Dr. Wei-Hao Chiu of Chang Gung University (Update 2026/02/25)

■ SCI Journal Paper

2026-

1. Iqra Shaheen†, Wei-Hao Chiu†, Yu-Xian Lee†, Shih-Hsuan Chen, Jen-Fu Hsu, and Kun-Mu Lee*, "Heterogeneous Graphite Felt Electrodes Decorated with Nanostructured Graphitic Carbon Nitride for Enhanced Redox Kinetics in Vanadium Redox Flow Batteries", **2026**, ***Journal of Power Sources***, 667, 239216. (▲**:0**; SCI; **IF:7.9** at 2024, Ranking:7/44=15.9% in Electrochemistry)

2. Wei-Hao Chiu, Wei-Lun Yu, Ming-Chung Wu, Jen-Fu Hsu, Gao Chen, Ching-Yuan Liu*, and Kun-Mu Lee*, "Synergistic Preheating and Moderate Temperature Liquid Medium Annealing for High Performance Perovskite Solar Cells", **2026,** ***Solar Energy***, 309, 114430. (▲ **:0**; SCI; **IF:6.6** at 2024; Ranking:51/182=28.0% in Energy & Fuels)

3. Harini Srikanth Rao, Wei-Hao Chiu, Shih-Hsuan Chen, Ming-Chung Wu, and Kun-Mu Lee*, "Impact of Proton Radiation on the Performance of Single-Junction Perovskite Solar Cells for Space Applications", **2026,** ***Solar Energy Materials and Solar Cells***, 295, 114015. (▲**:0**; SCI; **IF:6.3** at 2024; Ranking:36/187=19.3% in Physics, Applied)

2025-

4. Kun-Mu Lee, Chia-Hui Lin, Chia-Chi Chang, Ting-Yu Yang, Wei-Hao Chiu, Wei-Chen Chu, Ya-Ho Chang, Sie-Rong Li, Shih-I Lu, Hsiao-Chi Hsieh, Kang-Ling Liau, Chia Hui Hu, Chih-Hung Chen, Yun-Shuo Liu, Wei-Chun Chou, Mandy M. Lee, Shih-Sheng Sun, Yu-Tai Tao, and Yan-Duo Lin*, "Judicious Molecular Design of 5H-Dithieno[3,2-b:2',3'-d]Pyran-based Hole-Transporting Materials for Highly Efficient and Stable Perovskite Solar Cells", **2025**, ***Advanced Science***, 12, 2410666. (▲**:0**; SCI; **IF:14.1** at 2024; Ranking:33/460=7.2% in Materials Science, Multidisciplinary)

5. Iqra Shaheen, Wei-Hao Chiu, Shih-Hsuan Chen, and Kun-Mu Lee*, "MOF- & COF-Integrated Composite Separators/Membranes: Innovations for Sustainable and High-Performance Redox Flow Batteries", **2025**, ***Separation and Purification Technology***, 376, 134157. (▲**:0**; SCI; **IF:9.0** at 2024; Ranking:16/175=9.1% in Engineering, Chemical)

6. Chia-Yuan Chen*, Yu-Fan Chang, Yen-Chen Shih, Ying-Chuan Liu, Chi-Feng Chiu, Rahma Rahayu Dinarlita, Tsung-Yu Tsai, Chieh-Ming Hung, Hou-Chin Cha, You-Ren Chen, Zhi-Hao Huang, Yu-Cheng Zhang, Hui-Chieh Lin, Wei-Chen Chu, Wei-Hao Chiu, Sie-Rong Li, Ting-Jui Chang, Yi-Hong Liao, Siti Utari Rahayu, Bo-Yu Han, Yun-Tou Lin, Pei-Ling Wang, Zi-Ting Liao, Jhao-Yun Tsai, Zhong-En Shi, Chia-Tse Hsu, Po-Shun Hsu, Po-Yuan Chen, Jia-Zhen Li, Anjali Thakran, Yu-Ting Chen, Yu-Sheng Li, Hao-Wei Yu, Chu-Chen Chueh*, Tzung-Fang Guo*, Chih-Wei Chu*, Leeyih Wang*, Kuo-Chuan Ho*, Fang-Chung Chen*, Chih-Ping Chen*, Yian Tai*, Chun-Ting Li*, Ming-Way Lee*, Chih-Liang Wang*, Shih-Sheng Sun*, Kun-Mu Lee*, Zong-Liang Tseng*, Yu-Ching Huang*, Pi-Tai Chou*, Chung-Wen Ko*, and Chun-Guey Wu*, "Round-Robin Interlaboratory Comparison of Large-Area Organic Thin-Film and Perovskite Solar Cells", **2025**, ***Solar RRL***, e202500538. (▲**:0**; SCI; **IF:4.7** at 2024; Ranking:150/460=32.6% in Materials Science, Multidisciplinary)

