

## Dr. Ting-Han Lin of Chang Gung University (Update 2026/06/09)

### Award List

#### 2026-

1. 張家茂, 林廷翰, 蕭凱起, 張胤萱, 吳明忠\*, "漂浮式光熱-光觸媒平板應用於太陽光驅動二氧化碳高選擇性還原為甲烷", 第 21 屆台塑關係企業應用技術研討會, Jun. 5, 桃園-長庚大學. (研發論文暨海報競賽特優)
2. 陳銘儀, 謝定宏, 張胤萱, 林廷翰, 吳明忠\*, "應用於智慧密封材料之 AgNWs/TPU 壓阻型奈米複合材料製備與性質探討", 第 21 屆台塑關係企業應用技術研討會, Jun. 5, 桃園-長庚大學. (研發論文暨海報競賽優勝)
3. Ming-Chung Wu\*, Ting-Han Lin, Yin-Hsuan Chang, Jia-Mao Chang, Ciao-Yun Huang, Kai-Chi Hsiao, Kuo-Ping Chiang, and Ying-Han Liao, "Structural Distortion in Pt-Anchored g-C<sub>3</sub>N<sub>4</sub> Driving Efficient Plastic Waste Upcycling", 2026 第 11 屆台灣機電工程國際學會全國學術研討會, May. 8-9, 苗栗市-國立聯合大學. (Invited Speaker)
4. Jia-Mao Chang, Ting-Han Lin, Yin-Hsuan Chang, Kuan-Ying Wu, and Ming-Chung Wu\*, "Floatable Photothermal-Photocatalyst Sheet for Highly Selective Solar-Driven Carbon Dioxide to Methane Conversion", 2026 中華民國高分子年會, Jan. 8-9, 新竹-國立清華大學. (海報發表及競賽特優)
5. Ming-Yi Chen, Ting-Hung Hsieh, Yin-Hsuan Chang, Ting-Han Lin, and Ming-Chung Wu\*, "Development and Self-Monitoring Application of Green Polymer Nanocomposites for Smart Sealing Gaskets", 2026 中華民國高分子年會, Jan. 8-9, 新竹-國立清華大學. (海報發表及競賽佳作)

#### 2025-

6. 張胤萱, 李昱憲, 林廷翰, 李坤穆, 吳明忠\*, "裂縫中綻放的花朵", 2025 台灣材料科學微結構影像美學競賽, Nov. 14-15, 新竹-國立陽明交通大學. (銀質獎)
7. 吳明忠\*, 林廷翰, 張胤萱, "一種以光重整製造氫的方法", 2025 台灣創新技術博覽會, Oct. 16-18, 台北世貿 1 館. (鴻海特別獎)
8. 吳明忠\*, 林廷翰, 張胤萱, "一種以光重整製造氫的方法", 2025 台灣創新技術博覽會, Oct. 16-18, 台北世貿 1 館. (台達特別獎)
9. 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)
10. 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)
11. 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 第三十一屆用戶年會暨研討會, Sep. 2-4, 新竹-國家同步輻射研究中心. (壁報佳作)

