

KANG Dae-Joon

Professor
Department of Physics

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Key Words Electro Hydrodynamic Lithography, Supercapacitor, Nanogenerator, Transition Metal Oxide, 2D materials

Research Area Growth and device applications of inorganic nanostructured materials / Development of novel flexible and wearable electronics / Development of nonconventional pattern transfer techniques / Growth and device applications of 2D atomic crystals / Power electronic device applications and physics of phase transition in VO₂

Education	• University of Cambridge	PhD	Physics
	• University of Cambridge	MPhil	Microelectronic Engineering & Semiconductor Physics
	• University of Florida	MSc	Materials Science and Engineering
	• Yonsei university	BSc	Ceramic Engineering

Experience	• Chair of Program Session Committee; Member of Publication Committee	2015 Nano Korea
	• Chair of Organizing Committee	2015 Advances in Functional Materials
	• Editorial Board Member	Nanotechnology, Institute of Physics
	• Editor-in-chief	Current Nanoscience, Bentham Science

Position	Professor	Sungkyunkwan University
	Lecturer	University of Cambridge
	Senior Research Fellow	University of Cambridge
	Postdoctoral Associate	University of Cambridge
	Postdoctoral Fellow	University of Maryland

Selected Publication

- Gwangwoo Kim, A-Rang Jang, Hu Young Jeong, Zonghoon Lee, Dae Joon Kang, and Hyeon Suk Shin "Growth of High-Crystalline, Single-Layer Hexagonal Boron Nitride on Recyclable Platinum Foil" Nano Letters 13 (2013) 1834-1839
- A-Rang Jang, Eun Kyung Jeon, Dongwoo Kang, Gwangwoo Kim, Byeong-Su Kim, Dae Joon Kang, and Hyeon Suk Shin "Reversibly Light-Modulated Dirac Point of Graphene Functionalized with Spiropyran" ACS Nano 6 (2012) 9207-9213
- Dong Chung Kim, Jung Inn Sohn, Dejian Zhou, Thomas A. J. Duke, and Dae Joon Kang "Controlled Assembly for Well-Defined 3D Bioarchitecture Using Two Active Enzymes" ACS Nano 4 (2010) 1580-1586
- Mihaela Nedelcu, Mohammad S. M. Saifullah, David G. Hasko, Arang Jang, David Anderson, Wilhelm T. S. Huck, Geraint A. C. Jones, Mark E. Welland, Dae Joon Kang, Ullrich Steiner "Fabrication of Sub-10 nm Metallic Lines of Low Line-Width Roughness by Hydrogen Reduction of Patterned Metal-Organic Materials" Advanced Functional Materials 20 (2010) 1-7
- Jung Inn Sohn, Heung Jin Joo, Docheon Ahn, Hyun Hwi Lee, Alexandra E. Porter, Kinam Kim, Dae Joon Kang and Mark E. Welland "Surface-Stress-Induced Mott Transition and Nature of Associated Spatial Phase Transition in Single Crystalline VC₂ Nanowires" Nano Letters 9 (2009) 3392-3397
- Jung Inn Sohn, Heung Jin Joo, Alexandra E. Porter, Chel-Jong Choi, Kinam Kim, Dae Joon Kang, and Mark E. Welland "Direct Observation of the Structural Component of the Metal-Insulator Phase Transition and Growth Habits of Epitaxially Grown VC₂ Nanowires" NANO LETTERS 7 (2007) 157C

Others • Innovative Research Award from Nano Korea 2013 International Symposium