

## Prof. Ming-Chung Wu of Chang Gung University (Update 2026/05/29)

### International Conference Papers List

#### 2026-

1. Pin-Hsuan Yeh, Jia-Mao Chang, Yin-Hsuan Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Cu-Doping Induces Sulfur Vacancies in SnS<sub>2</sub> Nanosheets for Synergistic Antibiotic Degradation and CO<sub>2</sub> Reduction", **2026 JSAP The 73<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2026)**, Mar. 15-18, Tokyo, Japan. **(Oral Presentation)**
2. Pei-Hsuan Lu, Jia-Mao Chang, Yin-Hsuan Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Photoreforming of Plastic Waste to Hydrogen Using Single-Atom Anchored Pt Decorated Graphitic Carbon Nitride", **2026 JSAP The 73<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2026)**, Mar. 15-18, Tokyo, Japan. **(Oral Presentation)**
3. Chen-Yang Tseng, Tzu-Chuan Yang, Ting-Han Lin, Karthekeyan Periasamy, [Ming-Chung Wu](#), and Jer-Chyi Wang\*, "Self-Powered Ultra-Violet Index Detection Using TiO<sub>2</sub>-NFs-blended P(VDF-TrFE) Piezoelectric Nanogenerators", **2026 JSAP The 73<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2026)**, Mar. 15-18, Tokyo, Japan. **(Oral Presentation)**

#### 2025-

4. [Ming-Chung Wu\\*](#), Kai-Chi Hsiao, Chu-Liang Fu, Ting-Han Lin, Yin-Hsuan Chang, Yu-Ching Huang, Mu-Ping Nieh, Wei-Fang Su, and Mingda Li, "Giant Light-Matter Interaction Modulation via Semiconducting Matrix-Driven Quantum Dot Coupling", **2025 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2025)**, No. 30-Dec. 5, Boston, Massachusetts, United States of America.
5. Ting-Han Lin, Jia-Mao Chang, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Synergistic Integration of Carbonized Cellulose Nanofibers and Sulfur-Deficient Tin Disulfide Photocatalyst Sheets for Enhanced Floatable Heterogeneous CO<sub>2</sub> Photoreduction", **2025 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2025)**, No. 30-Dec. 5, Boston, Massachusetts, United States of America.
6. Yin-Hsuan Chang, Ting-Han Lin, Jia-Mao Chang, Kuo-Ping Chiang, and [Ming-Chung Wu\\*](#), "Photo-Assisted Kelvin Probe Force Microscopy for Probing Photoinduced Electronic Properties in CO<sub>2</sub> Photoreduction Materials", **2025 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2025)**, No. 30-Dec. 5, Boston, Massachusetts, United States of America. **(Oral Presentation)**
7. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Floatable Hybrid Photothermal-Photocatalyst Sheet for Highly Selective Solar-Driven CO<sub>2</sub> to CH<sub>4</sub> via the Integration of Topological Bi<sub>2</sub>Se<sub>3</sub> and ZnIn<sub>2</sub>S<sub>4</sub> Photocatalysts", **2025 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2025)**, No. 30-Dec. 5, Boston, Massachusetts, United States of America. **(Best Poster Award Nominee)**
8. Hong-Yi Lin, Kai-Chi Hsiao, Ting-Han Lin, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Chelating Molecule-Assisted Interface Engineering for Enhanced Efficiency and Stability of Perovskite Solar Cells", **2025 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2025)**, No. 30-Dec. 5, Boston, Massachusetts, United States of America.
9. Yen-Chang Chen, Ting-Han Lin, Yi-Ming Yu, and [Ming-Chung Wu\\*](#), "Engineering Barium Substitution for Lead-Reduction Strategies in Perovskite Solar Cells", **2025 NHSC The 14<sup>th</sup> Aseanian Conference on Nano Hybrid Solar Cells (NHSC 2025)**, Nov. 23-25, Hsinchu, Taiwan.
10. [Ming-Chung Wu\\*](#), Yin-Hsuan Chang, Ting-Han Lin, Kai-Chi Hsiao, and Jia-Mao Chang, "Ultrasensitive Detection of Organic Analytes Using Self-Precipitated Au-Titanate Nanofiber SERS Substrates", **2025 IEDMS International Electron Devices & Materials Symposium (IEDMS 2025)**, Oct. 30-31, Hsinchu, Taiwan.

11. Hong-Yi Lin, Kai-Chi Hsiao, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Chelating Molecule-Mediated Interface Passivation in Defective Perovskites: A DFT Study on Carrier Recombination Suppression", **2025 IEDMS International Electron Devices & Materials Symposium (IEDMS 2025)**, Oct. 30-31, Hsinchu, Taiwan. **(Oral Presentation)**
12. Yen-Chang Chen, Ting-Han Lin, Jia-Mao Chang, Kuo-Ping Chiang, and [Ming-Chung Wu\\*](#), "Engineering BaTiO<sub>3</sub>/Ag-Doped TiO<sub>2</sub> Heterostructures for Synergistically Enhanced Piezo-Photocatalytic CO<sub>2</sub> Reduction", **2025 IEDMS International Electron Devices & Materials Symposium (IEDMS 2025)**, Oct. 30-31, Hsinchu, Taiwan. **(Oral Presentation)**
13. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Floatable Photothermal-Photocatalyst Sheet for Highly Selective Solar-Driven Carbon Dioxide to Methane Conversion", **2025 SDSE 3<sup>rd</sup> International Conference on Smart Devices and Sustainable Energy (SDSE 2025)**, Oct. 15-17, New Taipei, Taiwan.
14. Hong-Yi Lin, Yueh-Lin Lin, Kai-Chi Hsiao, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Density Functional Theory Analysis of Chelating Molecule Passivation in Defective Perovskites: Implications for Efficiency Enhancement", **2025 SDSE 3<sup>rd</sup> International Conference on Smart Devices and Sustainable Energy (SDSE 2025)**, Oct. 15-17, New Taipei, Taiwan. **(Excellent Poster Award)**
15. Ying-Han Liao, Ze-Han Wu, Jia-Mao Chang, Yin-Hsuan Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Bismuth Selenide/Silver Bismuth Iodide 2D/2D Heterostructure for Photocatalytic Carbon Dioxide Reduction", **2025 WMC, WMS & IUMRS-ICA The 3<sup>rd</sup> World Materials Conference, The 9<sup>th</sup> World Materials Summit & International Union of Materials Research Societies International Conference in Asia (IUMRS-ICA 2025)**, Oct. 14-17, Guilin, China. **(High Level Poster Presentation)**
16. [Ming-Chung Wu\\*](#), Yin-Hsuan Chang, Ting-Han Lin, Jia-Mao Chang, and Ying-Han Liao, "Designing High Efficiency CO<sub>2</sub> Reduction Photocatalysts-Insights from a Photo-Assisted Kelvin Probe Force Microscopy Study", **2025 E-MRS European Materials Research Society Fall Meeting (E-MRS 2025)**, Sep. 15-18, Warsaw, Poland. **【NSTC-114-2923-E-182-001-MY3】**
17. [Ming-Chung Wu\\*](#), Yin-Hsuan Chang, Ting-Han Lin, Jia-Mao Chang, and Ying-Han Liao, "Designing High Efficiency CO<sub>2</sub> Reduction Photocatalysts-Insights from a Photo-Assisted Kelvin Probe Force Microscopy Study", **2025 E-MRS European Materials Research Society Fall Meeting (E-MRS 2025)**, Sep. 15-18, Warsaw, Poland. **【NSTC-114-2923-E-182-001-MY3】**
18. Yin-Hsuan Chang, Shun-Hsiang Chan, Shih-Hsuan Chen, Kai-Chi-Hsiao, Ting-Han Lin, Ying-Han Liao, Hong-Yi Lin, and [Ming-Chung Wu\\*](#), "Exploring the Maximum Barium Substitution at the Perovskite B-Site: Structural and Photovoltaic Implications in Hybrid Halide Perovskite Solar Cells", **2025 E-MRS European Materials Research Society Fall Meeting (E-MRS 2025)**, Sep. 15-18, Warsaw, Poland.
19. [Ming-Chung Wu\\*](#), Yin-Hsuan Chang, Ting-Han Lin, and Jia-Mao Chang, "Revealing Photocatalytic Efficiency with Photo-Assisted Kelvin Probe Force Microscopy", **2025 GCIM The 3<sup>rd</sup> Global Conference of Innovation Materials & MRS-K Spring Meeting (GCIM 2025)**, June. 16-19, Jeju, South Korea.
20. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Achieving High Selectivity for CO<sub>2</sub> Reduction to CH<sub>4</sub> through Photothermal-Photocatalysis with Topological Bi<sub>2</sub>Se<sub>3</sub> and ZnIn<sub>2</sub>S<sub>4</sub> Photocatalysts", **2025 GCIM The 3<sup>rd</sup> Global Conference of Innovation Materials & MRS-K Spring Meeting (GCIM 2025)**, June. 16-19, Jeju, South Korea. **(Best Poster Award) 【BMRPC74】**
21. Hong-Yi Lin, Ting-Han Lin, Kai-Chi Hsiao, Shu-Chi Lu, and [Ming-Chung Wu\\*](#), "Strategic Passivation of Perovskite Layer Interfaces Using Multiple Functional Groups to Enhance Photovoltaic Performance", **2025 GCIM The 3<sup>rd</sup> Global Conference of Innovation Materials & MRS-K Spring Meeting (GCIM 2025)**, June. 16-19, Jeju, South Korea. **【BMRPKC74】**

