Jae Won Jang

List of Publications by Year
in descending order

66	1,498	361413	330143
papers	citations	20 h-index	37 g-index

68	68	68	2490
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structural study of nitrogen-doping effects in bamboo-shaped multiwalled carbon nanotubes. Applied Physics Letters, 2004, 84, 2877-2879.	3.3	295
2	On-Wire Lithography-Generated Molecule-Based Transport Junctions: A New Testbed for Molecular Electronics. Journal of the American Chemical Society, 2008, 130, 8166-8168.	13.7	104
3	Platinum Monolayer Electrocatalyst on Gold Nanostructures on Silicon for Photoelectrochemical Hydrogen Evolution. ACS Nano, 2013, 7, 6017-6023.	14.6	95
4	Matrixâ€Assisted Dipâ€Pen Nanolithography and Polymer Pen Lithography. Small, 2010, 6, 1077-1081.	10.0	79
5	Direct Observation of Plasmon-Induced Interfacial Charge Separation in Metal/Semiconductor Hybrid Nanostructures by Measuring Surface Potentials. Nano Letters, 2018, 18, 109-116.	9.1	55
6	Sub-5-nm Gaps Prepared by On-Wire Lithography: Correlating Gap Size with Electrical Transport. Small, 2007, 3, 86-90.	10.0	52
7	Topographically Flat, Chemically Patterned PDMS Stamps Made by Dipâ€Pen Nanolithography. Angewandte Chemie - International Edition, 2008, 47, 9951-9954.	13.8	49
8	Overcoming Fill Factor Reduction in Ternary Polymer Solar Cells by Matching the Highest Occupied Molecular Orbital Energy Levels of Donor Polymers. Advanced Energy Materials, 2018, 8, 1702251.	19.5	48
9	Arrays of Nanoscale Lenses for Subwavelength Optical Lithography. Nano Letters, 2010, 10, 4399-4404.	9.1	47
10	Single-Crystal-like Perovskite for High-Performance Solar Cells Using the Effective Merged Annealing Method. ACS Applied Materials & Interfaces, 2017, 9, 12382-12390.	8.0	41
11	Generation of Metal Photomasks by Dipâ€Pen Nanolithography. Small, 2009, 5, 1850-1853.	10.0	37
12	A â€œMolecular Eraserâ€•for Dip-Pen Nanolithography. Small, 2007, 3, 600-605.	10.0	35
13	Structural, vibrational, and enhanced magneto-electric coupling in Ho-substituted BiFeO3. Journal of Alloys and Compounds, 2018, 750, 276-285.	5.5	29
14	Plasmon expedited response time and enhanced response in gold nanoparticles-decorated zinc oxide nanowire-based nitrogen dioxide gas sensor at room temperature. Journal of Colloid and Interface Science, 2021, 582, 658-668.	9.4	28
15	Interwall support in double-walled carbon nanotubes studied by scanning tunneling microscopy. Applied Physics Letters, 2005, 86, 023110.	3.3	25
16	Alignment Strategies for the Assembly of Nanowires with Submicron Diameters. Small, 2010, 6, 1736-1740.	10.0	25
17	Electrically Biased Nanolithography with KOH-Coated AFM Tips. Nano Letters, 2008, 8, 1451-1455.	9.1	24
18	Multiâ€ink pattern generation by dipâ€pen nanolithography^{Â®}. Scanning, 2010, 32, 24-29.	1.5	23

