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Education:

Ph.D. (2013/8~2020/2) Department of Energy Engineering, Ulsan National Institute of Science and Technology (UNIST), Korea

B.S. (2010/3~2013/8) Interdisciplinary School of Green Energy, UNIST, Korea

Experience:

Postdoc (2022/10~2023/1) Korea Institute of Science and Technology (KIST), Korea

Postdoc (2020/11~2022/9) Department of Chemistry, Imperial College London, UK

Postdoc (2020/3~2020/10) Department of Energy Engineering, UNIST, Korea

Research Areas:

Photoelectrochemical devices and solar cells

Selective Publications:

1. W. Na, H.-E. Koo, J. Y. Kim, H.-B. Kim, T. H. Lee* “A multifunctional polymer surface modifier enables efficient and stable photoelectrochemical operations of organic photoanodes” *J. Mater. Chem. A*, **13**, 48, 42017-42027 (2025).
2. Y. Kim, T. H. Lee* “High Detectivity and Low-Dark Current in Organic Photodetectors by a High-Content Nonfullerene Acceptor-Based Bulk Heterojunction with a Polymer Overlayer” *ACS Appl. Mater. Interfaces* **17**, 37, 52416–52425 (2025).
3. T. H. Lee*, S. A. J. Hillman, S. G.-Carrero, A. Difilippo, J. R. Durrant* “Long-lived Charges in Y6:PM6 Bulk-heterojunction Photoanodes with a Polymer Overlayer Improve Photocatalytic Performance” *Adv. Energy Mater.* **13**, 28, 2300400 (2023).
4. T. H. Lee, Y. Dong, R. A. Pacalaj, S. Y. Park, W. Xu, J.-S. Kim, J. R. Durrant* “Organic Planar Heterojunction Solar Cells and Photodetectors Tailored to the Exciton Diffusion Length Scale of a Non-fullerene Acceptor” *Adv. Funct. Mater.* **32**, 51, 2208001 (2022).
5. T. H. Lee, R. R. Rao, R. A. Pacalaj, A. A. Wilson, J. R. Durrant* “A Dual Functional Polymer Interlayer Enables Near-Infrared Absorbing Organic Photoanodes for Solar Water Oxidation” *Adv. Energy Mater.* **12**, 18, 2103698 (2022).