12. 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)
  13. 張家茂, [林廷翰](#), 蔣國斌, 張胤萱, 吳明忠\*, "建構拓撲 Bi<sub>2</sub>Se<sub>3</sub>/ZnIn<sub>2</sub>S<sub>4</sub> 偕同光熱與光催化實現二氧化碳高選擇性還原為甲烷", 第 20 屆台塑關係企業應用技術研討會, Jun. 6, 新北市-明志科技大學. (研發論文競賽優勝)
  14. Jia-Mao Chang, [Ting-Han Lin](#), Yin-Hsuan Chang, and Ming-Chung Wu\*, "Designing High-Efficiency Photocatalysts—Insights from a Photo-Assisted Kelvin Probe Force Microscopy Study", 2025 中華民國高分子學會年會, Jan. 15-16, 台中-朝陽科技大學. (海報發表及競賽佳作) 【MOST 113-2628-E-182-001-MY4】
  15. Ting-Hung Hsieh, Hao-Yun Yu, Yin-Hsuan Chang, [Ting-Han Lin](#), and Ming-Chung Wu\*, "Multifunctional Electrospun Nanocomposite Fibers for the Detection of Various Biomarkers in Exhaled Breath", 2025 中華民國高分子學會年會, Jan. 15-16, 台中-朝陽科技大學. (海報發表及競賽優等) 【MOST 111-2628-E-182-001-MY2】
- 2024-**
16. 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)
  17. 吳明忠\*, [林廷翰](#), 張胤萱, "光重整廢塑料製氫裝置", 2024 台灣創新技術博覽會, Oct. 17-19, 台北世貿 1 館. (發明競賽銅牌獎)
  18. 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)
  19. 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 ZnIn<sub>2</sub>S<sub>4</sub> 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)
  20. 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)
  21. [林廷翰](#), 張胤萱, 張家茂, 蔣國斌, 廖盈涵, 吳明忠\*, "塑料裂解與製氫—新式單原子光觸媒原型反應器", 第 19 屆台塑關係企業應用技術研討會, Jun. 14, 桃園市-長庚大學. (研發實物競賽第三名)
  22. 陳彥璋, [林廷翰](#), 蔣國斌, 張家茂, 吳明忠\*, "藉由壓電-光協同催化效應增益銀摻雜 BaTiO<sub>3</sub>/TiO<sub>2</sub> 奈米異質結構觸媒性能之應用與機制探討", 第 19 屆台塑關係企業應用技術研討會, Jun. 14, 桃園市-長庚大學. (研發論文暨海報競賽優勝)

23. 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)
24. Yu-Chi Peng, Kuo-Ping Chiang, Jia-Mao Chang, [Ting-Han Lin](#), and Ming-Chung Wu\*, "Enhancing Solar-Driven Photocatalytic Hydrogen Production through Incorporation of ZnIn<sub>2</sub>S<sub>4</sub> with BaTiO<sub>3</sub> Piezocatalyst to Decompose Polymeric Biomass", **2024 中華民國高分子學會年會**, Jan. 24-25, 台南-國立成功大學. (海報論文競賽佳作) 【MOST 112-2813-C-182-036-E】
25. Mei-Yu Chen, Ting-Hung Hsieh, Yin-Hsuan Chang, [Ting-Han Lin](#), and Ming-Chung Wu\*, "Multifunctional Electrospun Nanocomposite Fibers for the Detection of Various Biomarkers in Exhaled Breath", **2024 中華民國高分子學會年會**, Jan. 24-25, 台南-國立成功大學. (海報論文競賽優等) 【MOST 111-2628-E-182-001-MY2】

## 2023-

26. Ting-Hung Hsieh, Yin-Hsuan Chang, [Ting-Han Lin](#), Kai-Chi Hsiao, and Ming-Chung Wu\*, "Breath Acetone Sensing Based on Polymer Nanocomposite Sensing Material for Application in Non-Invasive Diabetics Monitoring", **2023 中華民國高分子學會年會**, Jan. 17-18, 桃園-長庚大學. (海報論文競賽優等) 【MOST 110-2628-E-182-001】

