graphene Fibers Containing Activated Graphene for High-Performance Solid-State Flexible Supercapacitors. ACS Applied Energy Materials, 2021, 4, 8883-8890.	2.5	18

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55	Dependence of the In-Plane Thermal Conductivity of Graphene on Grain Misorientation. Chemistry of Materials, 2017, 29, 10409-10417.	3.2	17
56	High-performance and thermostable wire supercapacitors using mesoporous activated graphene deposited on continuous multilayer graphene. Journal of Materials Chemistry A, 2021, 9, 4800-4809.	5.2	17
57	Green, fast, and scalable production of reduced graphene oxide via Taylor vortex flow. Chemical Engineering Journal, 2020, 391, 123482.	6.6	16
58	Graphene Papers with Tailored Pore Structures Fabricated from Crumpled Graphene Spheres. Nanomaterials, 2019, 9, 815.	1.9	13
59	Synergistic Effect of Graphene/Silver Nanowire Hybrid Fillers on Highly Stretchable Strain Sensors Based on Spandex Composites. Nanomaterials, 2020, 10, 2063.	1.9	13
60	Impact of Grain Boundaries on the Elastic Behavior of Transferred Polycrystalline Graphene. Chemistry of Materials, 2020, 32, 6078-6084.	3.2	12
61	Graphene Oxideâ€“Chitosan Network on a Dialysis Cellulose Membrane for Efficient Removal of Organic Dyes. ACS Applied Bio Materials, 2022, 5, 2795-2811.	2.3	12
62	Soft Fabric Actuator for Robotic Applications. , 2018, , .		8
63	Effect of the particle size of graphene oxide powders on the electrochemical performance of graphene-based supercapacitors. Functional Composites and Structures, 2021, 3, 015005.	1.6	8
64	Transfer of Chemical Vapor Deposition-Grown Monolayer Graphene by Alkane Hydrocarbon. Science of Advanced Materials, 2016, 8, 144-147.	0.1	8
65	A predictor algorithm for fast geometrically-nonlinear dynamic analysis. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 2521-2538.	3.4	6
66	Reagent-loaded plastic microfluidic chips for detecting homocysteine. Journal of Micromechanics and Microengineering, 2008, 18, 055024.	1.5	6
67	Activated Graphene Deposited on Porous Cu Mesh for Supercapacitors. Nanomaterials, 2021, 11, 893.	1.9	6
68	Ionic solution-processable Ag nanostructures with tunable optical and electrical properties and strong adhesion to general substrates. Applied Materials Today, 2022, 27, 101475.	2.3	6
69	van der waals interactions of graphene membranes with a sharp silicon tip. Journal of the Korean Physical Society, 2015, 67, 2003-2006.	0.3	5
70	A general fruit acid chelation route for eco-friendly and ambient 3D printing of metals. Nature Communications, 2022, 13, 104.	5.8	5
71	Enhancement of the adhesion energy between monolayer graphene and SiO2 by thermal annealing. Applied Surface Science, 2021, 570, 151243.	3.1	4
72	FABRICATION AND MEASUREMENT OF SUSPENDED SILICON CARBIDE NANOWIRE DEVICES AND DEFLECTION. Nano, 2009, 04, 351-358.	0.5	3

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73	Graphene/silver nanoflower hybrid coating for improved cycle performance of thermally-operated soft actuators. Scientific Reports, 2020, 10, 17553.	1.6	3
74	Interlayer Separation in Graphene Paper Comprising Electrochemically Exfoliated Graphene. Nanomaterials, 2021, 11, 865.	1.9	2
75	Design and Control of Lightweight Bionic Arm Driven by Soft Twisted and Coiled Artificial Muscles. Soft Robotics, 2023, 10, 17-29.	4.6	2
76	Enhanced Cooling Performance of Polymer Actuators Using Carbon Nanotube Composites. Composites Research, 2017, 30, 165-168.	0.1	1
77	Impact of N₂ admixture on the synthesis of graphitic carbon nanoparticles using atmospheric-pressure microwave plasma. Journal Physics D: Applied Physics, 2022, 55, 275201.	1.3	1
78	Barometrically and Electrostatically Induced Strain in Suspended Graphene. , 2010, , .		0