

Prof. Ming-Chung Wu of Chang Gung University (Update 2024/10/21)

International Conference Papers List

2024-

1. 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 CO₂ Reduction", **2024 SDSE 2nd International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
2. 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 2nd International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. (**Honorable Mentions**)
3. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu*](#), "Synergistic CO₂-to-CH₄ Conversion via Photothermal and Photocatalytic Integration of Topological Bi₂Se₃ and ZnInS Photocatalysts", **2024 SDSE 2nd International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. (**Honorable Mentions**)
4. Yen-Chang Chen, Ting-Han Lin, Jia-Mao Chang, Kuo-Ping Chiang, and [Ming-Chung Wu*](#), "Construction of BaTiO₃/Ag-Doped TiO₂ Heterostructures to Enhance Carbon Dioxide Reduction Reaction via Synergistic Piezo-Photocatalysis", **2024 SDSE 2nd International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. (**Second Award**)
5. 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 CO₂ Gas via Electrospinning Technique", **2024 SDSE 2nd International Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
6. 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 85th Japan Society of Applied Physics Autumn Meeting (JSAP 2024)**, Sep. 16-20, Niigata, Japan. (**Oral Presentation**)
7. 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 CO₂ Reduction", **2024 JSAP The 85th Japan Society of Applied Physics Autumn Meeting (JSAP 2024)**, Sep. 16-20, Niigata, Japan.
8. Yen-Chang Chen, Ting-Han Lin, Kuo-Ping Chiang, Jia-Mao Chang, and [Ming-Chung Wu*](#), "Boosting CO₂ Reduction Reaction via Synergistic Photo-Piezocatalysis in Ag-Doped BaTiO₃/TiO₂ Heterostructures", **2024 JSAP The 85th Japan Society of Applied Physics Autumn Meeting (JSAP 2024)**, Sep. 16-20, Niigata, Japan. (**Oral Presentation**)
9. Tzu-Chuan Yang, Tzu-Wei Hsu, Ting-Han Lin, [Ming-Chung Wu](#), and Jer-Chi Wang*, "High Efficient Piezoelectric Nanogenerators with TiO₂-NFs-Doped P(VDF-TrFE) Copolymers via Ultraviolet Thermal Annealing", **2024 JSAP The 85th Japan Society of Applied Physics Autumn Meeting (JSAP 2024)**, Sep. 16-20, Niigata, Japan. (**Oral Presentation**)
10. [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**)

11. 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 TiO₂ Nanofibers", **2024 E-MRS European Materials Research Society Spring Meeting (E-MRS 2024)**, May. 27-31, Strasbourg, France.
12. [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.
13. 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 TiO₂ Nanofibers", **2024 JSAP The 71th Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan. **(Oral Presentation)**
14. Ze-Han Wu, Jia-Mao Chang, Ting-Han Lin, and [Ming-Chung Wu*](#), "Construction of 2D/2D Bi₂Se₃/SBI Topological Heterostructure for Photocatalytic Degradation of Organic Pollutants", **2024 JSAP The 71th Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan.
15. 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-TiO₂ Nanocomposite for Enhanced Surface Hydrophilicity in Coatings", **2024 JSAP The 71th Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan.
16. 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 71th Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan. **(Oral Presentation)**
17. Yen-Chang Chen, Ting-Han Lin, Jia-Mao Chang, and [Ming-Chung Wu*](#), "Enhanced Photo-Piezocatalytic Performance through Synergistic Effects for Silver-Modified BaTiO₃/TiO₂ Heterostructure", **2024 JSAP The 71th Japan Society of Applied Physics Spring Meeting (JSAP 2024)**, Mar. 22-25, Tokyo, Japan. **(Poster Award)**

2023-

18. [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)**
19. [Ming-Chung Wu*](#), Kai-Chi Hsiao, Yin-Hsuan Chang, Jia-Mao Chang, and Ting-Han Lin, "Characterization of Ag₃BiI₆ 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.
20. [Ming-Chung Wu*](#), Yin-Hsuan Chang, Yi-Jing Lu, Kai-Chi Hsiao, Ting-Han Lin, Jia-Mao Chang, and Ying-Han Liao, "Optimizing CO₂ 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.
21. 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.