## 2022-

27. 王哲麒, Rajat Subhra Karmakar, [林廷翰](#), 吳明忠\*, 張國軒, "藉由 PEDOT:PSS 與 ITO 電極間之抑制介面塗層提升壓阻式壓力感測器之可靠度", 台灣化學工程學會 69 週年年會暨國科會化學工程學門成果發表會&台、日、韓、捷化學工程國際研討會, Dec. 2-3, 新北-淡江大學. (石延平教授論文獎)
28. Ting-Hung Hsieh, Yin-Hsuan Chang, [Ting-Han Lin](#), Kai-Chi Hsiao, and Ming-Chung Wu\*, "Ultra-Sensitive Breath Acetone Detection by Polymer Nanocomposite Sensing Material", 台灣化學工程學會 69 週年年會暨國科會化學工程學門成果發表會&台、日、韓、捷化學工程國際研討會, Dec. 2-3, 新北-淡江大學. 【MOST 111-2221-E-182-040-MY3】 (海報競賽佳作)
29. Jia-Mao Chang, [Ting-Han Lin](#), Yin-Hsuan Chang, and Ming-Chung Wu\*, "Composition Engineering in Silver Bismuth Iodide for Efficient Photocatalytic CO<sub>2</sub> Reduction", 中國材料科學學會 111 年年會, Nov. 18-19, 苗栗-國立聯合大學. 【MOST 111-2221-E-182-040-MY3】 (海報競賽特優)
30. Jia-Mao Chang, [Ting-Han Lin](#), Yin-Hsuan Chang, and Ming-Chung Wu\*, "Composition Engineering in Silver Bismuth Iodide for Efficient Photocatalytic CO<sub>2</sub> Reduction", **2022 第二十八屆用戶年會暨研討會**, Aug. 30-Sep. 1, 新竹-國家同步輻射研究中心. (壁報人氣獎)
31. Yin-Hsuan Chang, Yu-Han Liao, [Ting-Han Lin](#), and Ming-Chung Wu\*, "Organic Solvent Resistant Nanocomposite Films Made Self-Precipitated Ag/TiO<sub>2</sub> Nanofibers and Cellulose Nanofiber for Harmful Voltaic Organic Compounds Photodegradation", **2022 中華民國高分子學會年會**, Jan. 18-19, 台中-國立勤益科技大學. 【MOST 110-2628-E-182-001】 (論文海報競賽銅牌)

## 2021-

32. 吳明忠\*, 張胤萱, [林廷翰](#), 盧怡靜, 張家茂, "奈米光觸媒纖維複合紙燈罩 360° 無死角淨化空氣", **110 年度複合材料設計競賽**, Dec. 17, 台中-逢甲大學. (佳作)
33. 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)

34. 林廷翰, 張胤萱, 王前翰, 張家茂, 吳明忠\*, "塑氫專案", 2021 長庚大學青年老闆築夢計畫校際盃創新創業競賽, Mar. 6, 桃園-長庚大學. (第三名及評審特別獎)

## 2020-

35. Kai-Chi Hsiao, Meng-Huan Jao, Kuo-Yu Tian, Ting-Han Lin, Dinh-Phuc Tran, Hsueh-Chung Liao, Cheng-Hung Hou, Jing-Jong Shyue, Ming-Chung Wu, and Wei-Fang Su\*, "Acetamidinium Cation to Confer Ion Immobilization and Structure Stabilization of Organometal Halide Perovskite Toward Long Life and High Efficiency p-i-n Planar Solar Cell via Air-Processable Method", 2020 中國材料科學學會年會, Nov. 6-7, 新北-明志科技大學. (論文海報競賽特優)
36. Kuo-Ping Chiang, Ting-Han Lin, Yin-Hsuan Chang, Jia-Mao Chang, Jen-Fu Hsu, Kai-Hsiang Hsu, and Ming-Chung Wu\*, "Highly Efficient Solar-Driven Photodegradation on Antibiotics by Self-Precipitated Ag NPs/TiO<sub>2</sub> Nanofibers Photocatalyst", 2020 台灣化學工程學會 67 週年年會暨科技部化學工程學門成果發表會&台日韓捷永續化學工程國際研討會, Oct. 23-24, 新竹-國立清華大學. 【MOST 109-2221-E-182-059】 (海報論文競賽佳作)
37. Yen-Ting Lin, Chi-Hui Tsao, Ting-Han Lin, and Ming-Chung Wu\*, "Solar-Triggered Silver Doped Titanium Oxide Nanofibers with High Efficient Photothermal Therapy for Tumor Ablation", 2020 台灣化學工程學會 67 週年年會暨科技部化學工程學門成果發表會&台日韓捷永續化學工程國際研討會, Oct. 23-24, 新竹-國立清華大學. 【MOST 109-2221-E-182-059】 (海報論文競賽優勝)
38. 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)

