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Academic Appointments

2021- Current	<i>Postdoctoral Researcher</i> Material Science and Engineering University of Pennsylvania
2017- 2021	<i>Postdoctoral Researcher</i> Mechanical Engineering Hanyang University

EDUCATION

2008-2017	Ph.D, M.S. & B.S. Electric and Electronic Engineering University of Tokyo
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Research Interest

Transmission electron microscopy, HAADF-STEM, In situ TEM, Machine learning, Image processing, MEMS

Publications

Peer-Reviewed Journals

1. Q. Gong, H. Zhang, H. Yu, S. Jeon, Y. Ren, Z. Yang, ... and Jian Xie, "Amino-tethering synthesis strategy toward highly accessible sub-3-nm L10-PtM catalysts for high-power fuel cells" *Matter*, 2023
2. M. H. Kang, J. Park, S. Kang, S. Jeon, M. Lee, J. Y. Shim, ... and J. Park, "Graphene Oxide-Supported Microwell Grids for Preparing Cryo-EM Samples with Controlled Ice Thickness" *Advanced Materials*, 33(43), 2102991, 2021.
3. Y. Bae, S. Kang, B. H. Kim, K. Lim, S. Jeon, S. Shim, ... and J. Park, "Nanobubble Dynamics in Aqueous Surfactant Solutions Studied by Liquid-Phase Transmission Electron Microscopy". *Engineering*, 7(5), 630-635, 2021.
4. S. Jeon†, T. Heo†, SY Hwang†, J. Ciston, K. Bustillo, B. W. Reed, J. Ham, S. Kim, J. Lim, K. Lim, MH Kang, R. S. Bloom, S. Hong, K. Kim, A. Zettl, WY Kim, P. Ercius*, J. Park*, and WC Lee* " Reversible Disorder-Order Transitions in Atomic Crystal Nucleation", *Science*, 2020.
5. K. Lim†, Y. Bae†, S. Jeon†, K. Kim, BH Kim, J. Kim, S. Kang, T. Heo, J Park*, and WC Lee*, "A Large-scale Array of Ordered Graphene-sandwiched Chambers for Quantitative Liquid-phase Transmission Electron Microscopy", *Adv. Mat*, 2020. (Accepted)
6. J. Kim†, S. Jeon†, and WC Lee, "Fully Stretchable Electromagnet Using Magnetoactive PDMS Sponges

and Metallic Coils”, *JOM*, 71, 4556-4561, 2019.

7. J. Yang, J. Koo, S. Kim, S. Jeon, BK Choi, S. Kwon, J. Kim, BH Kim, WC Lee, WB Lee, H. Lee, T. Hyeon*, P. Ercius*, and J. Park*, “Amorphous-Phase-Mediated Crystallization of Ni Nanocrystals Revealed by High-Resolution Liquid-Phase Electron Microscopy”, *J. Am. Chem. Soc.*, 141, 763-768, 2019.
8. J. Jang, Y. Lee, JY Yoon, HH Yoon, J. Koo, J. Choe, S. Jeon, J. Sung, J. Park, WC Lee, H. Lee, HY Jeong, K. Park, and K. Kim, “One-Dimensional Assembly on Two-Dimensions: AuCN Nanowire Epitaxy on Graphene for Hybrid Phototransistors”, *Nano Lett.*, 18, 6214-6221, 2018.
9. S. Jeon and H. Toshiyoshi, “MEMS tracking mirror system for a bidirectional free-space optical link”, *Appl. Opt.*, 56, 6720-6727, 2017. (Chosen as an Editor's Pick)
10. S. Jeon, H. Fujita, and H. Toshiyoshi, “A MEMS-based interactive laser scanning display with a collocated laser range finder”, *Electron. Expr.*, 12, 1-10, 2015.
11. SH Jeon, N. Taoka, H. Matsumoto, K. Nakano, S. Koyama, H. Kakibayasi, K. Araki, M. Miyashita, K. Izunome, M. Takenaka, and S. Takagi, “Impacts of Surface Roughness Reduction in (110) Si Substrates Fabricated by High-Temperature Annealing on Electron Mobility in n-Channel Metal–Oxide–Semiconductor Field-Effect Transistors on (110) Si”, 52, 04CC26, 2013.

† These authors contributed equally to the work.

Conference Proceedings

12. Q. Gong, Q. Zhang, H. Zhang, D. A Cullen, S. Jeon, H. Yu, Y. Ren, Z. Yang, ..., and Jian Xie, “Amino Functionalization Approach to Synthesis of Carbon Supported Intermetallic Platinum-Based Alloy Catalysts for Fuel Cell Application”, Electrochemical Society Meeting Abstracts 242, No. 42, pp. 1548-1548, 2022.
13. J. Ham, Y. Lee, J. Kim, K. Lim, S. Lee, S. Jeon, K. Kim, and WC Lee, “Facile Identification of Graphene's Crystal Orientations by Optical Microscopy of Self-Aligned Microwires”, IEEE 32nd International Conference on Micro Electro Mechanical Systems (MEMS), 264-265, 2019.
14. K. Lim, Y. Bae, K. Kim, S. Jeon, BH Kim, J. Park, and WC Lee, “Self-assembled nanochamber arrays for in-situ TEM observation of liquid-phase samples, IEEE 32nd International Conference on Micro Electro Mechanical Systems (MEMS), 105-106, 2019.
15. S. Jeon and H. Toshiyoshi, “A bi-directional free-space optical communication system with MEMS spatial light modulator for agile data link”, IEEE 30th International Conference on Micro Electro Mechanical Systems (MEMS), 297-300, 2017.
16. S. Jeon and H. Toshiyoshi, “An Optical System for Bi-directional Free Space Optical Communication with Acquisition and Tracking Capabilities,” in Proc. Asia-Pacific Conference of Transducers and Micro-Nano Technology (APCOT), 29-30. 2016.
17. S. Jeon, H. Fujita, and H. Toshiyoshi, "A MEMS-based Interactive Laser Scanning Display with a Built-in Laser Range Finder," IEEE 18th Int. Conf. on Solid-State Sensors, Actuators and Microsystems (Transducers), 859-862, 2015.
18. S. Jeon, H. Fujita, and H. Toshiyoshi, "A MEMS Interactive Laser Projection Display with a Built-in Laser Range Finder," in Proc. IEEE Int. Conf. on Optical MEMS and Nanophotonics (OMN), 21-22, 2013.
19. SH Jeon, N. Taoka, H. Matsumoto, K. Nakano, S. Koyama, H. Kakibayasi, K. Araki, M. Miyashita, K. Izunome, M. Takenaka and S. Takagi, “Impacts of Surface Roughness Reduction in (110) Si Substrates by High-Temperature Annealing on Electron Mobility in n-MOSFETs on (110) Si”, Int. Conf. on Solid State Devices and Materials (SSDM), 813-814, 2012.