#	Article	IF	Citations
19	Polyethylene Glycol as a Novel Resist and Sacrificial Material for Generating Positive and Negative Nanostructures. Small, 2008, 4, 920-924.	10.0	22
20	Generating semi-metallic conductivity in polymers by laser-driven nanostructural reorganization. Materials Horizons, 2019, 6, 2143-2151.	12.2	21
21	Selfâ€leveling twoâ€dimensional probe arrays for Dip Pen Nanolithography^{Â®}. Scanning, 2010, 32, 49-59.	1.5	20
22	Effective hot-air annealing for improving the performance of perovskite solar cells. Solar Energy, 2017, 146, 359-367.	6.1	20
23	Hydrogen storage capacity of different carbon nanostructures in ambient conditions. Journal of Applied Physics, 2005, 98, 074316.	2.5	19
24	Actuation of Self-Assembled Two-Component Rodlike Nanostructures. Nano Letters, 2008, 8, 4441-4445.	9.1	18
25	A hot-electron-triggered catalytic oxidation reaction of plasmonic silver nanoparticles evidenced by surface potential mapping. Journal of Materials Chemistry A, 2018, 6, 20939-20946.	10.3	18
26	Inâ€Wire Conversion of a Metal Nanorod Segment into an Organic Semiconductor. Small, 2009, 5, 1527-1530.	10.0	17
27	Generation of plasmonic Au nanostructures in the visible wavelength using two-dimensional parallel dip-pen nanolithography. Nanoscale, 2014, 6, 7912.	5.6	17
28	Bulk Heterojunction-Assisted Grain Growth for Controllable and Highly Crystalline Perovskite Films. ACS Applied Materials & Interfaces, 2018, 10, 31366-31373.	8.0	17
29	Can Static Electricity on a Conductor Drive a Redox Reaction: Contact Electrification of Au by Polydimethylsiloxane, Charge Inversion in Water, and Redox Reaction. Journal of the American Chemical Society, 2018, 140, 14687-14695.	13.7	15
30	Improvement of polypyrrole nanowire devices by plasmonic space charge generation: high photocurrent and wide spectral response by Ag nanoparticle decoration. Nanoscale, 2015, 7, 17328-17337.	5.6	14
31	Efficient direct electron transfer via band alignment in hybrid metal-semiconductor nanostructures toward enhanced photocatalysts. Nano Energy, 2019, 63, 103841.	16.0	13
32	Thermoelectric properties of dispersant-free semiconducting single-walled carbon nanotubes sorted by a flavin extraction method. Chemical Communications, 2019, 55, 2636-2639.	4.1	13
33	Mass Fabrication of 3D Silicon Nanoâ€Microstructures by Fabâ€Free Process Using Tipâ€Based Lithography. Small, 2021, 17, e2005036.	10.0	13
34	Mechanical cutting of bamboo-shaped multiwalled carbon nanotubes by an atomic force microscope tip. Solid State Communications, 2005, 135, 683-686.	1.9	9
35	Differences in the catalyst removal from single- and double-walled carbon nanotubes. Current Applied Physics, 2013, 13, 1069-1074.	2.4	9
36	Fabrication of diffraction gratings by top-down and bottom-up approaches based on scanning probe lithography. Nanoscale, 2019, 11, 2326-2334.	5.6	9

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37	Helical Structure-Dependent Surface-Enhanced Raman Spectroscopy Enhancement in Gold Nanohelices. Journal of Physical Chemistry C, 2019, 123, 5626-5633.	3.1	9
38	Opposite Raman Shift of Ring Stretching Dependent on the Coordinated Silver Volume in Surface-Enhanced Raman Spectroscopy of Polypyrrole. Journal of Physical Chemistry Letters, 2022, 13, 1300-1306.	4.6	8
39	Userâ€Friendly Universal and Durable Subcellularâ€Scaled Template for Protein Binding: Application to Singleâ€Cell Patterning. Advanced Functional Materials, 2013, 23, 5840-5845.	14.9	7
40	Polycrystalline Au Nanomembrane as a Tool for Two-Tone Micro/Nanolithography. Chemistry of Materials, 2017, 29, 3863-3872.	6.7	7
41	Structural, optical and multiferroic properties of pure and Dy modified YMnO3. Journal of Materials Science: Materials in Electronics, 2017, 28, 16788-16796.	2.2	7
42	Effect of dopant-induced defects on structural, electrical, and enhanced ferromagnetism and magnetoelectric properties of Dy and Sr co-doped BiFeO3. Journal of Materials Science: Materials in Electronics, 2019, 30, 7359-7366.	2.2	7
43	Optimized Hole Injection, Diffusion, and Consumption for Efficient Metal-Assisted Chemical Etching Depending on the Silicon Doping Type and Metal Catalyst Area. Journal of Physical Chemistry C, 2021, 125, 22713-22723.	3.1	7
44	Exponential decrease of scission length and low tensile strength of bamboo-shaped multi-walled carbon nanotubes under ultrasonication. Current Applied Physics, 2017, 17, 507-512.	2.4	6
45	Micro- and nano-patterns fabricated by embossed microscale stamp with trenched edges. RSC Advances, 2017, 7, 32058-32064.	3.6	5
46	Effect of Wavelength-Scale Cu₂O Particles on the Performance of Photocathodes for Solar Water Splitting. Journal of Physical Chemistry C, 2019, 123, 24846-24854.	3.1	5
47	Direct curvature measurement of the compartments in bamboo-shaped multi-walled carbon nanotubes via scanning probe microscopy. Scientific Reports, 2021, 11, 701.	3.3	5
48	Fabrication and optical properties of zirconia nanoparticle array on a patterned hydrophilic-hydrophobic substrate. Journal of Applied Physics, 2013, 114, 234306.	2.5	4
49	Critical role of wettability in assembly of zirconia nanoparticles on a self-assembled monolayer-patterned substrate. Journal of Applied Physics, 2016, 120, 085304.	2.5	4
50	Molecular Transport Junctions Created By Selfâ€Contacting Gapped Nanowires. Small, 2016, 12, 4349-4356.	10.0	4
51	Gold Nanohelices: A New Synthesis Route, Characterization, and Plasmonic E-Field Enhancement. ACS Omega, 2020, 5, 14860-14867.	3.5	4
52	Electron donor or acceptor behavior of a AuCl3 dopant manipulated by dip-pen nanolithography on a MoS2 thin-film transistor. Applied Surface Science, 2022, 588, 152846.	6.1	4
53	Mass fabrication of size-controllable hydrogel microarrays by dip-pen nanolithography with viscosity-tunable ink. Current Applied Physics, 2014, 14, 790-793.	2.4	3
54	Unconventional but tunable phase transition above the percolation threshold by two-layer conduction in electroless-deposited Au nanofeatures on silicon substrate. Nanotechnology, 2015, 26, 505202.	2.6	3