## 2019-

39. Ting-Han Lin, Ching-Ting Chiu, and Ming-Chung Wu\*, "Construction of 3D/1D Porous g-C<sub>3</sub>N<sub>4</sub>/TiO<sub>2</sub> with Z-Scheme Heterostructure for Efficient Water", 2019 台灣化學工程學會 66 週年年會暨科技部化學工程學門成果發表會, Nov. 8-9, 台中-東海大學. (海報論文競賽佳作)
40. Yin-Hsuan Chang, Ting-Han Lin, Yu-Han Liao, Chiao-Yun Huang, and Ming-Chung Wu\*, "Hierarchically Cellulose Nanofiber/TiO<sub>2</sub> Nanofiber Composite Film for Organic Pollutant Photodegradation", 2019 台灣化學工程學會 66 週年年會暨科技部化學工程學門成果發表會, Nov. 8-9, 台中-東海大學. (海報論文競賽優勝)
41. 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)

## 2018-

42. 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 (2018CSPM1)*, July 26-29, Wuhan, China. (Excellent Poster Award)
43. 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 (2018CSPM1)*, July 26-29, Wuhan, China. (Excellent Poster Award)

44. Yu-Han Liao, Ting-Han Lin, Kou-Ping Chiang, Ming-Chung Wu\*, Ya-Wen Cheng, Chien-Hui Wu, Yu-Chen Chen, Po-Min Chen, and Wan-Tun Hung, "Highly Transparent Flexible Substrate Prepared by TEMPO-Oxidized Cellulose Nanofibers", **2018 第 41 屆中華民國高分子學會年會及前瞻高分子科學與技術國際研討會暨 106 年度科技部高分子學門成果發表會**, Jan. 12-13, 台北市-國立臺北科技大學. (海報論文競賽佳作)

#### 2017-

45. 廖于涵, 林廷翰, 蔣國斌, 吳明忠\*, 鄭雅文, 吳建慧, 陳玉振, 陳博明, 洪萬墩, "高透明度纖維素奈米纖維紙的製備與其應用", **第15屆台塑關係企業應用技術研討會**, Jun. 16, 桃園市-長庚大學. (研發論文獎優勝)
46. 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)

#### 2016-

47. 林廷翰, 王威凱, 吳明忠\*, 鄭雅文, 吳建慧, 陳玉振, 陳博明, 洪萬墩, "纖維素奈米纖維之合成、材料分析與其應用開發", **第14屆台塑關係企業應用技術研討會**, 2016 Jun. 22, 新北市-明志科技大學. (研發論文獎優勝)

#### 2015-

48. 林廷翰, 詹順翔, 黃瑋康, 吳明忠\*, "以 P3HT/PCBM 複合薄膜製作低成本、高效能與即時偵測的揮發性有機化合物感測器", **2015 International Symposium on Smart-Sensing Technology (ISST 2015)**, Jun. 5, 桃園市-長庚大學. (海報論文競賽佳作)
49. 詹順翔, 吳明忠\*, 林廷翰, 許喬惟, 林唯芳, "調控 P3HT/PMMA 感測纖維排列方式來提升感測器靈敏度之探討", **2015 International Symposium on Smart-Sensing Technology (ISST 2015)**, Jun. 5, 桃園市-長庚大學. (海報論文競賽佳作)

#### 2014-

50. Ming-Chung Wu\*, Shun-Hsiang Chan, and Ting-Han Lin, "Fabrication and Photocatalytic Characteristics of Electrospun Polyvinyl Alcohol/Silk/Titania Composite Textiles", **2014 The 6th International Symposium on Functional Materials (ISFM 2014)**, Aug. 4-7, Clarke Quay/Riverside, Singapore. (Best Poster Award)

#### 2013-

51. 詹順翔, 林廷翰, 吳明忠\*, "自清淨抗菌蠶絲光觸媒奈米纖維布", **第 11 屆台塑關係企業應用技術研討會**, 2013 Jun. 28, 桃園市-長庚大學. (研發論文競賽學校組 優良獎)