

CURRICULUM VITAE OF JEONG MIN BAIK

I. PROFESSIONAL AFFILIATION AND CONTACT INFORMATION



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301-1102, 73, Jeongpyeong-ro, Suji-gu, Yongin-si, Gyeonggi-do, Republic of
Korea, 16839

II. EDUCATION

B.Sc., 2001, Pohang University of Science and Technology, Materials Science and Engineering

Ph. D., 2006, Pohang University of Science and Technology, Materials Science and Engineering:

“A Study on the Magnetic Properties of Wide Bandgap Semiconductors”

Supervisor: Professor, Jong-Lam Lee

III. POSITION HELD:

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|-----------------------|---|
| 2020 - current | Professor, Sungkyunkwan University (SKKU) |
| 2019 - 2020 | Professor, Ulsan National Institute of Science and Technology (UNIST) |
| 2018 - 2020 | Rising-Star Distinguished Professor, Ulsan National Institute of Science and
Technology (UNIST) |
| 2016 - 2017 | Visiting Research Scholar, University of California, Santa Barbara (UCSB),
Supervisor: Prof. Martin Moskovits and Prof. Galen Stucky |
| 2016 - Current | International Advisory Board, Advanced Materials Technologies
Editor, Electronic Materials Letters (EML) |
| 2014 - 2018 | Associate Professor, Ulsan National Institute of Science and Technology
(UNIST) |

2014 - Current	Editor, Current Applied Physics (CAP)
2010 - 2013	Assistant Professor, Ulsan National Institute of Science and Technology (UNIST)
2009 - 2010	Assistant Professor, Kumoh National Institute of Technology (KIT)
2006 - 2009	Postdoctoral Research Fellow, University of California, Santa Barbara (UCSB), Supervisor: Prof. Martin Moskovits and Alec M. Wodtke
2006	Postdoctoral Research Fellow, Pohang University of Science and Technology (POSTECH), Supervisor: Prof. Jong-Lam Lee

IV. HONORS:

2018	<ul style="list-style-type: none"> ▪ Appointed as Rising-Star Distinguished Professor, Ulsan National Institute of Science and Technology (UNIST). 2018 - 2020 ▪ Best Poster Award, International Conference on Electronic Materials and Nanotechnology for Green Environment (ENGE) 2018
2016	<ul style="list-style-type: none"> ▪ Best Poster Award, the 2nd International Conference on Nanoenergy and Nanosystems 2016 (NENS2016)
2014	<ul style="list-style-type: none"> ▪ Best Poster Award, International Conference on Electronic Materials and Nanotechnology for Green Environment (ENGE) 2014 ▪ Best Poster Award, International Nanophotonics and Nanoenergy Conference (INPEC) 2014 ▪ Best Poster Award, International Conference on Nanogenerators and Piezotronics (NGPT) 2014 ▪ Award of Excellence in the Academic Division of Materials Photo Contest, The Korean Institute of Metals and Materials (KIMM)
2013	<ul style="list-style-type: none"> ▪ Best Poster Award, International Conference on Advanced Electromaterials (ICAE) 2013 ▪ Best Paper Award, Korean journal of metals and materials (KIM) 2013
2012	<ul style="list-style-type: none"> ▪ Best Poster Award, Nano Korea
2011	<ul style="list-style-type: none"> ▪ Flash Paper Presentation award, KIChE 2011 ▪ Outstanding paper award, International Conference on Advanced Electromaterials (ICAE) 2011
2010	<ul style="list-style-type: none"> ▪ The 8th Young Scientist Award from the Korea Synchrotron Radiation User's Association (KOSUA)
2006 - 2009	<ul style="list-style-type: none"> ▪ Full Post-doc Fellow of University of California, Santa Barbara
2005	<ul style="list-style-type: none"> ▪ The 12th Young Scientist Award from the Korean Vacuum Society

V. PROFESSIONAL SERVICE

- 2018**
 - Symposium Organizer, International Conference on Nanogenerators and Piezotronics (NGPT) 2018
- 2016**
 - Technical Program Committee, LEDs and Lighting, The 16th International Meeting on Information Display (IMID 2016)
 - Session Organizer, The 13th International Workshop on Piezoelectric Materials and Applications in Actuators & Energy Conversion Materials and Devices 2016
 - Symposium Organizer, Nanoenergy and Nanosystems 2016 (NENS 2016)
- 2015**
 - Technical Program Committee, LEDs and Lighting, The 15th International Meeting on Information Display (IMID 2015)
- 2014**
 - Local Program Committee, Asian Conference on Nanoscale and Nanotechnology (AsiaNANO 2014)
 - Technical Program Committee, LEDs and Lighting, The 14th International Meeting on Information Display (IMID 2014)
 - Session Chair of Triboelectric and piezoelectric nanogenerators, Nanoenergy and Nanosystems 2014 (NENS 2014), China, December 8 - 10, 2014.
- 2014 - 2017**
 - Editorial Advisory Board Member, Current Applied Physics

VI. TEACHING:

1. For undergraduate students;
 - 1) Thermodynamics in Materials Science (NME20301): 2010 - 2015
 - 2) Nanoceramics (NME33001): 2018
 - 3) Introduction to Semiconductor (NME35401): 2010 –
 - 4) Sensor (NME49301): 2019
2. For graduate students;
 - 1) Semiconductor Physics and Devices (NME55001): 2010 –

VII. RESEARCH INTERESTS:

1. Contact-electrification based Energy harvesting technologies (2012 -)
 - 1) Charge-pumped triboelectric nanogenerator for high power generation
 - 2) Grafted copolymers (PVDF, PI), Composites, Porous structures for charge acceptors
 - 3) Stretchable conducting materials, 2D materials (Te-based) for charge donors
 - 4) Self-powered systems (IOT sensor, healthcare sensor, wireless signal transmission)
 - 5) Hybridization of Thermoelectric and Triboelectric generator

2. Nanostructured metal-oxides for gas adsorption and gas sensor (2013 ~)
 - 1) Low Temperature Vanadium Oxide-based catalysts for NO_x removal
 - 2) Surface functionalization for Metal-oxides based gas sensors
 - 3) Synthesis of metal-oxides nanoparticles (ZnO, CuO, SnO₂, V₂O₅, TiO₂ ...) based on wet-chemical method
 - 4) Electrochemical sensors for VOCs detection

3. Electro-catalysts based on perovskite nanoparticles for water splitting
 - 1) Synthesis of La-based perovskite nanoparticles at low temperature
 - 2) Full cells for water splitting

4. Inorganic NPs (Si, B, SiB) for Radiation shielding, Antimicrobial action, and Deodorization (2017 ~)

VIII. RESEARCH SUPERVISION

POST-DOC

Vivek Vishal Sharma: 2018 -

Jae Won Lee: 2019 –

Rahul Purbia: 2019 –

DOCTORAL STUDENTS

Tae Won Lee: 2017 –

MS/PHD INTEGRATED STUDENTS

Hee Joon Kim: 2014 –

Young Min Kwon: 2016 –

Jin Pyo Lee: 2016 –

Woo Jung Yang: 2017 –

Ki Hyun Han: 2018 –

Hye Hyun Kim: 2019 –

Sun Woo Kim: 2019 –

Jin Kyeom Kim: 2019 –

RESEARCHER

Sung Yeol Choi: 2019 –

Tae Hyung Kim: 2019 –