Ji Won Suk

List of Publications by Citations

72 papers	15,179 citations	36 h-index	79 g-index
79 ext. papers	16,623 ext. citations	10.6 avg, IF	6.29 L-index

#	Paper	IF	Citations
72	Graphene and graphene oxide: synthesis, properties, and applications. *Advanced Materials*, **2010**, 22, 3906-24	24	7620
71	Transfer of CVD-grown monolayer graphene onto arbitrary substrates. *ACS Nano*, **2011**, 5, 6916-24	16.7	1059
70	Graphene films with large domain size by a two-step chemical vapor deposition process. *Nano Letters*, **2010**, 10, 4328-34	11.5	836
69	Mechanical properties of monolayer graphene oxide. *ACS Nano*, **2010**, 4, 6557-64	16.7	831
68	Raman measurements of thermal transport in suspended monolayer graphene of variable sizes in vacuum and gaseous environments. *ACS Nano*, **2011**, 5, 321-8	16.7	391
67	Biocompatible, robust free-standing paper composed of a TWEEN/graphene composite. *Advanced Materials*, **2010**, 22, 1736-40	24	340
66	Enhancement of the electrical properties of graphene grown by chemical vapor deposition via controlling the effects of polymer residue. *Nano Letters*, **2013**, 13, 1462-7	11.5	289
65	Synthesis and characterization of large-area graphene and graphite films on commercial Cu-Ni alloy foils. *Nano Letters*, **2011**, 11, 3519-25	11.5	270
64	Improved electrical conductivity of graphene films integrated with metal nanowires. *Nano Letters*, **2012**, 12, 5679-83	11.5	263
63	Millimeter-size single-crystal graphene by suppressing evaporative loss of Cu during low pressure chemical vapor deposition. *Advanced Materials*, **2013**, 25, 2062-5	24	246
62	Graphene-based actuators. *Small*, **2010**, 6, 210-2	11	237
61	Oxygen-activated growth and bandgap tunability of large single-crystal bilayer graphene. *Nature Nanotechnology*, **2016**, 11, 426-31	28.7	227
60	Inductive tuning of Fano-resonant metasurfaces using plasmonic response of graphene in the mid-infrared. *Nano Letters*, **2013**, 13, 1111-7	11.5	205
59	Selective-area fluorination of graphene with fluoropolymer and laser irradiation. *Nano Letters*, **2012**, 12, 2374-8	11.5	201
58	Interfacial capacitance of single layer graphene. *Energy and Environmental Science*, **2011**, 4, 4685	35.4	165
57	Chlorination of reduced graphene oxide enhances the dielectric constant of reduced graphene oxide/polymer composites. *Advanced Materials*, **2013**, 25, 2308-13	24	156
56	Domain (grain) boundaries and evidence of "twinlike" structures in chemically vapor deposited grown graphene. *ACS Nano*, **2011**, 5, 2433-9	16.7	156

