Cheol-Joo Kim

List of Publications by Citations

40 papers	3,409 citations	19 h-index	46 g-index
46 ext. papers	3,890 ext. citations	13.7 avg, IF	5.04 L-index

#	Paper	IF	Citations
40	High-mobility three-atom-thick semiconducting films with wafer-scale homogeneity. *Nature*, **2015**, 520, 656-60	50.4	1224
39	Graphene and boron nitride lateral heterostructures for atomically thin circuitry. *Nature*, **2012**, 488, 627-32	50.4	650
38	Atomically Thin Ohmic Edge Contacts Between Two-Dimensional Materials. *ACS Nano*, **2016**, 10, 6392-9	16.7	144
37	Diameter-dependent internal gain in ohmic Ge nanowire photodetectors. *Nano Letters*, **2010**, 10, 2043-8	11.5	137
36	Electrical detection of VEGFs for cancer diagnoses using anti-vascular endotherial growth factor aptamer-modified Si nanowire FETs. *Biosensors and Bioelectronics*, **2009**, 24, 1801-5	11.8	122
35	Chiral atomically thin films. *Nature Nanotechnology*, **2016**, 11, 520-524	28.7	117
34	Polycrystalline graphene with single crystalline electronic structure. *Nano Letters*, **2014**, 14, 5706-11	11.5	112
33	Stacking order dependent second harmonic generation and topological defects in h-BN bilayers. *Nano Letters*, **2013**, 13, 5660-5	11.5	106
32	Klein tunnelling and electron trapping in nanometre-scale graphene quantum dots. *Nature Physics*, **2016**, 12, 1069-1075	16.2	103
31	Band-gap modulation in single-crystalline Si1-xGex nanowires. *Nano Letters*, **2006**, 6, 2679-84	11.5	99
30	Spontaneous Chemical Vapor Growth of NiSi Nanowires and Their Metallic Properties. *Advanced Materials*, **2007**, 19, 3637-3642	24	93
29	Low-Temperature Deterministic Growth of Ge Nanowires Using Cu Solid Catalysts. *Advanced Materials*, **2008**, 20, 4684-4690	24	68
28	Imaging chiral symmetry breaking from Kekul bond order in graphene. *Nature Physics*, **2016**, 12, 950-958	16.2	56
27	The role of NiOx overlayers on spontaneous growth of NiSix nanowires from Ni seed layers. *Nano Letters*, **2008**, 8, 431-6	11.5	50
26	Stacking angle-tunable photoluminescence from interlayer exciton states in twisted bilayer graphene. *Nature Communications*, **2019**, 10, 1445	17.4	42
25	Hyperspectral imaging of structure and composition in atomically thin heterostructures. *Nano Letters*, **2013**, 13, 3942-6	11.5	37
24	On-nanowire band-graded Si:Ge photodetectors. *Advanced Materials*, **2011**, 23, 1025-9	24	33

23	Fabrication of Si1−xGex alloy nanowire field-effect transistors. *Applied Physics Letters*, **2007**, 91, 033104	3.4	29
22	Spatially resolved photodetection in leaky ferroelectric BiFeO(3). *Advanced Materials*, **2012**, 24, OP49-53	24	25
21	All-Dry Transfer of Graphene Film by van der Waals Interactions. *Nano Letters*, **2019**, 19, 3590-3596	11.5	18
20	Directionally integrated VLS nanowire growth in a local temperature gradient. *Angewandte Chemie - International Edition*, **2009**, 48, 7366-70	16.4	17
19	Unconventional roles of metal catalysts in chemical-vapor syntheses of single-crystalline nanowires. *Journal of Applied Physics*, **2009**, 105, 122407	2.5	15
18	Massive integration of inorganic nanowire-based structures on solid substrates for device applications. *Journal of Materials Chemistry*, **2009**, 19, 901		14
17	Vertically aligned Si intrananowire p-n diodes by large-area epitaxial growth. *Applied Physics Letters*, **2009**, 94, 173105	3.4	13
16	Thermodynamic analysis for the size-dependence of nanowire composition grown by a vapor−liquid−solid method. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2008**, 32, 669-674	1.9	13
15	Axially graded heteroepitaxy and Raman spectroscopic characterizations of Si1−xGex nanowires. *Applied Physics Letters*, **2008**, 92, 263111	3.4	12
14	Depolarization effect in optical absorption measurements of one- and two-dimensional nanostructures. *Applied Physics Letters*, **2012**, 101, 123102	3.4	10
13	Metal Nanoparticle Exsolution on a Perovskite Stannate Support with High Electrical Conductivity. *Nano Letters*, **2020**, 20, 3538-3544	11.5	9
12	Determination of the photocarrier diffusion length in intrinsic Ge nanowires. *Optics Express*, **2011**, 19, 6119-24	3.3	8
11	P-type Si-nanowire-based Field-effect Transistors for Electric Detection of a Biomarker: Matrix Metalloproteinase-9. *Journal of the Korean Physical Society*, **2009**, 55, 232-235	0.6	8
10	Large electroabsorption susceptibility mediated by internal photoconductive gain in Ge nanowires. *Nano Letters*, **2012**, 12, 5913-8	11.5	6
9	Direct Synthesis of Molybdenum Phosphide Nanorods on Silicon Using Graphene at the Heterointerface for Efficient Photoelectrochemical Water Reduction. *Nano-Micro Letters*, **2021**, 13, 81	19.5	6
8	Nanoscale Molecular Building Blocks for Layer-by-Layer Assembly. *Advanced Materials Interfaces*, **2020**, 7, 2000522	4.6	3
7	Atomically Smooth Graphene-Based Hybrid Template for the Epitaxial Growth of Organic Semiconductor Crystals. *Advanced Functional Materials*, **2021**, 31, 2008813	15.6	3
6	Vectorial nanowire growth by local kinetic manipulation. *Journal of Crystal Growth*, **2012**, 345, 56-60	1.6	2

5	Directionally Integrated VLS Nanowire Growth in a Local Temperature Gradient. *Angewandte Chemie*, **2009**, 121, 7502-7506	3.6	2
4	Graphene Nanoribbon Grids of Sub-10 nm Widths with High Electrical Connectivity. *ACS Applied Materials & Interfaces*, **2021**, 13, 28593-28599	9.5	2
3	Pristine Graphene Insertion at the Metal/Semiconductor Interface to Minimize Metal-Induced Gap States. *ACS Applied Materials & Interfaces*, **2021**, 13, 22828-22835	9.5	1
2	Substrate-Dependent Growth Mode Control of MoS2 Monolayers: Implications for Hydrogen Evolution and Field-Effect Transistors. *ACS Applied Nano Materials*, **2022**, 5, 4336-4342	5.6	0
1	Photodetection: Spatially Resolved Photodetection in Leaky Ferroelectric BiFeO3 (Adv. Mater. 10/2012). *Advanced Materials*, **2012**, 24, OP48-OP48	24	