22. Ting-Han Lin, Jia-Mao Chang, Yu-Chi Peng, Yen-Chang Chen, Yin-Hsuan Chang, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Enhanced Hydrogen Production via Synergistic Photo-Piezocatalysis in BaTiO<sub>3</sub>/ZnIn<sub>2</sub>S<sub>4</sub> Heterostructures", **2025 JSAP The 72<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2025)**, Mar. 14-17, Tokyo, Japan.
23. Yin-Hsuan Chang, Ting-Han Lin, Jia-Mao Chang, Ciao-Yun Huang, and [Ming-Chung Wu\\*](#), "Graphitic Carbon Nitride Nanosheets with Single-Atom Platinum for Efficient Hydrogen Generation via Plastic Photoreforming", **2025 JSAP The 72<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2025)**, Mar. 14-17, Tokyo, Japan.
24. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Achieving High Selectivity for CO<sub>2</sub> Reduction to CH<sub>4</sub> through Photothermal-Photocatalysis with Topological Bi<sub>2</sub>Se<sub>3</sub> and ZnIn<sub>2</sub>S<sub>4</sub> Photocatalysts", **2025 JSAP The 72<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2025)**, Mar. 14-17, Tokyo, Japan.

## 2024-

25. [Ming-Chung Wu\\*](#), Ting-Han Lin, Jia-Mao Chang, Yin-Hsuan Chang, and Ying-Han Liao, "Designing High-Efficiency Photocatalysts—Insights from a Photo-Assisted Kelvin Probe Force Microscopy Study", **2024 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2024)**, Dec. 1-6, Boston, Massachusetts, United States of America.
26. Ting-Han Lin, Jia-Mao Chang, Yu-Chi Peng, Yen-Chang Chen, Yin-Hsuan Chang, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Synergistic Enhancement of Hydrogen Production through Photo-Piezocatalytic BaTiO<sub>3</sub>/ZnIn<sub>2</sub>S<sub>4</sub> Heterostructures", **2024 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2024)**, Dec. 1-6, Boston, Massachusetts, United States of America.
27. Yin-Hsuan Chang, "Photoreforming of Plastic Waste to Hydrogen Using Single-Atom Anchored Pt Decorated Graphitic Carbon Nitride", **2024 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2024)**, Dec. 1-6, Boston, Massachusetts, United States of America. **(Oral Presentation)**
28. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Synergistic Photothermal and Photocatalytic Reduction of Carbon Dioxide to Methane via the Integration of Topological Bismuth Selenide and Zinc Indium Sulfide Photocatalysts", **2024 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2024)**, Dec. 1-6, Boston, Massachusetts, United States of America. **(Best Poster Award Nominee)**
29. [Ming-Chung Wu\\*](#), Ying-Hann Liao, Shun-Hsiang Chan, Shih-Hsuan Chen, Yuan-Yu Chiu, Yin-Hsuan Chang, Ting-Han Lin, and Kun-Mu Lee, "Predicting the Quality of Photovoltaic Materials in Lead-Reduced Perovskite Solar Cells Using Photo-Assisted Kelvin Probe Force System", **2024 PVSEC-35 The 35<sup>rd</sup> International Photovoltaic Science and Engineering Conference (PVSEC-35 2024)**, Nov. 10-15, Numazu, Japan.
30. Hong-Yi Lin, Kai-Chi Hsiao, Ting-Han Lin, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Enhancing the Photovoltaic Conversion Efficiency of Perovskite Solar Cells through Interface Engineering Using Chelating Molecules", **2024 PVSEC-35 The 35<sup>rd</sup> International Photovoltaic Science and Engineering Conference (PVSEC-35 2024)**, Nov. 10-15, Numazu, Japan. **【BMRPC74】**
31. Shu-Chi Lu, Ting-Han Lin, Kun-Mu Lee, Tz-Feng Lin, and [Ming-Chung Wu\\*](#), "Enhancement of Power Conversion Efficiency and Stability in Perovskite Solar Cells Using Long Carbon Chain Carbazole Derivatives", **2024 PVSEC-35 The 35<sup>rd</sup> International Photovoltaic Science and Engineering Conference (PVSEC-35 2024)**, Nov. 10-15, Numazu, Japan. **【NSTC-113-2922-I-182-029】**