7. Kun-Mu Lee*, Jui-Ting Pan, Wen-Tzu Chen, Chia-Hui Lin, Zhe-Wei Wang, Wei-Hao Chiu, Wei-Chen Chu, Ya-Ho Chang, Jen-Fu Hsu, Sie-Rong Li, Shih-I Lu*, Hsiao-Chi Hsieh*, Chih-Wei Hu, Chih-Hung Chen, Jian-Ming Chiu, Kang-Ling Liau, Gao Chen, Yun-Shuo Liu, Shih-Sheng Sun*, and Yan-Duo Lin*, "Asymmetric Fluorinated Cyclopenta[2,1-b:3,4-b']Dithiophene-Based Hole-Transporting Materials for Perovskite Solar Cell", **2025,** ***Chemistry-An Asian Journal***, 0, e00719. (▲**:0**; SCI; **IF:3.3** at 2024; Ranking:102/239=42.7% in Chemistry, Multidisciplinary)

8. Kun-Mu Lee, Wei-Hao Chiu, Bo-Chin Lee, Yu-Hsin Kao, Jr-Si Hsu, and Yung-Sheng Yen*, "Fused Dithienoheterocycle-Based Hole-Transporting Materials for Efficient Perovskite Solar Cells", **2025,** ***Chemistry-An Asian Journal***, 0, e70245. (**▲:0**; SCI; **IF:3.3** at 2024; Ranking:102/239=42.7% in Chemistry, Multidisciplinary)

2024-

9. Seoungjun Ahn, Wei-Hao Chiu, Wei-Chen Chu, Pei-Yu Chen, Ting-Han Lin, and Kun-Mu Lee*, "A Systematic Investigation of PVDF-HFP in Perovskite Solar Cells for Improved Space Mission Reliability", **2024**, ***Chemical Engineering Journal***, 496, 153974. (**▲:2**; SCI; **IF:13.2** at 2024; Ranking:3/83=3.6% in Engineering, Environmental)

10. Hsiao-Chien Chen*, Abdul Shabir, Kun-Hua Tu, Cher Ming Tan*, Wei-Hao Chiu, Ruei-Cheng Fan, Nilim Akash Baruah, "Additive-Free Electroless Deposition on Graphene/Copper Foil: Photo-Induced and Defect-Assisted Approach for Environmentally Friendly Plating", **2024**, ***Journal of Environmental Chemical Engineering***, 12, 111741. (**▲:0**; SCI; **IF:7.2** at 2024; Ranking:25/175=14.3% in Engineering, Chemical)

11. Wei-Hao Chiu, Ying-Kai Huang, Shih-Hsuan Chen, Ming-Chung Wu, Gao Chen, and Kun-Mu Lee*, "Exploring the Efficiency Enhancement of Perovskite Solar Cells by Chemical Bath Depositing SnO_2 on Mesoporous TiO_2 Electrode", **2024**, ***Materials Today Chemistry***, 41, 102329. (**▲:2**; SCI; **IF:6.7** at 2024; Ranking:46/239=19.2% in Chemistry, Multidisciplinary)

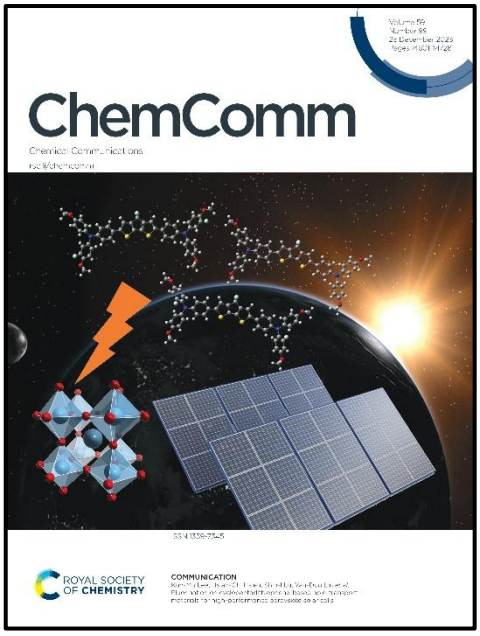
12. Gizachew Belay Adugna, Kun-Mu Lee*, Hsiao-Chi Hsieh*, Shih-I Lu*, Chia-Hui Lin, Yu-Chien Hsieh, Hune Hung Yang, Jian-Ming Chiu, Yun-Shuo Liu, Chih-Wei Hu, Wei-Hao Chiu, Sie-Rong Li, Kang-Ling Liau, Yu-Tai Tao, and Yan-Duo Lin*, "Fluorination of Star-Shaped Cyclopenta[2,1-b;3,4-b 0]dithiophene Derivatives and Its Application as Hole-Transporting Materials in Scalable Perovskite Solar Cell Fabrication by Bar Coating", **2024**, ***Solar RRL***, 8, 2300988. (**▲:1**; SCI; **IF:4.7** at 2024; Ranking:150/460=32.6% in Materials Science, Multidisciplinary)

