

Dr. Wei-Hao Chiu of Chang Gung University (Update 2026/05/22)

SCI Journal Paper

2026-

1. Harini Srikanth Rao, Seoungjun Ahn, [Wei-Hao Chiu](#), Wei-Chen Chu, Yi-Wen Sung, Gao Chen, and Kun-Mu Lee*, "Reliability Enhancement of PVDF-HFP Modified Perovskite Solar Cells Under Synergistic Space-Relevant Stress Conditions", **2026, *Chemical Engineering Journal***, 540, 177494. (▲:0; SCI; **IF:13.2** at 2024; Ranking:3/83=3.6% in Engineering, Environmental)
2. 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)
3. [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)
4. 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-

5. 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 Liao, 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)
6. 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)
7. 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)

8. 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 Liao, 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)
9. 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-

10. 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)
11. 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)
12. [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 SnO₂ on Mesoporous TiO₂ Electrode", **2024, *Materials Today Chemistry***, 41, 102329. (▲:2; SCI; IF:6.7 at 2024; Ranking:46/239=19.2% in Chemistry, Multidisciplinary)
13. 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 Liao, Yu-Tai Tao, and Yan-Duo Lin*, "Fluorination of Star-Shaped Cyclopenta[2,1-b:3,4-b O]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)

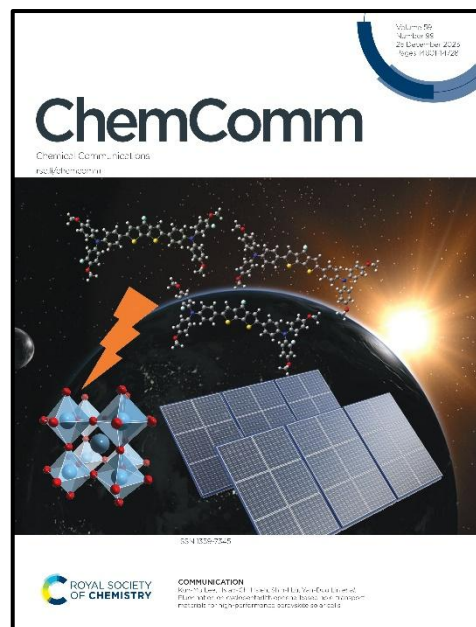
2023-

14. 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 Liao, 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)
15. Kun-Mu Lee*, Seid Yimer Abate, June Hung Yang, [Wei-Hao Chiu](#), Seoungjun Ahn, Sie-Rong Li, Kang-Ling Liao, 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)
16. 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)

17. Gizachew Belay Adugna†, Kun-Mu Lee*†, Hsiao-Chi Hsieh*, Shih-I Lu*, Yu-Chien Hsieh, Hune Hung Yang, [Wei-Hao Chiu](#), Kang-Ling Liao, 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!!**

18. 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)

19. 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 Pbl₂ Precursor", **2023**, *Organic Electronics*, 120, 106847. (▲:5; SCI; IF:2.6 at 2024; Ranking:97/187=51.9% in Physics, Applied)



2022-

20. 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)

21. 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)

22. 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-

23. 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)

24. [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)

25. 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/I₂ 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-

26. 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 SiO₂ Layer on TiO₂ Anode", **2013, *Journal of Power Sources***, 232, 1-6. (▲:13; SCI; IF:7.9 at 2024, Ranking:7/44=15.9% in Electrochemistry)

2012-

27. 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-

28. 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)
29. [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)
30. 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-

31. 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)
32. Kun-Mu Lee*, [Wei-Hao Chiu](#), Hung-Yu Wei, Chih-Wei Hu, Vembu Suryanarayanan, Wen-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-

33. [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)
34. 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 TiO₂ 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-

35. 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-

36. 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)