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Seungwu Han
Professor, Seoul National University

Address: 1, Gwanak-ro, Gwanak-gu, Seoul 08826
Telephone: (+82)2-880-1541 **Fax:** (+82)2-880-1541
E-mail: hansw@snu.ac.kr **Nationality:** Republic of Korea
Web: http://mdil.snu.ac.kr

EDUCATION

Seoul National University	Ph.D	Physics	**2000**
Seoul National University	MS	Physics	**1995**
Seoul National University	BS	Physics	**1993**

PROFESSIONAL ACTIVITIES

- Research associate, Princeton Materials Institute, USA, March 2001 to May 2003.
- Full-time lecturer, assistant professor, associate professor, Dept. of Physics, Ewha Womans University, Korea, September 2003 to August 2009.
- Associate professor, Dept. Materials Science and Engineering, Seoul National University, Korea, September 2009 to August 2013.
- Professor, Dept. Materials Science and Engineering, Seoul National University, Korea, September 2013 to present.
- Visiting professor, Korea Institute for Advanced Study, Korea, September 2015 to August 2016.

AWARD AND HONORS

- Fellow, School of Engineering, The University of Tokyo
- Associate Editor, Science and Technology of Advanced Materials (2016 to present)
- Associate Editor, Electronic Materials Letters (2009 to 2019)

MAIN SCIENTIFIC PUBLICATION

- Y. Youn, M. Lee, D. Kim, J. K. Jeong, Y. Kang, and S. Han, *Large-scale computational identification of p-type oxide semiconductors by hierarchical screening,* Chemistry of Materials **31**, 5475 (2019)
- K. Lee, D. Yoo, W. Jeong, and S. Han, *SIMPLE-NN: an efficient package for training and executing neural-network interatomic potentials*, Computer Physics Communications **242**, 95 (2019)
- K. Yim, Y. Youn, M. Lee, D. Yoo, J. Lee, S. H. Cho, and S. Han, *Computational discovery of p-type transparent oxide semiconductors using hydrogen descriptor,* npj Computational Materials **4**, 17 (2018)
- J. Lee, S. Kang, K. Yim, K. Y. Kim, H. W. Jang, Y. Kang, and S. Han, *Hydrogen*

evolution reaction at anion vacancy of two-dimensional transition metal dichalcogenides: ab initio computational screening, Journal of Physical Chemistry Letters **9**, 2049 (2018)

- Y. Youn, D. Yoo, H. Song, Y. Kang, K. Kim, S. H. Jeon, Y. Cho, K. Chae, and S. Han, *All-atom simulation of molecular orientation in vapor-deposited organic light-emitting diodes*, Journal of Materials Chemistry C **6**, 1015 (2018)

RESEARCH INTERESTS

- Machine-learning approach to accelerate material simulation
- Identification of high-performance p-type semiconducting materials
- Phase change materials for electronic devices
- Neural-network interatomic potentials
- Hydrogen evolution reactions in transition-metal dichalcogenides