

International Conference Papers List

2025-

1. [Wei-Hao Chiu](#), Wei-Hao Chiu, and Kun-Mu Lee*, "Blade Coating Strategies for Morphology-Controlled Perovskite Solar Cells with High Performance", **2025 SDSE 3rd International Conference on Smart Devices and Sustainable Energy (SDSE 2025)**, Oct. 15-17, New Taipei, Taiwan. **(Excellent Poster Award)**
2. Kun-Mu Lee*, Seoungjun Ahn, and [Wei-Hao Chiu](#), "Advanced Additives for Space Missions: PVDF-HFP's Impact on Perovskite Solar Cell Reliability", **2025 EU PVSEC The 42nd European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC 2025)**, Sep. 22-26, Bilbao, Spain. **(Oral Presentation)**
3. [Wei-Hao Chiu](#), Ying-Kai Huang, and Kun-Mu Lee*, "Enhancing Perovskite Solar Cell Performance through Chemical Bath Deposition of SnO₂ on Mesoporous TiO₂ Electrodes", **2025 MC The 17th International Conference on Materials Chemistry (MC 2025)**, Jul. 7-10, Edinburgh, United Kingdom.
4. Kun-Mu Lee*, Yan-Duo Lin, and [Wei-Hao Chiu](#), "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 ESOC The 11th European Stroke Organisation Conference (ESOC 2025)**, May 21-23, Helsinki, Finland.
5. Wei-Chen Chu, Seoungjun Ahn, [Wei-Hao Chiu](#), and Kun-Mu Lee*, "Enhancing Perovskite Solar Cell Efficiency by Controlling Active Layer Morphology with Blade Coating", **2025 International Conference on Advanced Green-Energy Materials**, Jan. 15-17, Tainan, Taiwan. **(Best Poster Presentation Award)**
6. Seoungjun Ahn, Wei-Chen Chu, [Wei-Hao Chiu](#), and Kun-Mu Lee*, "Exploring PVDF-HFP Additives in Perovskite Solar Cells: Advancements for Enhanced Space Mission Durability", **2025 International Conference on Advanced Green-Energy Materials**, Jan. 15-17, Tainan, Taiwan.

2024-

7. Kun-Mu Lee*, [Wei-Hao Chiu](#), and Yan-Duo Lin, "Pentafulvalene-Fused Fluorinated Compound Boosts Perovskite Solar Cell Performance", **2024 PVSEC-35 The 35rd International Photovoltaic Science and Engineering Conference (PVSEC-35 2024)**, Nov. 10-15, Numazu, Japan. **(Invited Speaker)**
8. [Wei-Hao Chiu*](#), and Kun-Mu Lee, "Enhancing Perovskite Solar Cell Performance through Chemical Bath Deposition of SnO₂ on Mesoporous TiO₂ Electrodes ", **2024 PVSEC-35 The 35rd International Photovoltaic Science and Engineering Conference (PVSEC-35 2024)**, Nov. 10-15, Numazu, Japan.
9. Seoungjun Ahn, [Wei-Hao Chiu](#), Wei-Hao Chiu, and Kun-Mu Lee*, "Exploring the Role of PVDF-HFP in Enhancing Perovskite Solar Cell Performance for Space Missions", **2024 SDSE 2nd International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
10. [Wei-Hao Chiu](#), Si-Yu Chen, and Kun-Mu Lee*, "Rapid Laser Annealing of Cu-Doped NiO_x for Improved Efficiency in Perovskite Solar Cells", **2024 SDSE 2nd International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
11. [Wei-Hao Chiu](#), Seoungjun Ahn, Wei-Hao Chiu, and Kun-Mu Lee*, "Controlling the Morphology of the Active Layer with Blade and Slot-Die Coating Results in Highly Efficient Perovskite Solar Cells", **2024 SDSE 2nd International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.

12. Seoungjun Ahn, [Wei-Hao Chiu](#), and Kun-Mu Lee*, "Optimizing Space Mission Reliability via Comprehensive Investigation of PVDF-HFP in Perovskite Solar Cells", **2024 IC ME&D the 34th International Conference on Molecular Electronics and Devices (IC ME&D 2024)**, May. 9-10, Pohang, Korea.

2022-

13. Seoungjun Ahn, Kun-Mu Lee*, and [Wei-Hao Chiu](#), "Toward High Efficiency Perovskite Solar Cells by Doping Cesium Iodide into Pbl₂ Film via Two-Step Deposition Method", **2022 PVSEC-33 The 33rd International Photovoltaic Science and Engineering Conference (PVSEC-33 2022)**, Nov. 13-17, Nagoya, Japan.
14. Seoungjun Ahn, Kun-Mu Lee*, and [Wei-Hao Chiu](#), "High Efficiency Perovskite Solar Cells by Incorporating Cesium into Pbl₂ Solution via Two-Step Deposition Method", **2022 IEDMS International Electron Devices & Materials Symposium (IEDMS 2022)**, Oct. 27-28, Nantou, Taiwan. (Oral Presentation)

2021-

15. Kun-Mu Lee*, [Wei-Hao Chiu](#), Bo-Yang Chen, and Yan-Duo Lin, "Achieving >21% Perovskite Solar Cells with Dopant-Free HTM by Thermal-Assisted Blade-Coating Method", **2021 IEDMS International Electron Devices & Materials Symposium (IEDMS 2021)**, Nov. 18-19, Kaohsiung, Taiwan.
16. Seoungjun Ahn, Kun-Mu Lee*, and [Wei-Hao Chiu](#), "Effect of Cesium Iodide Dopant for High-Efficiency Perovskite Solar Cells via Two-Step Deposition Method", **2021 IEDMS International Electron Devices & Materials Symposium (IEDMS 2021)**, Nov. 18-19, Kaohsiung, Taiwan.