2023-

13. Kun-Mu Lee, Yao-Shen Huang, Wei-Hao Chiu, Ying-Kai Huang, Gao Chen, Gizachew Belay Adugna, Sie Rong Li, Fang Ju Lin, Shih-I Lu, Hsiao-Chi Hsieh, Kang-Ling Liau, Chun-Cheng Huang, Yian Tai, Yu-Tai Tao, and Yan-Duo Lin*, "Fluorinated Pentafulvalene-Fused Hole-Transporting Material Enhances the Performance of Perovskite Solar Cells with Efficiency Exceeding 23%", **2023**, ***Advanced Functional Materials***, 33, 230637. (**▲:21**; SCI; **IF:19.0** at 2024; Ranking:9/187=4.8% in Physics, Applied)

14. Kun-Mu Lee*, Seid Yimer Abate, June Hung Yang, Wei-Hao Chiu, Seoungjun Ahn, Sie-Rong Li, Kang-Ling Liau, Yu-Tai Tao*, and Yan-Duo Lin*, "Facile Synthesis of Spiro-Core Based Hole Transporting High-Performance and Stable Perovskite Solar Cells", **2023**, ***Chemical Engineering Journal***, 454, 139926. (**▲:25**; SCI; **IF:13.2** at 2024; Ranking:3/83=3.6% in Engineering, Environmental)

15. Dharuman Chandrasekaran, Shih-Jyun Liou, Wei-Hao Chiu, Lee-Che Lee, Kun-Mu Lee*, Yi-Chen Wu, Hsien-Hsin Chou, Yuan-Jay Chang*, and Yung-Sheng Yen*, "Ladder-Type Dihydronaphtho[1, 2, 3, 4,-rst]pentaphene as Building Block to Construct Hole-Transporting Materials for Perovskite Solar Cells", **2023**, ***Journal of Power Sources***, 581, 233496. (**▲:3**; SCI; **IF:7.9** at 2024, Ranking:7/44=15.9% in Electrochemistry)



16. Gizachew Belay Adugna†, Kun-Mu Lee*†, Hsiao-Chi Hsieh*, Shih-I Lu*, Yu-Chien Hsieh, Hune Hung Yang, Wei-Hao Chiu, Kang-Ling Liau, Yu-Tai Tao, and Yan-Duo Lin*, "Fluorination on Cyclopentadithiophene-Based Hole-Transport Material for High-Performance Perovskite Solar Cells", **2023**, ***Chemical Communications***, 59, 14653-14656. (▲**:3**; SCI; **IF:4.2** at 2024; Ranking:84/239=35.1% in Chemistry, Multidisciplinary) **(Selected as an inside front cover of Chemical Communications!!)**

17. Li-Lin, Wei-Hao Chiu, Ming-Ling Cao, Kun-Mu Lee, Wei-Lun Yu, and Ching-Yuan Liu*, "New Molecular Design, Step-Saving Synthesis, and Applications of Indolocarbazole Core-Based Oligo(hetero)arenes", **2023, *Chemistry-An Asian Journal***, 18, e202300681. (▲**:0**; SCI; **IF:3.3** at 2024; Ranking:102/239=42.7% in Chemistry, Multidisciplinary)

18. Seoungjun Ahn, Wei-Hao Chiu, Hsin-Ming Cheng, Vembu Suryanarayanan, Gao Chen, Yu-Ching Huang*, Ming-Chung Wu*, and Kun-Mu Lee*, "Enhancing Efficiency and Stability of Perovskite Solar Cells Through Two-Step Deposition Method with the Addition of Cesium Halides to PbI_2 Precursor", **2023, *Organic Electronics***, 120, 106847. (▲**: 5**; SCI; **IF:2.6** at 2024; Ranking:97/187=51.9% in Physics, Applied)

