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**h-index : 68 (by Google Scholar)**

Research interests:

1. OLEDs and PLEDs

- Development of novel organic emitting materials
- Development of novel organic semiconductors for hole transporting layer
- Research on new device structures for highly efficient Organic or Polymer Light-Emitting Diodes (OLEDs, PLEDs)

2. Organic thin film transistors (OTFTs)

- Development of novel p-engine and n-engine organic semiconductors
- Development of novel organic gate insulators for gate dielectric layer for OTFTs
- Research on organic thin film phototransistors
- Research on organic memory devices

3. Organic photovoltaic cell(OPV)

- Development of novel materials
- Research on new device structures for highly efficient solar cell

4. Nano patterning

- Highly efficient display and organic optoelectronic device using the nano patterning technique
- Photo-responsive polymer and hologram for optical storage

5.Highly efficient photonic device using photonic crystals (PCs) and plasmonic

6.Perovskite solar cells

- Research on new structure of high-performance perovskite solar cells
- Development of large scale perovskite solar cell module

## ▶ Education

Ph. D (1997) University of Massachusetts Lowell  
Major: Polymer Science / Plastics Engineering

Master (1988) Seoul National University  
Major: Polymer Science

Bachelor (1986) Seoul National University  
Major: Chemical Technology

## ▶ Experience

2015 - present GIST Distinguished Professor, Gwangju Institute of Science and Technology (GIST)

2013 - 2015 The dean of Dept of Materials Science and Engineering, Gwangju Institute of Science and Technology (GIST)

2007 - present Professor, Gwangju Institute of Science and Technology (GIST)

2005 - 2007 The Vice-Director of Research Institute for Solar and Sustainable Energies (RISE), Gwanju Institute of Science and Technology (GIST)

2003 - 2007 Associate Professor, Gwangju Institute of Science and Technology (GIST)

1999 - 2003 Assistant Professor, Gwangju Institute of Science and Technology (GIST)

1997 - 1999 Postdoctoral Researcher, Center for Advanced Science Materials, University of Massachusetts Lowell

1989 - 1991 Research Scientist, Korean Institute of Science and Technology (KIST)



# Dong-Yu Kim

Gwangju institute of science and technology  
material science

Google Scholar

[Citation indices](#)

	All	Since 2012
Citations	17953	10779
h-index	68	51
i10-index	264	202

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NK Viswanathan, DY Kim, SK Tripathy  
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## [Efficient and Flexible ITO-Free Organic Solar Cells Using Highly Conductive Polymer Anodes](#)

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## [Gradient force: The mechanism for surface relief grating formation in azobenzene functionalized polymers](#)

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## [Graphene oxide thin films for flexible nonvolatile memory applications](#)

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## [Polymer and organic nonvolatile memory devices](#)

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Chemistry of Materials 23 (3), 341-358

319 2010

## [Polarized Laser Induced Holographic Surface Relief Gratings on Polymer Films.](#)

DY Kim, L Li, V Shivshankar, J Kumar, SK Tripathy  
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<a href="#">Photoinduced surface deformations on azobenzene polymer films</a>	S Bian, JM Williams, DY Kim, L Li, S Balasubramanian, J Kumar, ... Journal of Applied Physics 86 (8), 4498-4508	224	1999
<a href="#">Solution-Processable Reduced Graphene Oxide as a Novel Alternative to PEDOT: PSS Hole Transport Layers for Highly Efficient and Stable Polymer Solar Cells</a>	JM Yun, JS Yeo, J Kim, HG Jeong, DY Kim, YJ Noh, SS Kim, BC Ku, SI Na Advanced Materials 23 (42), 4923-4928	223	2011
<a href="#">Fabrication of organic bulk heterojunction solar cells by a spray deposition method for low-cost power generation</a>	D Vak, SS Kim, J Jo, SH Oh, SI Na, J Kim, DY Kim Applied Physics Letters 91 (8), 081102	223	2007
<a href="#">A Snowman-like Array of Colloidal Dimers for Antireflecting Surfaces</a>	HY Koo, DK Yi, SJ Yoo, DY Kim Advanced Materials 16 (3), 274-277	222	2004
<a href="#">Evolution of nanomorphology and anisotropic conductivity in solvent-modified PEDOT: PSS films for polymeric anodes of polymer solar cells</a>	SI Na, G Wang, SS Kim, TW Kim, SH Oh, BK Yu, T Lee, DY Kim Journal of Materials Chemistry 19 (47), 9045-9053	221	2009
<a href="#">Control of the electrode work function and active layer morphology via surface modification of indium tin oxide for high efficiency organic photovoltaics</a>	JS Kim, JH Park, JH Lee, J Jo, DY Kim, K Cho Applied Physics Letters 91 (11), 112111	211	2007
<a href="#">Polarization dependent recordings of surface relief gratings on azobenzene containing polymer films</a>	XL Jiang, L Li, J Kumar, DY Kim, V Shivshankar, SK Tripathy Applied physics letters 68 (19), 2618-2620	199	1996

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J Jo, SI Na, SS Kim, TW Lee, Y Chung, SJ Kang, D Vak, DY Kim Advanced Functional Materials 19 (15), 2398-2406			
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