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EDUCATION

2011.03.01–2016.08.29 **Ph.D. Chemical and Biological Engineering, Seoul National University**
Seoul, 08826, Republic of Korea
Thesis: Synthesis and Characterization of Ternary Selenide Quantum Nanostructures
Advisor: Prof. Taeghwan Hyeon

2007.03.01–2011.02.25 **B.S. Chemical and Biological Engineering, Seoul National University**
Seoul, 08826, Republic of Korea
Summa Cum Laude

PROFESSIONAL EXPERIENCE

2019.07.01–Present **Assistant/Associate Professor**
Department of Energy Science & Engineering/Chemical Engineering Track
Daegu Gyeongbuk Institute of Science and Technology (DGIST)
Daegu, 42988, Republic of Korea

2017.08.01–2019.06.30 **Postdoctoral Researcher**
Materials Sciences Division & Molecular Foundry
Lawrence Berkeley National Laboratory, Berkeley, CA, 94720, US
Advisor: Dr. Haimei Zheng, *Co-Advisor:* Dr. Emory Chan & Dr. Peter Ercius
Project: *In Situ* Liquid Cell Electron Microscopy

2016.09.01–2017.07.15 **Postdoctoral Researcher**
Center for Nanoparticle Research, Institute for Basic Science (IBS)
School of Chemical and Biological Engineering, Seoul National University
Seoul, 08826, Republic of Korea
Advisor: Prof. Taeghwan Hyeon
Project: Synthesis, Characterization, and Application of Semiconductor Nanocrystals

AWARDS & HONORS

2011.02 **The Most Outstanding Undergraduate Student Award** by SNU
2016.03 **MRS 2016 Spring Meeting Best Poster Award** by Material Research Society
2016.06 **The Best Research Award** by SNU CBE & Donjin Co.
2020.05 **Miwon Young Scientist Award** by Korean Society of Industrial & Engineering Chemistry
2020.10 **POSCO Science Fellowship** by POSCO TJ Park Foundation

PUBLICATIONS

* = corresponding authors, † = co-first authors, underline = Yang's group members

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"Recent Advances in Photoelectrochemical Hydrogen Production Using I–III–VI Quantum Dots."
Nanoscale **2024**, Accepted.

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"Recent Developments in Quantum Dot Light-Emitting Diodes for Skin-Attachable Electronics."
Korean Journal of Chemical Engineering **2024**, Accepted.

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"Highly Efficient Pure Red Light-Emitting Diodes through Surface Bromination of CsPbI3 Perovskite Nanocrystals for Skin-Attachable Displays."
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"Revealing Two Distinct Formation Pathways of 2D Wurtzite-CdSe Nanocrystals Using In-Situ X-Ray Scattering."
Advanced Science **2024**, *11*, 2307600.

[59] Gwang Heon Lee†, Kiwook Kim†, Yunho Kim†, **Jiwoong Yang***, Moon Kee Choi*
"Recent Advances in Patterning Strategies for Full-Color Perovskite Light-Emitting Diodes."
Nano-Micro Letters **2024**, *16*, 45.

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"High-Resolution Intaglio Transfer Printing of Silver Nanowires for Wearable Electrophysiological Sensors."
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- Invited Research Article for Rising Stars Series

[57] Shi Li†, Jae Hong Jang†, Wookjin Chung, Hyojin Seung, Soo Ik Park, Hyeonjong Ma, Won Jun Pyo, Changsoon Choi, Dae Sung Chung, Dae-Hyeong Kim*, Moon Kee Choi*, and **Jiwoong Yang***
"Ultrathin Self-Powered Heavy-Metal-Free Cu–In–Se Quantum Dot Photodetectors for Wearable Health Monitoring."
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"Compositional Engineering Of $ZnBr_2$-Doped $CsPbBr_3$ Perovskite Nanocrystals: Insights into Structure Transformation, Optical Performance, and Charge-Carrier Dynamics."
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"Dynamics of Polymer Nanocapsule Buckling and Collapse Revealed by In Situ Liquid Phase TEM."
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"콜로이드 양자점 합성의 기초."
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Journal of the American Chemical Society **2019**, *141*, 763.

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[24] **Jiwoong Yang**†, Franziska Muckel†, Back Kyu Choi, Severin Lorenz, In Young Kim, Julia Ackermann, Hogeun Chang, Tamara Priesner, Vinayak S. Kale, Seong-Ju Hwang, Gerd Bacher*, Taeghwan Hyeon*
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"Liquid Phase Transmission Electron Microscopy for Studying Colloidal Inorganic Nanoparticles."
Advanced Materials **2018**, *30*, 1703316.

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"Extremely Vivid, Highly Transparent, and Ultrathin Quantum Dot Light-Emitting Diodes."
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"Colloidal Synthesis of Uniform-Sized Molybdenum Disulfide Nanosheets for Wafer-Scale Flexible Nonvolatile Memory."
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