22. 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-TiO₂ 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.
23. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, Kai-Chi Hsiao, and [Ming-Chung Wu*](#), "Gas-Solid Phase Reaction-Driven CO₂ 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.
24. 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 ZnIn₂S₄ with BaTiO₃ Piezocatalyst", **2023 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2023)**, Nov. 17-20, Hsinchu, Taiwan.
25. Yen-Chang Chen, Jia-Mao Chang, Ting-Han Lin, Yi-Lin Wang, and [Ming-Chung Wu*](#), "Construction of BaTiO₃/TiO₂ Heterostructures through Varied TiO₂ Templates for Enhanced Piezocatalytic Performance", **2023 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2023)**, Nov. 17-20, Hsinchu, Taiwan.
26. [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 TiO₂ Electron Transport Layer", **2023 PVSEC-34 The 34rd International Photovoltaic Science and Engineering Conference (PVSEC-34 2023)**, Nov. 6-10, Shenzhen, China.
27. Ying-Han Liao, Kai-Chi Hsiao, Ching-Mei Ho, Ting-Han Lin, Shih-Hsuan Chen, Yin-Hsuan Chang, Jao-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 34rd International Photovoltaic Science and Engineering Conference (PVSEC-34 2023)**, Nov. 6-10, Shenzhen, China.
28. 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.
29. Yin-Hsuan Chang, Ting-Han Lin, Kai-Chi Hsiao, Jao-Mao Chang, and [Ming-Chung Wu*](#), "Self-Precipitation Au Nanoparticles on TiO₂ Nanofibers for Surface-Enhanced Raman Scattering Detection", **2023 IEDMS International Electron Devices & Materials Symposium (IEDMS 2023)**, Oct. 19-20, Kaohsiung, Taiwan.
30. [Ming-Chung Wu*](#), Yin-Hsuan Chang, Yi-Jing Lu, Kai-Chi Hsiao, and Ting-Han Lin, "Enhancing CO₂ Photoreduction via Incident Light Modulation in Silver Bismuth Iodide/Nanocellulose Films and the Integration of Gold Nanoparticles", **2023 JSAP The 84th Japan Society of Applied Physics Autumn Meeting (JSAP 2023)**, Sep. 19-23, Kumamoto, Japan.
31. Yin-Hsuan Chang, Ting-Han Lin, Kai-Chi Hsiao, Jia-Mao Chang, and [Ming-Chung Wu*](#), "Surface Self-Precipitation Au Nanoparticles on TiO₂ Nanofibers for Surface-Enhanced Raman Scattering Detection of Environmental Hazards", **2023 JSAP The 84th Japan Society of Applied Physics Autumn Meeting (JSAP 2023)**, Sep. 19-23, Kumamoto, Japan.
32. 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 84th Japan Society of Applied Physics Autumn Meeting (JSAP 2023)**, Sep. 19-23, Kumamoto, Japan. (Oral Presentation)

33. Ting-Han Lin, Kuo-Ping Chiang, Jia-Mao Chang, Kun-Mu Lee, and [Ming-Chung Wu*](#), "Multidimensional Ternary Heterostructured Self-Precipitated Ag Nanoparticles on TiO₂@SrTiO₃ 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.
34. 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.
35. 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 TiO₂ Electron Extraction Layer", **2023 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2023)**, Apr. 10-15, San Francisco, California, United States of America.
36. 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.
37. 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 70th Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan. **(Oral Presentation)**
38. 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 TiO₂ Mesopores Electron Extraction Layer", **2023 JSAP The 70th Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan. **(Oral Presentation)**
39. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, and [Ming-Chung Wu*](#), "Silver Bismuth Iodide Rudorffite for Photocatalytic CO₂ Reduction", **2023 JSAP The 70th Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan. **(Oral Presentation)**
40. 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 70th Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan.
41. 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 70th Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan.
42. Yi-Lin Wang, Jia-Mao Chang, Ting-Han Lin, and [Ming-Chung Wu*](#), "BaTiO₃/TiO₂ Nanocomposite for Piezo-Photocatalytic Wastewater Treatment", **2023 JSAP The 70th Japan Society of Applied Physics Spring Meeting (JSAP 2023)**, Mar. 15-18, Tokyo, Japan.