55	Thermoacoustic sound generation from monolayer graphene for transparent and flexible sound sources. *Advanced Materials*, **2012**, 24, 6342-7	24	111
54	Simultaneous transfer and doping of CVD-grown graphene by fluoropolymer for transparent conductive films on plastic. *ACS Nano*, **2012**, 6, 1284-90	16.7	103
53	Enhanced dielectric performance in polymer composite films with carbon nanotube-reduced graphene oxide hybrid filler. *Small*, **2014**, 10, 3405-11	11	97
52	Nanotube fracture during the failure of carbon nanotube/alumina composites. *Carbon*, **2011**, 49, 3709-3716	10.4	95
51	Selective mechanical transfer of graphene from seed copper foil using rate effects. *ACS Nano*, **2015**, 9, 1325-35	16.7	88
50	The effect of concentration of graphene nanoplatelets on mechanical and electrical properties of reduced graphene oxide papers. *Carbon*, **2012**, 50, 4573-4578	10.4	77
49	Ultra long-range interactions between large area graphene and silicon. *ACS Nano*, **2014**, 8, 11234-42	16.7	68
48	Graphene: Substrate preparation and introduction. *Journal of Structural Biology*, **2011**, 174, 234-8	3.4	66
47	Graphene synthesis via magnetic inductive heating of copper substrates. *ACS Nano*, **2013**, 7, 7495-9	16.7	62
46	Capillary flow control using hydrophobic patterns. *Journal of Micromechanics and Microengineering*, **2007**, 17, N11-N15	2	62
45	Flexible and transparent dielectric film with a high dielectric constant using chemical vapor deposition-grown graphene interlayer. *ACS Nano*, **2014**, 8, 269-74	16.7	60
44	Mechanical measurements of ultra-thin amorphous carbon membranes using scanning atomic force microscopy. *Carbon*, **2012**, 50, 2220-2225	10.4	60
43	Clean Transfer of Wafer-Scale Graphene via Liquid Phase Removal of Polycyclic Aromatic Hydrocarbons. *ACS Nano*, **2015**, 9, 4726-33	16.7	54
42	Fingerprint-Inspired Conducting Hierarchical Wrinkles for Energy-Harvesting E-Skin. *Advanced Functional Materials*, **2019**, 29, 1903580	15.6	48
41	Large arrays and properties of 3-terminal graphene nanoelectromechanical switches. *Advanced Materials*, **2014**, 26, 1571-6	24	46
40	Oxidative doping renders graphene hydrophilic, facilitating its use as a support in biological TEM. *Nano Letters*, **2011**, 11, 4319-23	11.5	46
39	The influence of nanoscale defects on the fracture of multi-walled carbon nanotubes under tensile loading. *Diamond and Related Materials*, **2010**, 19, 748-751	3.5	42
38	Multifunctional Smart Textronics with Blow-Spun Nonwoven Fabrics. *Advanced Functional Materials*, **2019**, 29, 1900025	15.6	41

37	Probing the adhesion interactions of graphene on silicon oxide by nanoindentation. *Carbon*, **2016**, 103, 63-72	10.4	37
36	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	7.1	34
35	Recycling performance of graphene oxide-chitosan hybrid hydrogels for removal of cationic and anionic dyes. *Nano Convergence*, **2020**, 7, 4	9.2	31
34	Microsystem for nanofiber electromechanical measurements. *Sensors and Actuators A: Physical*, **2009**, 155, 1-7	3.9	31
33	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	5.1	28
32	Double Helix Twisted and Coiled Soft Actuator from Spandex and Nylon. *Advanced Engineering Materials*, **2018**, 20, 1800536	3.5	26
31	Fracture of polycrystalline graphene membranes by in situ nanoindentation in a scanning electron microscope. *Physica Status Solidi - Rapid Research Letters*, **2015**, 9, 564-569	2.5	22
30	Adhesion properties of 2D materials. *Journal Physics D: Applied Physics*, **2019**, 52, 364002	3	21
29	PDMS-paraffin/graphene laminated films with electrothermally switchable haze. *Carbon*, **2016**, 96, 805-811	10.4	20
28	Electrical Measurements of Thermally Reduced Graphene Oxide Powders under Pressure. *Nanomaterials*, **2019**, 9,	5.4	19
27	Evaluation of elastic modulus of ultra-thin vermiculite membranes by contact mode atomic force microscopy imaging. *Thin Solid Films*, **2013**, 527, 205-209	2.2	19
26	Scalable Exfoliation of Bulk MoS_2 to Single- and Few-Layers Using Toroidal Taylor Vortices. *Nanomaterials*, **2018**, 8,	5.4	18
25	Polycrystalline Few-Layer Graphene as a Durable Anticorrosion Film for Copper. *Nano Letters*, **2021**, 21, 1161-1168	11.5	16
24	Dependence of the In-Plane Thermal Conductivity of Graphene on Grain Misorientation. *Chemistry of Materials*, **2017**, 29, 10409-10417	9.6	13
23	Using coin cells for ultracapacitor electrode material testing. *Journal of Applied Electrochemistry*, **2011**, 41, 681-686	2.6	13
22	Green, fast, and scalable production of reduced graphene oxide via Taylor vortex flow. *Chemical Engineering Journal*, **2020**, 391, 123482	14.7	12
21	Graphene Papers with Tailored Pore Structures Fabricated from Crumpled Graphene Spheres. *Nanomaterials*, **2019**, 9,	5.4	11
20	Adhesion and Self-Healing between Monolayer Molybdenum Disulfide and Silicon Oxide. *Scientific Reports*, **2017**, 7, 14740	4.9	10