2022-

19. Kun-Mu Lee, Wei-Hao Chiu, Yu-Hsiang Tsai, Chao-Shian Wang, Yu-Tai Tao, and Yan-Duo Lin*, "High-Performance Perovskite Solar Cells Based on Dopant-Free Hole-Transporting Material Fabricated by a Thermal-Assisted Blade-Coating Method with Efficiency Exceeding 21%", **2022**, ***Chemical Engineering Journal***, 427, 131609. (▲**:46**; SCI; **IF:13.2** at 2024; Ranking:3/83=3.6% in Engineering, Environmental)

20. Dharuman Chandrasekaran, Wei-Hao Chiu, Kun-Mu Lee*, Jian-Ming Liao, Hsien-Hsin Chou*, and Yung-Sheng Yen*, "Effect of Thiophene Insertion on X-Shaped Anthracene-Based Hole-Transporting Materials in Perovskite Solar Cells", **2022**, ***Polymers***, 14, 1580. (▲**:2**; SCI; **IF:4.9** at 2024; Ranking:19/94=20.2% in Polymer Science)

21. Kun-Mu Lee*†, Shun-Hsiang Chan*†, Chang-Chieh Ting, Shih-Hsuan Chen, Wei-Hao Chiu, Vembu Suryanarayanan, Jen-Fu Hsu, Ching-Yuan Liu*, and Ming-Chung Wu*, "Surfactant Tween 20 Controlled Perovskite Film Fabricated by Thermal Blade Coating for Efficient Perovskite Solar Cells", **2022**, ***Nanomaterials***, 12, 2651. (▲**:8**; SCI; **IF:4.3** at 2024; Ranking:57/187=30.5% in Physics, Applied)

2021-

22. Yi-Jen Huang, Chien-Lin Huang*, Ruo-Yu Lai, Cheng-Han Zhuang, Wei-Hao Chiu, and Kun-Mu Lee*, "Microstructure and Biological Properties of Electrospun In Situ Polymerization of Polycaprolactone-Graft-Polyacrylic Acid Nanofibers and Its Composite Nanofiber Dressings", **2021**, ***Polymers***, 13, 4246. (▲**:13**; SCI; **IF:4.9** at 2024; Ranking:19/94=20.2% in Polymer Science)

23. Wei-Hao Chiu, Kun-Mu Lee*, Vembu Suryanarayanan, Jen-Fu Hsu*, and Ming-Chung Wu*, "Controlled Photoanode Properties for Large-Area Efficient and Stable Dye-Sensitized Photovoltaic Modules", **2021**, ***Nanomaterials***, 11, 2125. (▲**:7**; SCI; **IF:4.3** at 2024; Ranking:57/187=30.5% in Physics, Applied)

24. Kun-Mu Lee*, Shun-Hsiang Chan, Wei-Hao Chiu, Seoungjun Ahn, Chang-Chieh Ting, Yin-Hsuan Chang, Vembu Suryanarayanan, Ming-Chung Wu*, and Ching-Yuan Liu*, "Reduced Defect in Organic-Lead Halide Perovskite Film by De-Layer Thermal Annealing Combined with KI/I_2 for Efficient Perovskite Solar Cells", **2021**, ***Nanomaterials***, 11, 1607. (▲**:6**; SCI; **IF:4.3** at 2024; Ranking:57/187=30.5% in Physics, Applied)

2013-

25. Kun-Mu Lee*, Wei-Hao Chiu, Vembu Suryanarayanan, and Chun-Guey Wu*, "Enhanced Efficiency of Bifacial and Back-Illuminated Ti Foil Based Flexible Dye-Sensitized Solar Cells by Decoration of Mesoporous SiO_2 Layer on TiO_2 Anode", **2013**, ***Journal of Power Sources***, 232, 1-6. (▲**:13**; SCI; **IF:7.9** at 2024, Ranking:7/44=15.9% in Electrochemistry)

2012-

26. Kun-Mu Lee*, Wei-Hao Chiu, Chih-Yu Hsu, Hsin-Ming Cheng, Chia-Hua Lee, and Chun-Guey Wu, "Ionic Liquid Diffusion Properties in Tetrapod-like ZnO Photoanode for Dye-Sensitized Solar Cells", **2012,** ***Journal of Power Sources***, 216, 330-336. (▲ **:16**; SCI; **IF:7.9** at 2024, Ranking:7/44=15.9% in Electrochemistry)