32. Kuo-Ping Chiang, Jia-Mao Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Novel Nanoscale Silver Bismuth Iodide Co-Catalysts on Titanium Dioxide Nanofibers for Enhanced Photocatalytic CO<sub>2</sub> Reduction", **2024 SDSE 2<sup>nd</sup>International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
33. Hong-Yi Lin, Shu-Chi Lu, Kai-Chi Hsiao, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Strategic Passivation of Perovskite Layer Interfaces Using Multiple Functional Groups to Enhance Photovoltaic Performance", **2024 SDSE 2<sup>nd</sup>International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. **(Honorable Mentions Award)**
34. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Synergistic CO<sub>2</sub>-to-CH<sub>4</sub> Conversion via Photothermal and Photocatalytic Integration of Topological Bi<sub>2</sub>Se<sub>3</sub> and ZnInS Photocatalysts", **2024 SDSE 2<sup>nd</sup>International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. **(Honorable Mentions)**
35. Yen-Chang Chen, Ting-Han Lin, Jia-Mao Chang, Kuo-Ping Chiang, and [Ming-Chung Wu\\*](#), "Construction of BaTiO<sub>3</sub>/Ag-Doped TiO<sub>2</sub> Heterostructures to Enhance Carbon Dioxide Reduction Reaction via Synergistic Piezo-Photocatalysis", **2024 SDSE 2<sup>nd</sup>International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. **(Second Award)**
36. Hao-Yun Yu, Ting-Hung Hsieh, Yin-Hsuan Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Advanced Fibrous Sensing Materials for Non-Invasive Detection of Acetone Vapor and CO<sub>2</sub> Gas via Electrospinning Technique ", **2024 SDSE 2<sup>nd</sup>International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
37. Yin-Hsuan Chang, Ciao-Yun Huang, Ting-Han Lin, Jia-Mao Chang, and [Ming-Chung Wu\\*](#), "Single-Atom Platinum Anchored Graphitic Carbon Nitride Nanosheets for Photoreforming Plastic to Hydrogen", **2024 JSAP The 85<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2024)**, Sep. 16-20, Niigata, Japan. **(Oral Presentation)**
38. Kuo-Ping Chiang, Jia-Mao Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Novel Nanoscale Silver Bismuth Iodide Co-Catalyst on Titanium Dioxide Nanofibers for Enhanced Photocatalytic CO<sub>2</sub> Reduction", **2024 JSAP The 85<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2024)**, Sep. 16-20, Niigata, Japan. **[BMRPC74]**
39. Yen-Chang Chen, Ting-Han Lin, Kuo-Ping Chiang, Jia-Mao Chang, and [Ming-Chung Wu\\*](#), "Boosting CO<sub>2</sub> Reduction Reaction via Synergistic Photo-Piezocatalysis in Ag-Doped BaTiO<sub>3</sub>/TiO<sub>2</sub> Heterostructures", **2024 JSAP The 85<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2024)**, Sep. 16-20, Niigata, Japan. **(Oral Presentation)**
40. Tzu-Chuan Yang, Tzu-Wei Hsu, Ting-Han Lin, [Ming-Chung Wu](#), and Jer-Chi Wang\*, "High Efficient Piezoelectric Nanogenerators with TiO<sub>2</sub>-NFs-Doped P(VDF-TrFE) Copolymers via Ultraviolet Thermal Annealing", **2024 JSAP The 85<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2024)**, Sep. 16-20, Niigata, Japan. **(Oral Presentation)**
41. [Ming-Chung Wu\\*](#), Yin-Hsuan Chang, Yuan-Yu Chiu, Shih-Hsuan Chen, Ying-Han Liao, and Shun-Hsiang Chan, "Lead-Reduced Halide Perovskite Solar Cells-Predicting the Quality of Photovoltaic Materials with Photo-Assisted Kelvin Probe Force System", **2024 E-MRS European Materials Research Society Spring Meeting (E-MRS 2024)**, May. 27-31, Strasbourg, France. **(Oral Presentation)**
42. Yin-Hsuan Chang, Ting-Han Lin, Kai-Chi Hsiao, Jia-Mao Chang, Ying-Han Liao, and [Ming-Chung Wu\\*](#), "Surface-Enhanced Raman Scattering Detection Platform by Using Self-Precipitation Au Nanoparticles on TiO<sub>2</sub> Nanofibers", **2024 E-MRS European Materials Research Society Spring Meeting (E-MRS 2024)**, May. 27-31, Strasbourg, France.

43. [Ming-Chung Wu\\*](#), Shih-Hsuan Chen, Shun-Hsiang Chan, Yuan-Yu Chiu, Ting-Han Lin, Yin-Hsuan Chang, Ying-Han Liao, and Ku-Mun Lee\*, "Lead-Reduced Halide Perovskite Solar Cells-Predicting the Quality of Photovoltaic Materials with Photo-Assisted Kelvin Probe Force System", **2024 IC ME&D The 34th International Conference on Molecular Electronics and Devices (IC ME&D 2024)**, May. 9-10, Pohang, Korea.
  44. Yin-Hsuan Chang, Ting-Han Lin, Kai-Chi Hsiao, Jia-Mao Chang, and [Ming-Chung Wu\\*](#), "A Facile Platform for Surface-Enhanced Raman Scattering Detection by Self-Precipitation Au Nanoparticles on TiO<sub>2</sub> Nanofibers", **2024 JSAP The 71<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan. **(Oral Presentation)**
  45. Ze-Han Wu, Jia-Mao Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Construction of 2D/2D Bi<sub>2</sub>Se<sub>3</sub>/SBI Topological Heterostructure for Photocatalytic Degradation of Organic Pollutants", **2024 JSAP The 71<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan.
  46. Wei-Zhe Lin, Kai-Chi Hsiao, Ting-Han Lin, Kuo-Ping Chiang, and [Ming-Chung Wu\\*](#), "Development of Heat-Resistant Naphthalene-Based Epoxy Resin with Ag-TiO<sub>2</sub> Nanocomposite for Enhanced Surface Hydrophilicity in Coatings", **2024 JSAP The 71<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan.
  47. Hong-Yi Lin, Kai-Chi Hsiao, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Enhancing the Power Conversion Efficiency of Perovskite Solar Cells through A Chelating Molecules-Based Strategy", **2024 JSAP The 71<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan. **(Oral Presentation)**
  48. Yen-Chang Chen, Ting-Han Lin, Jia-Mao Chang, and [Ming-Chung Wu\\*](#), "Enhanced Photo-Piezocatalytic Performance through Synergistic Effects for Silver-Modified BaTiO<sub>3</sub>/TiO<sub>2</sub> Heterostructure", **2024 JSAP The 71<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan. **(Poster Award)**
- 2023-**
49. [Ming-Chung Wu\\*](#), "Lead-Reduced Halide Perovskite Solar Cells with Photo-Assisted Kelvin Probe Microscopy", **2023 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2023)**, Nov. 26-Dec. 1, Boston, Massachusetts, United States of America. **(Invited Speaker)**
  50. [Ming-Chung Wu\\*](#), Kai-Chi Hsiao, Yin-Hsuan Chang, Jia-Mao Chang, and Ting-Han Lin, "Characterization of Ag<sub>3</sub>BiI<sub>6</sub> Rudorffite Absorber for Ambient-Air-Stable, Lead-Free, and Efficiency Solar Cells through Scanning Analyzer", **2023 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2023)**, Nov. 26-Dec. 1, Boston, Massachusetts, United States of America.
  51. [Ming-Chung Wu\\*](#), Yin-Hsuan Chang, Yi-Jing Lu, Kai-Chi Hsiao, Ting-Han Lin, Jia-Mao Chang, and Ying-Han Liao, "Optimizing CO<sub>2</sub> Photoreduction in Freestanding Silver Bismuth Iodide/Nanocellulose Films through Incident Light Modulation and Integration of Gold Nanoparticles", **2023 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2023)**, Nov. 26-Dec. 1, Boston, Massachusetts, United States of America.
  52. Ting-Han Lin, Jia-Mao Chang, Yi-Lin Wang, Kai-Chi Hsiao, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Exploring Photo-Piezocatalysis in Heterostructured Barium Titanate and Titanium Dioxide: Insights from Photo-Triggered Contact Potential Differences", **2023 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2023)**, Nov. 26-Dec. 1, Boston, Massachusetts, United States of America.
  53. Yin-Hsuan Chang, Rei-Yang Li, Ying-Han Liao, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Machine Learning-Based Prediction of Crystal Structure Proportions in Ag-TiO<sub>2</sub> Nanofibers for Enhanced Photocatalytic Activity", **2023 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2023)**, Nov. 26-Dec. 1, Boston, Massachusetts, United States of America. **[BMRPC74]**

54. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, Kai-Chi Hsiao, and [Ming-Chung Wu\\*](#), "Gas-Solid Phase Reaction-Driven CO<sub>2</sub> Reduction: Exploring the Photocatalytic Potential of Silver-Bismuth-Iodide Rudorffite", **2023 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2023)**, Nov. 26-Dec. 1, Boston, Massachusetts, United States of America.
55. Yu-Chi Peng, Kuo-Ping Chiang, Yen-Chang Chen, Jia-Mao Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Enhanced Solar-Driven Photocatalytic Hydrogen Production through Incorporation of ZnIn<sub>2</sub>S<sub>4</sub> with BaTiO<sub>3</sub> Piezocatalyst", **2023 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2023)**, Nov. 17-20, Hsinchu, Taiwan.
56. Yen-Chang Chen, Jia-Mao Chang, Ting-Han Lin, Yi-Lin Wang, and [Ming-Chung Wu\\*](#), "Construction of BaTiO<sub>3</sub>/TiO<sub>2</sub> Heterostructures through Varied TiO<sub>2</sub> Templates for Enhanced Piezocatalytic Performance", **2023 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2023)**, Nov. 17-20, Hsinchu, Taiwan.
57. [Ming-Chung Wu\\*](#), Ying-Han Liao, Yin-Hsuan Chang, Shih-Hsuan Chen, Ching-Mei Ho, Shan-Hsiang Chan, Yu-Ching Huang, and Kun-Mu Lee, "High-Performance Perovskite Solar Cells Based on Various Metal-Doped TiO<sub>2</sub> Electron Transport Layer", **2023 PVSEC-34 The 34<sup>rd</sup> International Photovoltaic Science and Engineering Conference (PVSEC-34 2023)**, Nov. 6-10, Shenzhen, China.
58. Ying-Han Liao, Kai-Chi Hsiao, Ching-Mei Ho, Ting-Han Lin, Shih-Hsuan Chen, Yin-Hsuan Chang, Jia-Mao Chang, Tz-Feng Lin, Yu-Ching Huang, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Ceiling of Barium Substitution for B-site Cation in Organometal Halide Perovskite Solar Cells", **2023 PVSEC-34 The 34<sup>rd</sup> International Photovoltaic Science and Engineering Conference (PVSEC-34 2023)**, Nov. 6-10, Shenzhen, China. **[BMRPC74]**
59. Yin-Hsuan Chang, Ting-Hung Hsieh, Kai-Chi Hsiao, Ting-Han Lin, [Ming-Chung Wu\\*](#), and Kai-Hsiang Hsu\*, "Electrospun Nanocomposite Fibers for Exhaled Breath Biomarker Detection", **2023 IEDMS International Electron Devices & Materials Symposium (IEDMS 2023)**, Oct. 19-20, Kaohsiung, Taiwan.
60. Yin-Hsuan Chang, Ting-Han Lin, Kai-Chi Hsiao, Jia-Mao Chang, and [Ming-Chung Wu\\*](#), "Self-Precipitation Au Nanoparticles on TiO<sub>2</sub> Nanofibers for Surface-Enhanced Raman Scattering Detection", **2023 IEDMS International Electron Devices & Materials Symposium (IEDMS 2023)**, Oct. 19-20, Kaohsiung, Taiwan.
61. [Ming-Chung Wu\\*](#), Yin-Hsuan Chang, Yi-Jing Lu, Kai-Chi Hsiao, and Ting-Han Lin, "Enhancing CO<sub>2</sub> Photoreduction via Incident Light Modulation in Silver Bismuth Iodide/Nanocellulose Films and the Integration of Gold Nanoparticles", **2023 JSAP The 84<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2023)**, Sep. 19-23, Kumamoto, Japan.
62. Yin-Hsuan Chang, Ting-Han Lin, Kai-Chi Hsiao, Jia-Mao Chang, and [Ming-Chung Wu\\*](#), "Surface Self-Precipitation Au Nanoparticles on TiO<sub>2</sub> Nanofibers for Surface-Enhanced Raman Scattering Detection of Environmental Hazards", **2023 JSAP The 84<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2023)**, Sep. 19-23, Kumamoto, Japan.
63. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, Kai-Chi Hsiao, and [Ming-Chung Wu\\*](#), "Exploring Photo-Piezocatalysis in Heterostructured Barium Titanate and Titanium Dioxide: Insights from Photo-Triggered Contact Potential Differences", **2023 JSAP The 84<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2023)**, Sep. 19-23, Kumamoto, Japan. **(Oral Presentation)**
64. Ting-Han Lin, Kuo-Ping Chiang, Jia-Mao Chang, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Multidimensional Ternary Heterostructured Self-Precipitated Ag Nanoparticles on TiO<sub>2</sub>@SrTiO<sub>3</sub> for Photoreforming of Plastics Face Mask to Hydrogen", **2023 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2023)**, Apr. 10-15, San Francisco, California, United States of America. **[BMRPC74]**

65. Kai-Chi Hsiao, Ting-Han Lin, Wei-Fang Su, and [Ming-Chung Wu\\*](#), "Chloride Gradient Renders Carrier Extraction of Hole for High  $V_{oc}$  and Efficient Inverted Organometal Halide Perovskite Solar Cell", **2023 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2023)**, Apr. 10-15, San Francisco, California, United States of America.
66. Yin-Hsuan Chang, Shih-Hsuan Chen, Ching-Mei Ho, Shun Hsiang Chan, Ying-Han Liao, and [Ming-Chung Wu\\*](#), "Mechanism Study of High Efficiency Perovskite Solar Cells Based on Planar or Mesoporous Metal-Doped  $TiO_2$  Electron Extraction Layer", **2023 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2023)**, Apr. 10-15, San Francisco, California, United States of America.
67. Jia-Mao Chang, Kai-Chi Hsiao, Ching-Mei Ho, Shun-Hsiang Chan, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Realize the Counterbalance Between Sustainability And Photovoltaic Performance of Organometal Halide Perovskite Solar Cell", **2023 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2023)**, Apr. 10-15, San Francisco, California, United States of America.
68. Yin-Hsuan Chang, Ting-Hung Hsieh, Kai-Chi Hsiao, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Electrospun Sensing Materials for Monitoring Exhaled Diabetes Biomarker", **2023 JSAP The 70<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan. (Oral Presentation)
69. Ying-Han Liao, Shih-Hsuan Chen, Ching-Mei Ho, Shun-Hsiang Chan, and [Ming-Chung Wu\\*](#), "Interface Engineering for Achieving Efficient and Low Hysteretic Behavior Perovskite Solar Cells Based on  $TiO_2$  Mesopores Electron Extraction Layer", **2023 JSAP The 70<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan. (Oral Presentation)
70. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Silver Bismuth Iodide Rudorffite for Photocatalytic  $CO_2$  Reduction", **2023 JSAP The 70<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan. (Oral Presentation)
71. Yuan-Yu Chiu, Kai-Chi Hsiao, Ching-Mei Ho, Shih-Hsuan Chen, and [Ming-Chung Wu\\*](#), "2-Chloroethyl Vinyl Ether Chain-Grafted Carbazole Derivatives Interlayer Enhances Power Conversion Efficiency of Perovskite Solar Cells", **2023 JSAP The 70<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan.
72. Ting-Hung Hsieh, Kai-Chi Hsiao, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Electrospun Ag/PVP/PMMA Porous Nanofibers for Monitoring Exhaled Diabetes Biomarker", **2023 JSAP The 70<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan.
73. Yi-Lin Wang, Jia-Mao Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "BaTiO<sub>3</sub>/TiO<sub>2</sub> Nanocomposite for Piezo-Photocatalytic Wastewater Treatment", **2023 JSAP The 70<sup>th</sup> Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan.

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74. Kun-Mu Lee\*, Seungjun Ahn, and [Ming-Chung Wu](#), "Enhanced Efficiency and Stability of Quasi-2D/3D Perovskite Solar Cells by Blade Coating Method", **2022 PVSEC-33 The 33<sup>rd</sup> International Photovoltaic Science and Engineering Conference (PVSEC-33 2022)**, Nov. 13-17, Nagoya, Japan.
75. Yin-Hsuan Chang, Shun-Hsiang Chan, Yi-Ying Li, Shih-Hsian Chen, Ching-Mei Ho, Kai-Chi Hsiao, and [Ming-Chung Wu\\*](#), "Defect Passivation Toward High-Performance Perovskite Solar Cells", **2022 ICGET-TW The 2022 International Conference on Green Electrochemical Technologies and the 2022 Annual Meeting of Electrochemical Society of Taiwan (ICGET-TW 2022)**, Nov. 10-12, Hsinchu, Taiwan.
76. Tzu-Chuan Yang, Ping-Jung Huang, Peng-Nang Chen, Tzu-Wei Hsu, [Ming-Chung Wu\\*](#), and Jer-Chyi Wang, "Enhanced Output Performance of P(VDF-TrFE) Piezoelectric Nanogenerators with DMF and Toluene Co-Solvent Dissolving Process", **2022 IEDMS International Electron Devices & Materials Symposium (IEDMS 2022)**, Oct. 27-28, Nantou, Taiwan.

