

# JAE WON SHIM, Ph.D.

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Google Scholar Profile - <https://scholar.google.co.kr/citations?hl=en&user=pmw0zJ0AAAAJ>

## RESEARCH INTERESTS

Light emitting devices (Organic, perovskite, QD, *etc.*)

Design, fabrication, and testing of light-weight flexible optoelectronic devices-based on hybrid printable materials

Fundamental physical processes (charge transport, energy harvesting, and emission) in various thin films

Energy harvesting technologies (photovoltaics, piezoelectric, thermoelectric, *etc.*)

## EDUCATION

**Georgia Institute of Technology**, School of Electrical and Computer Engineering, Atlanta, Georgia, U.S.A

**Doctor of Philosophy** (August 2008 – May 2014)

Thesis: Study of Charge-collecting Interlayers for Single-junction and Tandem Organic Solar Cells

Advisor: Professor Bernard Kippelen

**University of Texas at Austin**, Department of Electrical and Computer Engineering, Austin, Texas, U.S.A

**Master of Science** (August 2006 – May 2008)

Thesis: Low Sub-Threshold Swing OTFT with Low and High K Bilayer Dielectric

Advisor: Professor Ananth Dodabalapur

**Korea University**, School of Electrical Engineering, Seoul, Republic of Korea

**Bachelor of Engineering** (March 1998 – August 2005)

## PROFESSIONAL EXPERIENCE AND ADDITIONAL TRAINING

**Korea University**, School of Electrical Engineering, Seoul, Korea (September 2019 – Present)

- Assistant Professor

**Dongguk University**, Division of Electronics and Electrical Engineering, Seoul, Korea (March 2015 – August 2019)

- Assistant Professor
- Director of Organic Nano Device Laboratory (ONDEV)
- Vice director of Research Center for Photoenergy Harvesting & Conversion Technology (*phct*)
- Member of Millimeter-Wave Innovation Technology Research Center (MINT)

**Samsung Advanced Institute of Technology (SAIT)**, Suwon, Korea (May 2014 – December 2014)

- Research Staff Member
- Participating in projects to develop deep blue phosphorescent materials for organic light emitting diodes (OLEDs)

**National Renewable Energy Laboratory (NREL)**, Golden, Colorado (April 2011)

- The “Pemberton Pairs” Proposal Competition at ITF1
- Participated in projects to characterize the electrical properties of ZnO layers

**Samsung Advanced Institute of Technology (SAIT)**, Giheung, Korea (June 2008 – August 2008)

- Internship Program
- Participated in projects to develop organic solar cells

**Siemens VDO Ltd.**, Chungwon, Korea (January 2006 – March 2006)

- Body and Chassis Team
- Participated in projects to develop electric-controlled power steering

**Military Service**, Pochun, Korea (January 2000–March 2002)

- Sergeant in the 8<sup>th</sup> Infantry Division
- Secretary to the divisional chief commander