2011-

27. Kun-Mu Lee*, Wei-Hao Chiu, Ming-De Lu, and Wen-Feng Hsieh, "Improvement on the Long-Term Stability of Flexible Plastic Dye-Sensitized Solar Cells", **2011,** ***Journal of Power Sources***, 196, 8897-8903. (▲**:35**; SCI; **IF:7.9** at 2024, Ranking:7/44=15.9% in Electrochemistry)

28. Wei-Hao Chiu, Kun-Mu Lee, and Wen-Feng Hsieh*, "High efficiency Flexible Dye-Sensitized Solar Cells by Multiple Electrophoretic Depositions", **2011,** ***Journal of Power Sources***, 196, 3683-3687. (▲**:71**; SCI; **IF:7.9** at 2024, Ranking:7/44=15.9% in Electrochemistry)

29. Chia-Hua Lee, Wei-Hao Chiu, Kun-Mu Lee, Wen-Feng Hsieh, and Jenn-Ming Wu, "Improved Performance of Flexible Dye-Sensitized Solar Cells by Introducing an Interfacial Layer on Ti Substrates", **2011**, ***Journal of Materials Chemistry***, 21, 5114. (▲**:58**; SCI; **IF:6.626** at 2013; Ranking:22/251=8.8% in Materials Science, Multidisciplinary)

2010-

30. Chia-Hua Lee, Wei-Hao Chiu, Kun-Mu Lee, Wen-Hsiang Yen, Hsiu-Fen Lin, Wen-Feng Hsieh, and Jenn-Ming Wu, "The Influence of Tetrapod-Like ZnO Morphology and Electrolytes on Energy Conversion Efficiency of Dye-Sensitized Solar Cells", **2010**, ***Electrochimica Acta***, 55, 8422-8429. (▲**:37**; SCI; **IF:5.6** at 2024, Ranking:11/44=25.0% in Electrochemistry)

31. Kun-Mu Lee*, Wei-Hao Chiu, Hung-Yu Wei, Chih-Wei Hu, Vembu Suryanarayanan, Weng-Feng Hsieh, and Kuo-Chuan Ho, "Effects of Mesoscopic Poly (3,4-ethylenedioxythiophene) Films as Counter Electrodes for Dye-Sensitized Solar Cells", **2010**, ***Thin Solid Films***, 518, 1716-1721. (▲**:76**; SCI; **IF:2.0** at 2024; Ranking:50/79 =63.3% in Physics, Condensed Matter)

2009-

32. Wei-Hao Chiu, Chia-Hua Lee, Hsin-Ming Cheng, Hsiu-Fen Lin, Shih-Chieh Liao, Jenn-Ming Wu, and Wen-Feng Hsieh*, "Efficient Electron Transport in Tetrapod-Like ZnO Metal-Free Dye-Sensitized Solar Cells", **2009**, ***Energy & Environmental Science***, 2, 694-698. (▲ **:96**; SCI; **IF:32.4** at 2023 Ranking: Ranking:1/231=0.4% in Chemistry, Multidisciplinary)

33. Kun-Mu Lee, Chih-Yu Hsu, Wei-Hao Chiu, Meng-Chin Tsui, Yung-Liang Tung, Song-Yeu Tsai, and Kuo-Chuan Ho*, "Dye-Sensitized Solar Cells with A Micro-Porous TiO_2 Electrode and Gel Polymer Electrolytes Prepared by in Situ Cross-Link Reaction", **2009**, ***Solar Energy Materials and Solar Cells***, 93, 2003-2007. (▲**:40**; SCI; **IF:6.3** at 2024; Ranking:36/187=19.3% in Physics, Applied)

2008-

34. Hsin-Ming Cheng†, Wei-Hao Chiu†, Chia-Hua Lee, Song-Yeu Tsai, and Wen-Feng Hsieh*, "Formation of Branched ZnO Nanowires from Solvothermal Method and Dye-Sensitized Solar Cells Applications", **2008**, ***Journal of Physical Chemistry C***, 112, 16359-16364. (▲**:247**; SCI; **IF:3.2** at 2024; Ranking:95/185=51.4% in Chemistry, Physical)

2005-

35. Ching-Hsu Chen*, Po-Tse Tai, Wei-Hao Chiu, and Wen-Feng Hsieh*, "Transverse Excess Noise Factor and Transverse Mode Locking in A Gain-Guided Laser", **2005**, ***Optics Communications***, 245, 301-308. (▲**:12**; SCI; **IF:2.5** at 2024; Ranking:61/125=48.8% in Optics)