77. Shih-Cheng Tsao, Yi Fu, Tzu-Chuan Yang, Peng-Nang Chen, Tzu-Wei Hsu, [Ming-Chung Wu\\*](#), and Jer-Chyi Wang, "Thickness Dependence of Resistive Switching Characteristics in Flexible Cu/MDMP-PPV/ITO ReRAMs", **2022 IEDMS International Electron Devices & Materials Symposium (IEDMS 2022)**, Oct. 27-28, Nantou, Taiwan. **(Oral Presentation)**
78. Ying-Han Liao, Shih-Hsuan Chen, Ching-Mei Ho, Shun-Hsiang Chan, and [Ming-Chung Wu\\*](#), "High Efficiency Perovskite Solar Cells based on Planar or Mesoporous Metal Doping TiO<sub>2</sub> Electron Extraction Layer", **2022 IEDMS International Electron Devices & Materials Symposium (IEDMS 2022)**, Oct. 27-28, Nantou, Taiwan. **(Oral Presentation)**
79. Yin-Hsuan Chang, Ting-Hung Hsieh, Kai-Chi Hsiao, and [Ming-Chung Wu\\*](#), "Exhaled Breath Sensor Based on an Electrospun Nanofiber-Based Sensing Materials for Non-Invasive Diagnostic Applications", **2022 IEDMS International Electron Devices & Materials Symposium (IEDMS 2022)**, Oct. 27-28, Nantou, Taiwan.
80. Kai-Chi Hsiao, Shun-Hsiang Chan, Wei-Cheng Chen, Tzu-Hao Lin, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Realize the Counterbalance Between Sustainability and Photovoltaic Performance of Organometal Halide Perovskite Solar Cell", **2022 IEDMS International Electron Devices & Materials Symposium (IEDMS 2022)**, Oct. 27-28, Nantou, Taiwan. **(Oral Presentation)**

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81. Jia-Mao Chang, Ting-Han Lin, Kou-Ping Chiang, and [Ming-Chung Wu\\*](#), "Vapor-Assisted Synthesis of Novel Silver Bismuth Iodide Crystal for Efficient Photocatalytic CO<sub>2</sub> Reduction", **2021 IEDMS International Electron Devices & Materials Symposium (IEDMS 2021)**, Nov. 18-19, Kaohsiung, Taiwan.
82. Yu-Hsiang Chang, Yen-Fu Yu, Kai-Chi Hsiao, Shih-Hsuan Chen, and [Ming-Chung Wu\\*](#), "Enhance Power Conversion Efficiency of Non-Toxic Rudorfittes Solar Cells Through Modification of Carrier Transporting Layer", **2021 IEDMS International Electron Devices & Materials Symposium (IEDMS 2021)**, Nov. 18-19, Kaohsiung, Taiwan. **(Excellent Poster Paper Award)**
83. Tien-Hao Chen, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Synthesis of Sulfur-Vacancy Defects on SnS<sub>2</sub>/Carbonized CNF Nanocomposite Film for Photocatalytic Application", **2021 IEDMS International Electron Devices & Materials Symposium (IEDMS 2021)**, Nov. 18-19, Kaohsiung, Taiwan.
84. Yu-Ching Huang\*, Yu-Hsiang Cheng, Zih-Ting Chen, Zhi-Hao Huang, Kun-Mu Lee, and [Ming-Chung Wu\\*](#), "Study of the Conducting Polymer as the Interfacial Buffer Layer of Screen-Printed Electrodes for Perovskite Solar Cells", **2021 TACT International Thin Films Conference (TACT 2021)**, Nov. 15-18, Virtual Conference.
85. Kou-Ping Chiang, Ting-Han Lin, Yin-Hsuan Chang, Jia-Mao Chang, Kai-Chi Hsiao, and [Ming-Chung Wu\\*](#), "Enhanced Photocatalytic CO<sub>2</sub> Reduction Activity of Silver-Bismuth Iodide Decorated TiO<sub>2</sub> NFs by Chemical Vapor Deposition", **2021 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2021)**, Nov. 13-17, Virtual Conference.
86. Jia-Mao Chang, Ting-Han Lin, Kou-Ping Chiang, and [Ming-Chung Wu\\*](#), "Manipulating the Microstructure of Novel Silver Bismuth Iodide Crystal for Efficient Photocatalytic CO<sub>2</sub> Reduction", **2021 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2021)**, Nov. 13-17, Virtual Conference.
87. Ting-Hun Hsieh, Yin-Hsuan Chang, Ting-Han Lin, and [Ming-Chung Wu\\*](#), "Ultra-Sensitive Breath Acetone Detection by Polymer Nanocomposite Sensing Material for Non-Invasive Diabetics Health Monitoring", **2021 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2021)**, Nov. 13-17, Virtual Conference. **(First Prize)**

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88. Ting-Han Lin, Duy Linh Vu, [Ming-Chung Wu\\*](#), and Chao-Sung Lai, "Using Electrospun PANI/P3TI/PMMA Fibers for Highly-Sensitive Detection of Volatile Organic Compounds Vapor", **2020 ICSS International Conference on Smart Sensors, 25<sup>th</sup> Symposium of Association of Chemical Sensors in Taiwan, and 23<sup>rd</sup> Nano Engineering and Microsystem Technology Conference (ICSS 2020)**, Oct. 19-20, Kaohsiung, Taiwan. (Oral Presentation) (Best Oral Paper Award)
89. Chi-Hung Lin, [Ming-Chung Wu\\*](#), Ding-Hong Xie, and Chao-Sung Lai, "Detection of Volatile Organic Compounds Using Aligned Ag/QR/PMMA Freestanding Fibrous Film", **2020 ICSS International Conference on Smart Sensors, 25<sup>th</sup> Symposium of Association of Chemical Sensors in Taiwan, and 23<sup>rd</sup> Nano Engineering and Microsystem Technology Conference (ICSS 2020)**, Oct. 19-20, Kaohsiung, Taiwan.
90. Meng-Huan Jao, Shun-Hsiang Chan, [Ming-Chung Wu\\*](#), and Chao-Sung Lai, "Pseudopotential Generated Element Code as Efficient Descriptor to Predict Material Properties", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
91. Shun-Hsiang Chan, Meng-Huan Jao, [Ming-Chung Wu\\*](#), and Chao-Sung Lai, "Enhanced Photovoltaic Performance of 2D/3D Ba-Doped Perovskite Solar Cells by Phenethylammonium Chloride Addition", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan. (Oral Presentation)
92. Yin-Hsuan Chang, Ting-Han Lin, Yu-Han Liao, and [Ming-Chung Wu\\*](#), "Efficient Removal of Organic Pollutants with Reusable Cellulose Nanofiber/Titanium Dioxide Nanofiber Composite Film", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
93. Qian-Han Wang, Shih-Hsuan Chen, and [Ming-Chung Wu\\*](#), "Using Composition Engineering to Enhance Photovoltaic Performance of Lead-Free Silver Bismuth Iodide Solar Cells", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
94. Yen-Fu Yu, Shih-Hsuan Chen, and [Ming-Chung Wu\\*](#), "Improved the Photovoltaic Performance of Ag<sub>3</sub>BiI<sub>6</sub> Solar Cells by Band Alignment Engineering", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
95. Yu-Zhe Liu, Kun Mu Lee\*, and [Ming-Chung Wu\\*](#), "Sequential Preparation of Fluorine-Doped Tin Oxide Films for High-Efficiency Perovskite Solar Cells", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
96. Ya-Ting Chan, Yi-Pei Jiang, Yi Fu, [Ming-Chung Wu](#), Kuo-Hsuan Chang, and Jer-Chyi Wang\*, "Effects of Electrode Materials on SiO<sub>2</sub> Nanoparticle Incorporated Ionic Liquid/Poly(Vinylidene Fluoride) Actuators", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
97. Tzu-Chuan Yang, Rajat Subhra Karmaker, Shih-Hsuan Chen, Yu-Jen Lu, [Ming-Chung Wu](#), and Jer-Chyi Wang\*, "Superior Characteristics of MDMO-PPV Piezoresistive Pressure Sensors with 1×1 Cross-Point Electrode Structure", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
98. Yi Fu, Yu-Hua Liu, Han-Hsiang Tai, Kuo-Hsuan Chang, [Ming-Chung Wu](#), and Jer-Chyi Wang\*, "Gold Nanoparticles Incorporated PEG Tactile Sensing Unit for the Implementation in Diagnosis of Parkinson's Disease", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
99. Ishita Chakraborty, [Ming-Chung Wu](#), and Chao-Sung Lai\*, "PDMS@TiO<sub>2</sub> NPs Composite Based High Performance TENG", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.