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43. 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 33rd International Photovoltaic Science and Engineering Conference (PVSEC-33 2022)**, Nov. 13-17, Nagoya, Japan.
44. 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.

45. 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.
46. 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)**
47. 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 TiO₂ Electron Extraction Layer", **2022 IEDMS International Electron Devices & Materials Symposium (IEDMS 2022)**, Oct. 27-28, Nantou, Taiwan. **(Oral Presentation)**
48. 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.
49. 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)**

2021-

50. 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 CO₂ Reduction", **2021 IEDMS International Electron Devices & Materials Symposium (IEDMS 2021)**, Nov. 18-19, Kaohsiung, Taiwan.
51. Yu-Hsiang Chang, Yen-Fu Yu, Kai-Chi Hsiao, Shih-Hsuan Chen, and [Ming-Chung Wu*](#), "Enhance Power Conversion Efficiency of Non-Toxic Rudorffites 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)**
52. Tien-Hao Chen, Ting-Han Lin, and [Ming-Chung Wu*](#), "Synthesis of Sulfur-Vacancy Defects on SnS₂/Carbonized CNF Nanocomposite Film for Photocatalytic Application", **2021 IEDMS International Electron Devices & Materials Symposium (IEDMS 2021)**, Nov. 18-19, Kaohsiung, Taiwan.
53. 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.
54. Kou-Ping Chiang, Ting-Han Lin, Yin-Hsuan Chang, Jia-Mao Chang, Kai-Chi Hsiao, and [Ming-Chung Wu*](#), "Enhanced Photocatalytic CO₂ Reduction Activity of Silver-Bismuth Iodide Decorated TiO₂ NFs by Chemical Vapor Deposition", **2021 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2021)**, Nov. 13-17, Virtual Conference.
55. 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 CO₂ Reduction", **2021 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2021)**, Nov. 13-17, Virtual Conference.

56. 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)**

2020-

57. 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, 25th Symposium of Association of Chemical Sensors in Taiwan, and 23rd Nano Engineering and Microsystem Technology Conference (ICSS 2020)**, Oct. 19-20, Kaohsiung, Taiwan. **(Oral Presentation) (Best Oral Paper Award)**
58. 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, 25th Symposium of Association of Chemical Sensors in Taiwan, and 23rd Nano Engineering and Microsystem Technology Conference (ICSS 2020)**, Oct. 19-20, Kaohsiung, Taiwan.
59. 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.
60. 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)**
61. 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.
62. 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.
63. Yen-Fu Yu, Shih-Hsuan Chen, and [Ming-Chung Wu*](#), "Improved the Photovoltaic Performance of Ag₃BiI₆ Solar Cells by Band Alignment Engineering", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
64. 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.
65. Ya-Ting Chan, Yi-Pei Jiang, Yi Fu, [Ming-Chung Wu](#), Kuo-Hsuan Chang, and Jer-Chyi Wang*, "Effects of Electrode Materials on SiO₂ Nanoparticle Incorporated Ionic Liquid/Poly(Vinylidene Fluoride) Actuators", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
66. 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.
67. 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.

68. Ishita Chakraborty, [Ming-Chung Wu](#), and Chao-Sung Lai*, "PDMS@TiO₂ NPs Composite Based High Performance TENG", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
69. [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 TiO₂ 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)
70. Ting-Han Lin, Yin-Hsuan Chang, Ching-Ting Chiu, and [Ming-Chung Wu*](#), "Construction of 2D/1D g-C₃N₄/TiO₂ 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)
71. 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)

2019-

72. 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.
73. [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 TiO₂ Electron Extraction Layer", **2019 MRS Materials Research Society Fall Meeting & Exhibit (MRS 2019)**, Dec. 1-6, Boston, Massachusetts, United States of America.
74. 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.
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