

International Conference Papers List

2023-

1. Zhi-Hao Huang, Fu-Zong Liu, Kun-Mu Lee, and Yu-Ching Huang*, "Enhancing Crystallinity and Absorption in Organic Photodetector Films for Improved Short-Wave Infrared Performance", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
2. Yu-Chen Huang, Shih-Han Huang, Chien-Te Tsou, Hou-Chin Cha, Chih-Chien Lee, Shun-Wei Liu, and Yu-Ching Huang*, "Thermal evaporation γ -CsPbI-GAI perovskite solar cells", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
3. Chia-Feng Li, Shih-Han Huang, You-Ren Chen, Wun-Ting Li, Hou-Chin Cha, Feng-Yu Tsai, and Yu-Ching Huang*, "Scalable Sequential Deposition for Perovskite Solar Cells in Air", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. **(Special Award)**
4. Chun-Te Lu, Pin-Haw Zhao, Shu-Hsien Liao, Shih-Han Huang, and Yu-Ching Huang*, "Research on Indoor Photovoltaic Power Generation using Organic Solar Cells", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
5. Shih-Han Huang, Chien-Te Tsou, Chia-Feng Li, Hou-Chin Cha, and Yu-Ching Huang*, "Perovskite Solar Cells with An Air-Processable Two-Step Active Layer", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. **(Honorable Mentions)**
6. Hou-Chin Cha, Shih-Han Cheng, Chia-Feng Li, Ssu-Yung Chung, Pin-Haw Zhao, and Yu-Ching Huang*, "Optimizing the Electron Transport Layer for Enhanced Performance of Slot-Die Coated Indoor Organic Photovoltaics", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan. **(Honorable Mentions)**
7. Chih-Sheng Shen, Ssu-Yung Chung, Chien-Te Tsou, Li-Chen Su, and Yu-Ching Huang*, "Foldable Ultra-Flexible Organic Solar Cells", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
8. Chia-Yi Hsu, Pradeep Kumar, Shih-Han Huang, Ssu-Yung Chung, Hou-Chin Cha, Chih-Min Chuan, Yu-Ching Huang*, and Kuen-Lin Chen, "Improving Power Conversion Efficiency in Organic Solar Cells by Fe₃O₄@Au@m-ABS Nanoparticles", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
9. Fu-Zong Liu, Zhi-Hao Huang, Li-Chen Su, and Yu-Ching Huang*, "Integration of Novel Near-Infrared Organic Photodetectors for H5N1 Detection Applications", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.
10. Chen-Hsiang Cheng, Yo-Yuan Gu, Chun-Yu Chang, Meng-Fang Lin, Yu-Ching Huang*, and Wei-Fang Su, "Advanced Polymer Bioscaffolds for Nerve Tissue Engineering: Combining Polycaprolactone and Poly(γ -Benzyl-L-Glutamate) for Improved Mechanical Strength and Cell Adhesion", **2024 SDSE 2ndInternational Conference on Smart Devices and Sustainable Energy (SDSE 2024)**, Oct. 16-18, New Taipei, Taiwan.

2023-

11. Sheng-Wen Huang, [Yu-Ching Huang*](#), Chia-Feng Li, and C.-Y. Chen, "A High-Efficiency and Photostable Wide Bandgap Perovskite Solar Cells Fabricated via Composition Engineering", **2023 PVSEC-34 The 34rd International Photovoltaic Science and Engineering Conference (PVSEC-34 2023)**, Nov. 6-10, Shenzhen, China.
12. Chia-Feng Li, Yu-Hung Hsiao, Feng-Yu Tsai, and [Yu-Ching Huang*](#), "Highly-Efficient Non-Toxic Perovskite Solar Cells by Slot-Die Coating", **2023 PVSEC-34 The 34rd International Photovoltaic Science and Engineering Conference (PVSEC-34 2023)**, Nov. 6-10, Shenzhen, China.
13. 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.
14. 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.

2022-

15. [Yu-Ching Huang*](#), Shih-Han Cheng, Chia-Feng Li, Yu-Sheng Lin, and Feng-Yu Tsai, "Effect of Hole Transport Layer on Indoor Organic Photovoltaic", **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.
16. [Yu-Ching Huang*](#), Sheng-Wen Huang, Chia-Feng Li, You-Hong Xiao, Wei-Fang Su, and Feng-Yu Tsai, "Composition Engineering of Methylammonium Free Wide Bandgap Perovskite Solar Cell with Suppressed Photoinduced Phase Segregation", **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.

2021-

17. [Yu-Ching Huang*](#), and Tai-Yung Wang, "The Annealing Mechanism Effect on Polymer Crystallography Based on Photomultiplication Type Organic Photodetectors", **2021 TACT International Thin Films Conference (TACT 2021)**, Nov. 15-18, Virtual Conference.
18. [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.
19. [Yu-Ching Huang*](#), Chi-Wei Wu, Yu-Xuan Huang, and Shao-Sian Li, "Additives Engineering to Replace Anti-Solvent Method", **2021 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2021)**, Nov. 13-17, Virtual Conference. **(Second Prize)**.
20. [Yu-Ching Huang*](#), Kang-Wei Chang, Ssu-Yung Chung, and Chia Feng Li, "The Role of The Third Component in Ternary Indoor Organic Photovoltaics", **2021 MRSTIC Materials Research Society-Taiwan International Conference (MRSTIC 2021)**, Nov. 13-17, Virtual Conference.