100. Ming-Chung Wu\*, Kai-Chi Hsiao, Yin-Hsuan Chang, and Krisztián Kordás, "Photo-Kelvin Probe Force Microscopy Study on Carrier Transport Mechanism of Core/Shell Heterostructure TiO<sub>2</sub> Photocatalysts", **2020 CCE IV International Conference on Catalysis and Chemical Engineering (CCE 2020)**, Feb. 24-26, Los Angeles, California, United States of America. (Oral Presentation)
101. Ting-Han Lin, Yin-Hsuan Chang, Ching-Ting Chiu, and Ming-Chung Wu\*, "Construction of 2D/1D g-C<sub>3</sub>N<sub>4</sub>/TiO<sub>2</sub> with Z-Scheme Heterostructure for Efficient Water Splitting", **2020 CCE IV International Conference on Catalysis and Chemical Engineering (CCE 2020)**, Feb. 24-26, Los Angeles, California, United States of America. (Oral Presentation)
102. Yin-Hsuan Chang, Ting-Han Lin, Yu-Han Liao, Ying-Han Liao, and Ming-Chung Wu\*, "Cellulose Nanofiber/Titanium Dioxide Nanowire Film for Reusable Organic Pollutant Photosdegradation", **2020 CCE IV International Conference on Catalysis and Chemical Engineering (CCE 2020)**, Feb. 24-26, Los Angeles, California, United States of America. (Oral Presentation)

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103. Ting-Han Lin, Yu-Han Liao, Yin-Hsuan Chang, Ying-Han Liao, and Ming-Chung Wu\*, "Hierarchically Cellulose Nanofiber/Titanium Dioxide Nanowire Film with Morphological Matching Forreusable Organic Pollutant Photodegradation", **2019 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2019)**, Dec. 1-6, Boston, Massachusetts, United States of America.
104. Ming-Chung Wu\*, Yen-Tung Lin, Shih-Hsuan Chen, Ying-Han Liao, and Shun-Hsiang Chan, "High Power Conversion Efficiency of Perovskite Solar Cells Based on Low-Temperature Zn-Doped TiO<sub>2</sub> Electron Extraction Layer", **2019 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2019)**, Dec. 1-6, Boston, Massachusetts, United States of America.
105. Chi-Hung Lin, Ming-Chung Wu\*, Tz-Feng Lin, Shun-Hsiang Chan, Ting-Han Lin, Kai Wang, and Chao-Sung Lai, "Ultrasensitive Detection of Volatile Organic Compounds by Freestanding Aligned Ag/CdSe-CdS/PMMA Texture with Double-Sild UV-Ozone Treatment", **2019 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2019)**, Dec. 1-6, Boston, Massachusetts, United States of America.
106. Ting-Han Lin, Yu-Han Liao, Yin-Hsuan Chang, and Ming-Chung Wu\*, "Hierarchically Cellulose Nanofiber/TiO<sub>2</sub> Nanofiber Composite Film for The Reusable Organic Pollutant Photodegradation", **2019 APAM The Congress of Asia Pacific Academy of Materials (APAM 2019)**, Nov. 15-18, Guangzhou, China. (Oral Presentation)
107. Yin-Hsuan Chang, Chi-Hung Lin, Tz-Feng Lin, Shun-Hsiang Chan, Ting-Han Lin, Kai Wang, Chao-Sung Lai, and Ming-Chung Wu\*, "Efficient Polarization-Selective CdSe-CdS/PMMA Sensing Material for Detection of Volatile Organic Compounds Detection", **2019 APAM The Congress of Asia Pacific Academy of Materials (APAM 2019)**, Nov. 15-18, Guangzhou, China.
108. Shih-Hsuan Chen, Yen-Tung Lin, and Ming-Chung Wu\*, "Control Perovskite Crystallization via Interface Engineering for Highly Efficient Low-Temperature Perovskite Solar Cells", **2019 A-COE The 11<sup>th</sup> Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan. (Excellent Poster Award)
109. Ching-Mei Ho, Shih-Hsuan Chen, and Ming-Chung Wu\*, "Two-Dimensional Additive Promoting Crystal Growth for High-Performance Perovskite Solar Cells", **2019 A-COE The 11<sup>th</sup> Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan.
110. Chi-Hung Lin, Ting-Han Lin, Shun-Hsiang Chan, Yin-Hsuan Chang, Tz-Feng Lin, Ziming Zhou, Kai Wang, Chao-Sung Lai, and Ming-Chung Wu\*, "Highly Sensitive Freestanding Ag/CdSe-CdS/PMMA Sensors for Volatile Organic Compounds Detection", **2019 FAPS The 6<sup>th</sup> Federation of Asian Polymer Societies Polymer Congress (FAPS 2019)**, Oct. 27-30, Taipei, Taiwan.