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55	Giant Temperature Coefficient of Resistivity and Cryogenic Sensitivity in Silicon with Galvanically Displaced Gold Nanoparticles in Freeze-Out Region. ACS Nano, 2017, 11, 1572-1580.	14.6	3
56	Gate-enhanced photocurrent of (6,5) single-walled carbon nanotube based field effect transistor. Carbon, 2018, 139, 709-715.	10.3	3
57	Structural and Optical Properties of Epitaxial Iron Oxide Thin Films Deposited by Pulsed Laser Deposition. Journal of the Korean Physical Society, 2020, 76, 512-516.	0.7	3
58	Normalized Contact Force to Minimize "Electrode-Lead" Resistance in a Nanodevice. Bulletin of the Korean Chemical Society, 2014, 35, 2415-2418.	1.9	3
59	Understanding Optomagnetic Interactions in Fe Nanowireâ€“Au Nanoring Hybrid Structures Synthesized through Coaxial Lithography. Chemistry of Materials, 2020, 32, 2843-2851.	6.7	2
60	Finite-difference time-domain analysis on light extraction in a GaN light-emitting diode by empirically capable dielectric nano-features. Journal of Applied Physics, 2014, 116, 184302.	2.5	1
61	Investigation on the Structural, Optical, and Vibrational Properties of Lead-Free (1 â^' x) Na0.5Bi0.5TiO3-xBiMnO3 Ceramics. Journal of the Korean Physical Society, 2019, 75, 229-235.	0.7	1
62	Correlation Between Lateral Photovoltaic Effect and Conductivity in p-type Silicon Substrates. Bulletin of the Korean Chemical Society, 2013, 34, 1845-1847.	1.9	1
63	Dip Pen Nanolithography® (DPN®) and the Deposition of Multiple Materials in Nanopatterning. , 2010, , .		0
64	Nanolithography: Userâ€Friendly Universal and Durable Subcellularâ€Scaled Template for Protein Binding: Application to Singleâ€Cell Patterning (Adv. Funct. Mater. 47/2013). Advanced Functional Materials, 2013, 23, 5826-5826.	14.9	0
65	Open Circuit Potential Changes upon Protonation/Deprotonation of ï‰â€Functionalized Alkanethiols on Au: Determination of Surface pK_{1/2} in Aqueous and Nonâ€Aqueous System. Bulletin of the Korean Chemical Society, 2016, 37, 1537-1540.	1.9	0
66	Dimensional crossover of quantum Hall conductivity in graphite through proton-irradiation. Carbon, 2021, 187, 126-126.	10.3	0