

Hyun-Mi Kim

List of Publications by Year in descending order

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45
papers

1,099
citations

430874

18
h-index

395702

33
g-index

45
all docs

45
docs citations

45
times ranked

1831
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of the Bilayer Period of Atomic Layer Deposition on the Growth Behavior and Electrical Properties of the Amorphous In ₂ ZnO Film. ACS Applied Materials & Interfaces, 2020, 12, 39372-39380.	8.0	3
2	Sheet Resistance Analysis of Interface-Engineered Multilayer Graphene: Mobility Versus Sheet Carrier Concentration. ACS Applied Materials & Interfaces, 2020, 12, 30932-30940.	8.0	18
3	Efficient Blue-Light-Emitting Cd-Free Colloidal Quantum Well and Its Application in Electroluminescent Devices. Chemistry of Materials, 2020, 32, 5200-5207.	6.7	26
4	An electrophoretic DNA extraction device using a nanofilter for molecular diagnosis of pathogens. Nanoscale, 2020, 12, 5048-5054.	5.6	11
5	Comparison of Growth Behavior and Electrical Properties of Graphene Grown on Solid and Liquid Copper by Chemical Vapor Deposition. Journal of Nanoscience and Nanotechnology, 2020, 20, 316-323.	0.9	3
6	Surface modification of solid-state nanopore by plasma-polymerized chemical vapor deposition of poly(ethylene glycol) for stable device operation. Nanotechnology, 2020, 31, 185503.	2.6	3
7	Selective Atomic Layer Deposition of Metals on Graphene for Transparent Conducting Electrode Application. ACS Applied Materials & Interfaces, 2020, 12, 14331-14340.	8.0	26
8	Graphene-Based Etch Resist for Semiconductor Device Fabrication. ACS Applied Nano Materials, 2020, 3, 4635-4641.	5.0	4
9	Atomic Layer Deposition of Nickel Using a Heteroleptic Ni Precursor with NH ₃ and Selective Deposition on Defects of Graphene. ACS Omega, 2019, 4, 11126-11134.	3.5	13
10	Direct formation of graphene on dielectric substrate: Controlling the location of graphene formation adopting carbon diffusion barrier. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2018, 36, .	1.2	2
11	The dynamics of electron beam scattering on metal membranes: nanopore formation in metal membranes using transmission electron microscopy. Nano Convergence, 2018, 5, 32.	12.1	3
12	Highly Stable and Effective Doping of Graphene by Selective Atomic Layer Deposition of Ruthenium. ACS Applied Materials & Interfaces, 2017, 9, 701-709.	8.0	29
13	Noise and sensitivity characteristics of solid-state nanopores with a boron nitride 2-D membrane on a pyrex substrate. Nanoscale, 2016, 8, 5755-5763.	5.6	39
14	Nanopore formation in TiN membranes by the focused electron beam of a transmission electron microscope. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, 06F502.	1.2	3
15	Synchronized Optical and Electronic Detection of Biomolecules Using a Low Noise Nanopore Platform. ACS Nano, 2015, 9, 1740-1748.	14.6	62
16	Self-assembly and continuous growth of hexagonal graphene flakes on liquid Cu. Nanoscale, 2015, 7, 12820-12827.	5.6	31
17	Identifying the Location of a Single Protein along the DNA Strand Using Solid-State Nanopores. ACS Nano, 2015, 9, 5289-5298.	14.6	40
18	Leakage current in a Si-based nanopore structure and its influence on noise characteristics. Microfluidics and Nanofluidics, 2014, 16, 123-130.	2.2	9