111. Yin-Hsuan Chang, Yi-Ying Li, Shun-Hsiang Chan, and [Ming-Chung Wu\\*](#), "Enhanced Photovoltaic Performance Lead-Reduced Perovskite Solar Cells by Polymer Additives", **2019 FAPS The 6<sup>th</sup> Federation of Asian Polymer Societies Polymer Congress (FAPS 2019)**, Oct. 27-30, Taipei, Taiwan. **(Oral Presentation)**
112. [Ming-Chung Wu\\*](#), Yin-Hsuan Chang, Ying-Han Liao, Shun-Hsiang Chan, and Yi-Yin Li, "High-Performance and Stable Perovskite Solar Cells by Adding Polymer Additive in Barium Doped Methylammonium Lead Halide", **2019 JSAP The 80<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2019)**, Sep. 18-21, Sapporo, Hokkaido University, Japan.
113. Yin-Hsuan Chang, Kai-Chi Hsiao, Krisztián Kordás, and [Ming-Chung Wu\\*](#), "Peering into Carrier Transport Mechanism of Anatase/Rutile Core/Shell TiO<sub>2</sub> NFs Photocatalysts by Photo-Kelvin Probe Force Microscopy", **2019 JSAP The 80<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2019)**, Sep. 18-21, Sapporo, Hokkaido University, Japan. **(Oral Presentation)**
114. Ying-Han Liao, and [Ming-Chung Wu\\*](#), "Photophysics of Perovskite Solar Cells based on Sn-TiO<sub>2</sub> Electron Extraction Layer Revealed by Time-Resolved Photoluminescence Spectroscopy", **2019 JSAP The 80<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2019)**, Sep. 18-21, Sapporo, Hokkaido University, Japan. **(Oral Presentation)**
115. [Ming-Chung Wu\\*](#), Shun-Hsiang Chan, Shih-Hsuan Chen, Yen-Tung Lin, and Yin-Hsuan Chang, "High-Efficiency Perovskite Solar Cells by Modifying Zn-Doped TiO<sub>2</sub> Electron Extraction Layer", **2019 10<sup>th</sup> International Conference on Materials for Advanced Technologies (ICMAT 2019)**, June. 23-28, Marina Bay Sands, Singapore.
116. [Ming-Chung Wu\\*](#), Shun-Hsiang Chan, and Yi-Ying Li, "High Performance and Long-Term Stability Lead-Reduced Perovskite Solar Cells Based on Mesoscopic Zn-TiO<sub>2</sub> Electron Transport Layer", **2019 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2019)**, Apr. 22-26, Phoenix, Arizona, United States of America.
117. Yin-Hsuan Chang, Kai-Chi Hsiao, Krisztián Kordás, and [Ming-Chung Wu\\*](#), "Synthesis of Core-Shell Rutile/Anatase Heterojunction Titanium Dioxide for Efficient Photocarrier Separation and Enhanced Photocatalytic Performance", **2019 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2019)**, Apr. 22-26, Phoenix, Arizona, United States of America.
118. Shih-Hsuan Chen, [Ming-Chung Wu\\*](#), and Yen-Tung Lin, "High-Efficiency Perovskite Solar Cells Prepared by Low-Temperature Solution-Process for Commercialization", **2019 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2019)**, Apr. 22-26, Phoenix, Arizona, United States of America.
119. Chi-Hung Lin, Ting-Han Lin, Ching-Ting Chiu, and [Ming-Chung Wu\\*](#), "Construction Of 2D/1D g-C<sub>3</sub>N<sub>4</sub>/TiO<sub>2</sub> with Z-Scheme Heterostructure of Efficient Water Splitting", **2019 3<sup>rd</sup> International Workshop on Graphene and C<sub>3</sub>N<sub>4</sub>-based Photocatalysts (IWGCP3 2019)**, Mar. 23-26, Wuhan, China. **(Excellent Poster Award)**
120. Ting-Han Lin, Ying-Han Liao, Yin-Hsuan Chang, and [Ming-Chung Wu\\*](#), "Sn Doping Effect on Crystal Structure of TiO<sub>2</sub> Electron Extraction Layer for Organometal Halide Perovskite Solar Cells", **2019 3<sup>rd</sup> International Workshop on Graphene and C<sub>3</sub>N<sub>4</sub>-based Photocatalysts (IWGCP3 2019)**, Mar. 23-26, Wuhan, China.
121. [Ming-Chung Wu\\*](#), Shun-Hsiang Chan, Ying-Han Liao, and Yi-Ying Li, "Enhancing the Performance of Perovskite Solar Cells by Modifying Lead-Reduced Perovskite Absorber and Metal-Doped TiO<sub>2</sub> Electron Extraction Layer", **2019 The 2<sup>nd</sup> International Conference on Advanced Energy Materials (ICAEM 2019)**, Jan. 23-26, Singapore. **(Oral Presentation)**

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122. Ming-Chung Wu\*, Shun-Hsiang Chan, Ying-Han Liao, and Yin-Hsuan Chang, "Enhanced Performance of Perovskite Solar Cells Based on Lead-Reduced Perovskite Absorber and Metal-Doped TiO<sub>2</sub> Electron Extraction Layer", **2018 IUMRS-ICA The 19<sup>th</sup> International Union of Materials Research Societies International Conference in Asia (IUMRS-ICA 2018)**, Oct. 31- Nov. 04, Bali, Indonesia.
123. Yin-Hsuan Chang, Ting-Han Lin, Kuo-Ping Chiang, and Ming-Chung Wu\*, "Magnetic Separable Fe<sub>3</sub>O<sub>4</sub>/Ag/TiO<sub>2</sub> Nanofibers for Removal of Hexavalent Chromium", **2018 IUMRS-ICA The 19<sup>th</sup> International Union of Materials Research Societies International Conference in Asia (IUMRS-ICA 2018)**, Oct. 31- Nov. 04, Bali, Indonesia. (Oral Presentation)
124. Ying-Han Liao, Shun-Hsiang Chan, and Ming-Chung Wu\*, "Tuning Metal-Doped TiO<sub>2</sub> Electron Extraction Layer for High-Performance Perovskite Solar Cells", **2018 IUMRS-ICA The 19<sup>th</sup> International Union of Materials Research Societies International Conference in Asia (IUMRS-ICA 2018)**, Oct. 31- Nov. 04, Bali, Indonesia. (Oral Presentation)
125. Shan-Hsiang Chan, Ming-Chung Wu\*, Kun-Mu Lee, Shih-Hsuan Chen, Meng-Huan Jao, Yang-Fang Chen, and Wei-Fang Su "Enhanced Photovoltaic Characteristics of Perovskite Solar Cells Using Mesoscopic Zn-Doped TiO<sub>2</sub> as Electron Extraction Layer", **2018 ISOS-11 The 11<sup>th</sup> International Summit on Organic and Hybrid Photovoltaics Stability (ISOS-11 2018)**, Oct. 21-25, Suzhou, China.
126. Yen-Tung Lin, Shih-Hsuan Chen, and Ming-Chung Wu\*, "High-Efficiency Perovskite Solar Cells Prepared by Low-Temperature Solution-Process", **2018 JSAP The 79<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2018)**, Sep. 18-21, Nagoya, Japan. (Oral Presentation) [106-2221-E-182-057-MY3]
127. Yi-Ying Li, Shan-Hsiang Chan, and Ming-Chung Wu\*, "High Performance Lead-Reduced Mixed-Cation Perovskite Solar Cells", **2018 JSAP The 79<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2018)**, Sep. 18-21, Nagoya, Japan. (Oral Presentation)
128. Ching-Mei Ho, Shan-Hsiang Chan, and Ming-Chung Wu\*, "Fabrication of Lead-Free (CH<sub>3</sub>NH<sub>3</sub>)<sub>3</sub>Bi<sub>2</sub>I<sub>9</sub> Solar Cell Using Anti-Solvent Engineering Treatment", **2018 JSAP The 79<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2018)**, Sep. 18-21, Nagoya, Japan. (Oral Presentation)
129. Chi-Hung Lin, Shan-Hsiang Chan, Ching-Ying Chiu, and Ming-Chung Wu\*, "Etching Effect on Electrospun Ag/QR/PMMA Freestanding Film for Volatile Organic Compounds Detection", **2018 JSAP The 79<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2018)**, Sep. 18-21, Nagoya, Japan. (Oral Presentation)
130. Ming-Chung Wu\*, "Enhanced PCE of Perovskite Solar Cells by Tuning Perovskite-Structure Absorber and TiO<sub>2</sub>-Based Electron Transport Layer", **2018 International Conference of Frontier Materials and Green Materials**, Aug 14, Taipei, Taiwan. (Invited Speaker)
131. Ming-Chung Wu\*, Tzu-Hao Lin, Shun-Hsiang Chan, Ying-Han Liao, and Yin-Hsuan Chang, "Enhanced Photovoltaic Performance of Perovskite Solar Cells Based on Alkaline Earth Metal-Doped Perovskite-structured Absorber and Metal-Doped TiO<sub>2</sub> Hole Blocking Layer", **2018 Chinese Symposium on Photocatalytic Materials (2018 CSPM1)**, July 26-29, Wuhan, China. (Invited Speaker)
132. Ting-Han Lin, Kuo-Ping Chiang, and Ming-Chung Wu\*, "One-Pot Synthesis of Silver Oxide Nanoparticles Loaded TiO<sub>2</sub> Nanofibers and Its Synergistic Effect on Visible-Driven Photocatalytic Activity", **2018 Chinese Symposium on Photocatalytic Materials (2018 CSPM1)**, July 26-29, Wuhan, China. (Excellent Poster Award)
133. Shih-Hsuan Chen, Shun-Hsiang Chan, Kun-Mu Lee, and Ming-Chung Wu\*, "Enhancing Efficiency of Mesoporous Structure Perovskite Solar Cells Using Ag-Doped TiO<sub>2</sub> as Electron Transport Layer", **2018 Chinese Symposium on Photocatalytic Materials (2018 CSPM1)**, July 26-29, Wuhan, China.