19	Low-Temperature Synthesis of Wafer-Scale MoS-WS Vertical Heterostructures by Single-Step Penetrative Plasma Sulfurization. *ACS Nano*, **2021**, 15, 707-718	16.7	10
18	Enhanced dynamic performance of twisted and coiled soft actuators using graphene coating. *Composites Part B: Engineering*, **2019**, 178, 107499	10	8
17	Impact of Grain Boundaries on the Elastic Behavior of Transferred Polycrystalline Graphene. *Chemistry of Materials*, **2020**, 32, 6078-6084	9.6	8
16	Transfer of Chemical Vapor Deposition-Grown Monolayer Graphene by Alkane Hydrocarbon. *Science of Advanced Materials*, **2016**, 8, 144-147	2.3	7
15	Reagent-loaded plastic microfluidic chips for detecting homocysteine. *Journal of Micromechanics and Microengineering*, **2008**, 18, 055024	2	6
14	High-performance and thermostable wire supercapacitors using mesoporous activated graphene deposited on continuous multilayer graphene. *Journal of Materials Chemistry A*, **2021**, 9, 4800-4809	13	6
13	van der waals interactions of graphene membranes with a sharp silicon tip. *Journal of the Korean Physical Society*, **2015**, 67, 2003-2006	0.6	5
12	A predictor algorithm for fast geometrically-nonlinear dynamic analysis. *Computer Methods in Applied Mechanics and Engineering*, **2003**, 192, 2521-2538	5.7	5
11	Synergistic Effect of Graphene/Silver Nanowire Hybrid Fillers on Highly Stretchable Strain Sensors Based on Spandex Composites. *Nanomaterials*, **2020**, 10,	5.4	4
10	Soft Fabric Actuator for Robotic Applications **2018**,		4
9	Effect of the particle size of graphene oxide powders on the electrochemical performance of graphene-based supercapacitors. *Functional Composites and Structures*, **2021**, 3, 015005	3.5	3
8	Graphene Fibers Containing Activated Graphene for High-Performance Solid-State Flexible Supercapacitors. *ACS Applied Energy Materials*, **2021**, 4, 8883-8890	6.1	3
7	FABRICATION AND MEASUREMENT OF SUSPENDED SILICON CARBIDE NANOWIRE DEVICES AND DEFLECTION. *Nano*, **2009**, 04, 351-358	1.1	2
6	Activated Graphene Deposited on Porous Cu Mesh for Supercapacitors. *Nanomaterials*, **2021**, 11,	5.4	2
5	Ionic solution-processable Ag nanostructures with tunable optical and electrical properties and strong adhesion to general substrates. *Applied Materials Today*, **2022**, 27, 101475	6.6	2
4	Interlayer Separation in Graphene Paper Comprising Electrochemically Exfoliated Graphene. *Nanomaterials*, **2021**, 11,	5.4	1
3	Graphene/silver nanoflower hybrid coating for improved cycle performance of thermally-operated soft actuators. *Scientific Reports*, **2020**, 10, 17553	4.9	0
2	Enhancement of the adhesion energy between monolayer graphene and SiO2 by thermal annealing. *Applied Surface Science*, **2021**, 570, 151243	6.7	0

1	A general fruit acid chelation route for eco-friendly and ambient 3D printing of metals.. *Nature Communications*, **2022**, 13, 104	17.4	0