#	ARTICLE	IF	CITATIONS
19	A Low-Noise Solid-State Nanopore Platform Based on a Highly Insulating Substrate. <i>Scientific Reports</i> , 2014, 4, 7448.	3.3	103
20	Digital versus analog resistive switching depending on the thickness of nickel oxide nanoparticle assembly. <i>RSC Advances</i> , 2013, 3, 20978.	3.6	53
21	Non-volatile nano-floating gate memory with Pt-Fe ₂ O ₃ composite nanoparticles and indium gallium zinc oxide channel. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	1.9	10
22	Multimode threshold and bipolar resistive switching in bi-layered Pt-Fe ₂ O ₃ core-shell and Fe ₂ O ₃ nanoparticle assembly. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	23
23	Organosilicate polymer e-beam resists with high resolution, sensitivity and stability. <i>Applied Organometallic Chemistry</i> , 2013, 27, 644-651.	3.5	2
24	Investigation of analog memristive switching of iron oxide nanoparticle assembly between Pt electrodes. <i>Journal of Applied Physics</i> , 2013, 114, 224505.	2.5	24
25	Gas transport controlled synthesis of graphene by employing a micro-meter scale gap jig. <i>RSC Advances</i> , 2013, 3, 26376.	3.6	4
26	Interface-controlled thermal transport properties in nano-clustered phase change materials. <i>Journal of Applied Physics</i> , 2012, 111, 073528.	2.5	1
27	Electrical Properties of Silicon Nanowire Fabricated by Patterning and Oxidation Process. <i>IEEE Nanotechnology Magazine</i> , 2012, 11, 565-569.	2.0	6
28	Fabrication and verification of DNA functionalized nanopore with gold layer embedded structure for bio-molecular sensing. , 2011, , .		0
29	Direct formation of graphene-metal hybrid on dielectric surfaces by metal-induced crystallization. , 2011, , .		0
30	Structural and Electrical Properties of Atomic Layer Deposited Al-doped ZnO Films. <i>Advanced Functional Materials</i> , 2011, 21, 448-455.	14.9	233
31	High-performance Micro-Solid Oxide Fuel Cells Fabricated on Nanoporous Anodic Aluminum Oxide Templates. <i>Advanced Functional Materials</i> , 2011, 21, 1154-1159.	14.9	151
32	Theoretical and experimental study of nanopore drilling by a focused electron beam in transmission electron microscopy. <i>Nanotechnology</i> , 2011, 22, 275303.	2.6	29
33	Fabrication of ultra-high-density nanodot array patterns (~1/3 Tbits/in. ²) using electron-beam lithography. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011, 29, 061602.	1.2	4
34	Homogeneous dispersion of organic p-dopants in an organic semiconductor as an origin of high charge generation efficiency. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	40
35	Analysis of the electric field induced elemental separation of Ge ₂ Sb ₂ Te ₅ by transmission electron microscopy. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	28
36	Method of improving the quality of nanopatterning in atomic image projection electron-beam lithography. <i>Journal of Vacuum Science & Technology B</i> , 2009, 27, 2553.	1.3	4

#	ARTICLE	IF	CITATIONS
37	Study of growth behaviour and microstructure of epitaxially grown self-assembled Ge quantum dots on nanometer-scale patterned SiO ₂ /Si(001) substrates. Physica Status Solidi (B): Basic Research, 2009, 246, 721-724.	1.5	5
38	A Structural and Compositional Analysis of a TiO _x Diffusion Barrier for Indium Tin Oxide/Si Contacts. Metals and Materials International, 2008, 14, 481-485.	3.4	0
39	Microstructure analysis of epitaxially grown self-assembled Ge islands on nanometer-scale patterned SiO ₂ -Si substrates by high-resolution transmission electron microscopy. Journal of Applied Physics, 2007, 102, 104306.	2.5	8
40	Selective growth of Ge islands on nanometer-scale patterned SiO ₂ -Si substrate by molecular beam epitaxy. Applied Physics Letters, 2006, 89, 063107.	3.3	23
41	Metal-Induced Nickel Silicide Nanowire Growth Mechanism in the Solid State Reaction. Materials Research Society Symposia Proceedings, 2006, 910, 7.	0.1	0
42	Solid-state growth of nickel silicide nanowire by the metal-induced growth method. Journal of Materials Research, 2006, 21, 2936-2940.	2.6	13
43	The reaction sequence and microstructure evolution of an MgB ₂ layer during ex situ annealing of amorphous boron film. Journal of Materials Research, 2004, 19, 409-412.	2.6	2
44	Growth kinetics of MgB ₂ layer and interfacial MgO layer during ex situ annealing of amorphous boron film. Journal of Materials Research, 2004, 19, 3081-3089.	2.6	7
45	Characterization of Atomic Layer Deposited W _N x _{Cy} Thin Film as a Diffusion Barrier for Copper Metallization. Materials Research Society Symposia Proceedings, 2003, 766, 1091.	0.1	1