134. Yin-Hsuan Chang, Ting-Han Lin, Kuo-Ping Chiang, and Ming-Chung Wu\*, "Recyclable Magnetic Fe<sub>3</sub>O<sub>4</sub>/Ag/TiO<sub>2</sub> Photocatalyst for Removing Hexavalent Chromium", **2018 Chinese Symposium on Photocatalytic Materials (2018 CSPM1)**, July 26-29, Wuhan, China. **(Excellent Poster Award)**
135. Shun-Hsiang Chan, Shih-Hsuan Chen, Kun-Mu Lee, Wei-Fang Su, and Ming-Chung Wu\*, "High Power Conversion Efficiency of Perovskite Solar Cells Using Mesoscopic Zn-Doped TiO<sub>2</sub> as Electron Transport Layer", **2018 The 6<sup>th</sup> International Conference on the Characterization and Control of Interfaces for High Quality Advanced Materials (2018 ICCCI)**, July 9-12, Kurashiki, Japan. **(Oral Presentation) 【106-2221-E-182-057-MY3】**
136. Yin-Hsuan Chang, and Ming-Chung Wu\*, "Reusable Ag/Fe<sub>3</sub>O<sub>4</sub>-TiO<sub>2</sub> NFs for Photocatalytic Reduction of Hexavalent Chromium", **2018 The 6<sup>th</sup> International Conference on the Characterization and Control of Interfaces for High Quality Advanced Materials (2018 ICCCI)**, July 9-12, Kurashiki, Japan. **(Oral Presentation)**
137. Yu-Han Liao, Ting-Han Lin, Kou-Ping Chiang, and Ming-Chung Wu\*, "Preparation and Photocatalytic Performance of TiO<sub>2</sub>/Cellulose Nanofibers Composite Film", **2018 The 6<sup>th</sup> International Conference on the Characterization and Control of Interfaces for High Quality Advanced Materials (2018 ICCCI)**, July 9-12, Kurashiki, Japan. **(Oral Presentation)**
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141. Ming-Chung Wu\*, Shun-Hsiang Chan, and Wei-Fang Su, "Using Barium Doped Methylammonium Lead Halide to Enhance the Performance of Perovskite-Structured Solar Cell", **2018 AEMC European Advanced Energy Materials and Technology Congress (AEMC 2018)**, Mar. 25-28, Stockholm, Sweden. **(Oral Presentation)**
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147. Tzu-Hao Lin, [Ming-Chung Wu\\*](#), Shun-Hsiang Chan, Ying-Han Liao, and Wei-Fang Su\*, "Fabrication and Characteristics of Reduced Lead Perovskite Solar Cell", **2017 IUMRS-ICA International Union of Materials Research Societies International Conference in Asia (IUMRS 2017)**, Nov. 5-9, Taipei, Taiwan. (Excellent Poster Award)
148. Chih-Kuang Kao, Shun-Hsiang Chan, and [Ming-Chung Wu\\*](#), "Tuning Morphological Structure of Ag/QRs/PMMA Blend Fibers to Enhance the Sensitivity of Volatile Organic Compounds", **2017 IUMRS-ICA International Union of Materials Research Societies International Conference in Asia (IUMRS 2017)**, Nov. 5-9, Taipei, Taiwan.
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150. Shun-Hsiang Chan, [Ming-Chung Wu\\*](#), Shih-Hsuan Chen, Wei-Fang Su, and Chao-Sung Lai, "Using Aligned P3HT/PMMA Fibers to Detect Volatile Organic Compounds", **2017 SSDM International Conference on Solid State Devices and Materials (SSDM 2017)**, Sep. 19-22, Sendai, Japan.
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154. Wei-Kung Huang, Po-Yeh Wu, and [Ming-Chung Wu\\*](#), "Enhanced Photocatalytic Activity of Metal Decorated Hydrogenated TiO<sub>2</sub> NFs", **2017 JSAP The 78<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2017)**, Sep. 5-8, Fukuoka, Japan.
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156. Shih-Hsuan Chen, Shun-Hsiang Chan, Chun-Fu Lu, Wei-Fang Su, and Ming-Chung Wu\*, "P3HT/PMMA Fibers Fabricated by Electrospinning Technique for High Sensitivity Volatile Organic Compounds Sensor", 2017 JSAP The 78<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2017), Sep. 5-8, Fukuoka, Japan. (Oral Presentation) 【105-2221-E-182-011-】
157. Yin-Hsuan Chang, Ting-Han Lin, Po-Yen Wu, and Ming-Chung Wu\*, "High Photocatalytic Performance of Silver Doped Titanium Dioxide Nanofibers", 2017 JSAP The 78<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2017), Sep. 5-8, Fukuoka, Japan. (Oral Presentation)
158. Ying-Han Liao, Shun-Hsiang Chan, Tzu-Hao Lin, and Ming-Chung Wu\*, "Using Silver-Doped TiO<sub>2</sub> Electron Transport Layer to Enhance Photovoltaic Performance of Perovskite Structured Solar Cell", 2017 JSAP The 78<sup>th</sup> Japan Society of Applied Physics Autumn Meeting (JSAP 2017), Sep. 5-8, Fukuoka, Japan. (Oral Presentation)
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160. Yin-Hsuan Chang, Kai-Chi Hsiao, Po-Yeh Wu, Shun-Hsiang Chan, and Ming-Chung Wu\*, "Photocatalytic Hydrogen Production of Palladium Nanoparticles Decorated Black TiO<sub>2</sub> Calcined in Argon Atmosphere", 2017 IWGCP2 2<sup>nd</sup> International Workshop on Graphene and C<sub>3</sub>N<sub>4</sub>-Based Photocatalysts (IWGCP2 2017), Mar. 24-27, Wuhan, China.
161. Ting-Han Lin, Po-Yeh Wu, Yin-Hsuan Chang, and Ming-Chung Wu\*, "High Photocatalytic Performance of Ag/TiO<sub>2</sub> Nanofibers: Photodegradation of Organic Dye and Photocatalytic H<sub>2</sub> Generation", 2017 IWGCP2 2<sup>nd</sup> International Workshop on Graphene and C<sub>3</sub>N<sub>4</sub>-Based Photocatalysts (IWGCP2 2017), Mar. 24-27, Wuhan, China. (Best Poster Award)
162. Kuo-Ping Chiang, Po-Yeh Wu, Yin-Hsuan Chang, Ting-Han Lin, and Ming-Chung Wu\*, "Copper Doping Effects on Photocatalytic Properties of TiO<sub>2</sub> NFs", 2017 IWGCP2 2<sup>nd</sup> International Workshop on Graphene and C<sub>3</sub>N<sub>4</sub>-Based Photocatalysts (IWGCP2 2017), Mar. 24-27, Wuhan, China.
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164. Tzu-Hao Lin, Ming-Chung Wu\*, Shun-Hsiang Chan, Wei-Cheng Chen, Meng-Huan Jao, and Wei-Fang Su, "Calcium-Doped Perovskite Materials for Perovskite Photovoltaics", 2017 MCARE Materials Challenges in Alternative and Renewable Energy (MCARE 2017), Feb. 20-24, Jeju Island, Korea. (Oral Presentation) 【NERPD2F0021(MOST105-2221-E-182-011)】
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166. Ying-Han Liao, Shun-Hsiang Chan, Tzu-Hao Lin, and Ming-Chung Wu\*, "Silver-Doped TiO<sub>2</sub> Compact Layer Enhanced Photovoltaic Performance of Perovskite Solar Cells", 2017 SICEAS Seoul International Conference on Engineering and Applied Sciences (SICEAS 2017), Feb. 7-9, Seoul, Korea. (Oral Presentation) 【NERPD2F0021(MOST105-2221-E-182-011)】
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199. Ming-Chung Wu, and Jyun-Sian Chih, "Synthesis and Photocatalytic Performance of Bi-Doped Anatase TiO<sub>2</sub> Nanofibers and Fabrication of Freestanding Films", **2013 MRS Spring Meeting**, Apr. 1-5, San Francisco, USA.