

In Hwan Jung

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EDUCATION

- Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Republic of Korea
B.S. in Department of Chemistry (Mar. 2000 – Feb. 2006, Mandatory Military Service in Korean Army: Feb. 2003 –Feb. 2005)
- Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Republic of Korea
M.S. in Department of Chemistry (Mar. 2006 – Feb. 2008)
Thesis Title: Synthesis and EL properties of Fluorene-based Copolymers Containing Electron-Withdrawing Thiazole Moieties
Advisor: Professor Hong-Ku Shim
- Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Republic of Korea
Ph.D. in Department of Chemistry (Mar. 2008 – Aug. 2011)
Thesis Title: Synthesis, Characterization and Photovoltaic Properties of Organic Semiconducting Polymers
Advisor: Professor Hong-Ku Shim

EXPERIENCES & CAREERS

- The University of Chicago, Chicago, Illinois, United States
Post Doc. in Department of Chemistry (Aug. 2011 – Aug. 2014)
Advisor: Professor Luping Yu
- Korea Research Institute of Chemical Technology (KRICT), Daejeon, Republic of Korea
Senior Researcher in Division of Advanced Materials (Sep. 2014 – Feb. 2017)
- University of Science and Technology (UST), Daejeon, Republic of Korea
Assistant professor in Chemical Convergence Materials (Sept. 2015 – Feb. 2017)
- The University of Chicago, Chicago, Illinois, United States
Visiting Professor in Department of Chemistry (Feb., Jul. and Aug. 2018) funded by NRF of Korea
Host: Professor Luping Yu
- Kookmin University, Seoul, Republic of Korea

Assistant professor in Department of Applied Chemistry (Mar. 2017 – Feb. 2020)
- Kookmin University, Seoul, Republic of Korea
Associate professor in Department of Applied Chemistry (Mar. 2020 – Feb. 2021)
- Hanyang University, Seoul, Republic of Korea
Associate professor in Department of Organic and Nano Engineering (Mar. 2021 – present)
Affiliate professor in Department of Chemistry (Mar. 2021 – present)

AWARDS

1. Young Scientist Award (2018. 4. 5) from The Polymer Society of Korea
2. JID Distinguished Paper Award (2016. 8. 23) from The Korean Information Display Society (KIDS)
3. Excellent University-Industry Cooperation Award (2020. 12. 20) from Kookmin University
4. Outstanding Editor-in-Chief, Organic Polymer Material Research, 2022

REPRESENTATIVE PUBLICATIONS

1. WonJo Jeong, Jinhyeon Kang, Dongchan Lee, Cheol Shin, Hyungju Ahn, Chan So, Jong Ho Won, Dae Sung Chung, Shinuk Cho* and **In Hwan Jung***, "Development of High-Performance Organic Photodetectors by Understanding Origin of Dark Current Density with Synthesis of Photoconductive Polymers" *Chem. Eng. J.* 2023, 473, 145178.
2. Junho Kim, Gyuri Kim, You Kyung Park, Gayoung Lim, Seung Tae Kim, **In Hwan Jung***, and Hansu Kim*, "Structure-Performance Relationship of Aromatic Polymer Binder for Silicon Anode in Lithium-Ion Batteries" *Adv. Funct. Mater.*, 2023, 33, 2303810.
3. Sung Hoon Noh, WonJo Jeong, Kyeong Ho Lee, Han Sol Yang, Eui Hyun Suh, Jaemin Jung, Seul Chan Park, Dongwoon Lee, **In Hwan Jung***, Yong Jin Jeong*, and Jaeyoung Jang*, "Photocrosslinkable Zwitterionic Ligands for Perovskite Nanocrystals: Self-Assembly and High-Resolution Direct patterning" *Adv. Funct. Mater.*, 2023, 33, 2304004.
4. Eui Hyun Suh, Moon-Ki Jeong, Kyumin Lee, WonJo Jeong, Yong Jin Jeong*, **In Hwan Jung***, and Jaeyoung Jang*, "Understanding the solution-state doping of donor-acceptor polymers through tailored side chain engineering for thermoelectrics" *Adv. Funct. Mater.*, 2022, 32, 2207886.
5. Junho Kim, You Kyung Park, Hansu Kim*, and **In Hwan Jung***, "Ambidextrous Polymeric Binder for Silicon Anode in Lithium-Ion Batteries" *Chem. Mater.*, 2022, 34, 5791–5798.
6. WonJo Jeong,† Jinhyeon Kang,† Soo Yeong Lim, Hyungju Ahn, Hyung Min Kim, Jong Ho Won*, and **In Hwan Jung***, "Spontaneously Induced Hierarchical Structure by Surface Energy in Novel Conjugated Polymer-Based Ultrafast-Response Organic Photodetectors" *Adv. Opt. Mater.*, 2022, 10, 2102607.
7. Muhibullah Al Mubarak, Febrian Tri Adhi Wibowo, Havid Aqoma, Narra Vamsi Krishna, Wooseop

- Lee, Du Yeol Ryu, Shinuk Cho*, **In Hwan Jung***, and Sung-Yeon Jang*, "PbS-Based Quantum Dot Solar Cells with Engineered π -Conjugated Polymers Achieve 13% Efficiency" *ACS Energy Lett.*, 2020, 5, 11, 3452–3460.
8. Wisnu Tanyo Hadmojo, Febrian Tri Adhi Wibowo, Wooseop Lee, Hye-Kyung Jang, Yeongsik Kim, Septy Sinaga, Minsuk Park, Sang-Yong Ju, Du Yeol Ryu*, **In Hwan Jung***, Sung-Yeon Jang*, "Performance Optimization of Parallel-Like Ternary Organic Solar Cells Through Simultaneous Improvement in Charge Generation and Transport", *Adv. Funct. Mater.*, 2019, 29, 1808731.
9. Randi Azmi, Wisnu Tanyo Hadmojo, Septy Sinaga, Chang-Lyoul Lee, Sung Cheol Yoon, **In Hwan Jung*** and Sung-Yeon Jang*, "High-Efficiency Low-Temperature ZnO based Perovskite Solar Cells Based on Highly Polar, Non-Wetting Self-Assembled Molecular Layers", *Adv. Energy Mater.*, 2018, 8 (5), 1701683.
10. Randi Azmi, So Youn Nam, Septy Sinaga, Zico Alaia Akbar, Chang-Lyoul Lee, Sung Cheol Yoon, **In Hwan Jung***, Sung-Yeon Jang*, "High-performance dopant-free conjugated small molecule-based hole-transport materials for perovskite solar cells", *Nano Energy*, 2018, 44, 191-198.