21. Yu-Ching Huang*, Kang-Wei Chang, Ssu-Yung Chung, and Chia Feng Li, "The Role of The Third Component in Ternary Indoor Organic Photovoltaics", **2021 PESI Polymer Engineering & Science International (PESI 2021)**, May. 30-June. 3, Virtual Conference.
22. Yu-Ching Huang*, Tai-Yung Wang, Zhi-Hao Huang, Zih-Ting Chen, and Kun-Mu Lee, "Lower Dark Current and High External Quantum Efficiency for Near-Infrared Organic Photodetectors Using a New Fullerene Acceptor", **2021 PESI Polymer Engineering & Science International (PESI 2021)**, May. 30-June. 3, Virtual Conference.
23. Yu-Ching Huang*, Chi-Wei Wu, and Hou-Chin Cha, "Optimization of Annealing Parameters for Spray-Coated Perovskite Solar Cells", **2021 PESI Polymer Engineering & Science International (PESI 2021)**, May. 30-June. 3, Virtual Conference.

2020-

24. Abdul Khalik Akbar, Yun Ming Sung, Yu-Ching Huang*, Johan Iskandar, Richie Estrada, and Shun Wei Liu, "The Optimization of ZnO Synthesis Method for Preparing The Efficient Polymer Solar Cells", **2020 OPTIC Optics & Photonics Taiwan International Conference, 25th Annual Meeting of MOST Photonics Program, 2020 Annual Meeting of Taiwan Photonics Society (OPTIC 2020)**, Dec. 3-5, Taipei, Taiwan. (Oral Presentation)
25. Yu-Ching Huang*, Madhujay Layek, Chia-Feng Li, and Zhi-Hao Huang, "Effect of Different Substrates on Oxygen Sensing Using CsPbBr₃ Quantum Dots", **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. (Excellent Poster Award)
26. Yu-Ching Huang*, Zhi-Hao Huang, and Zih-Ting Chen, "Effect of Different Solvents on Solution Processed Organic Photodetector", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
27. Yu-Ching Huang*, Madhujay Layek, Chia-Feng Li, and Zhi-Hao Huang, "Cesium Lead Bromide Nanocrystals Synthesis, Modification and Sensing Application", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan.
28. Yu-Ching Huang, Abdul Khalik Akbar*, Chia-Feng Li, Kang-Wei Chang, Si-Yong Zhong, and Wei Liu, "Effect of High Open Circuit Voltage Organic Photovoltaic Applied to Indoor Light on Performance", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan. (Oral Presentation)
29. Yu-Ching Huang*, Shih-Han Cheng, and Chia-Feng Li, "The Influence of Electronic Transmit Layer of Large Area Organic Photovoltaic on Indoor Light Efficiency", **2020 IEDMS International Electron Devices & Materials Symposium (IEDMS 2020)**, Oct. 15-16, Taoyuan, Taiwan. (Oral Presentation)

2019-

30. Yu-Ching Huang*, Zhi-Hao Huang, Kai-Shun Huang, and Yun-Ming Sung, "Efficient Organic Photodetector Processed From Green Solvent", **2019 A-COE The 11th Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan.
31. Yu-Ching Huang*, Chia-Feng Li, Kai-Shun Huang, Yu-Xuan Huang, and Yun-Ming Sung, "Highly Efficiency Organic Photovoltaics Based on Near-Infrared Non-Fullerene Acceptor Under Indoor Lighting Environments", **2019 A-COE The 11th Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan.

32. Yu-Ching Huang*, Po-Hung Liu, and Yun-Ming Sung, "Effect of Electron Transport Layer on the Indoor Performance of Organic Photovoltaic", **2019 A-COE The 11th Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan.
33. Ting-Tzu Wu, Pei-Huan Lee, Chia-Feng Li, Chih-Hao Huang, Po-Hung Liu, Yu-Ching Huang*, and Wei-Fang Su*, "Low-Temperature and Solution Processable Nickel Oxide Nanoparticles for High Efficient Perovskite Solar Cell", **2019 A-COE The 11th Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan.
34. Shih-Han Huang, Chia-Feng Li, Wei-Cheng Chu, Kun-Mu Lee*, Yu-Ching Huang*, and Wei-Fang Su*, "Perovskite Layer of High-Efficiency Solar Cell Fabricated Using Blade Coating in Ambient Environment", **2019 A-COE The 11th Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan.
35. Pei-Huan Lee, Ting-Tzu Wu, Chia-Feng Li, Yu-Ching Huang*, and Wei-Fang Su*, "Semi-Transparent P-I-N Planar Perovskite Solar Cell for 4-Terminal Perovskite/Silicon Tandem Solar Cell by Using Multi-Functional Electron Transport Layer", **2019 A-COE The 11th Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan.
36. Madhuja Layek, and Yu-Ching Huang*, "Increasing the Sensitivity of Perovskite (CsPbBr₃) Quantum Dot Gas Sensor Using Anodic Aluminum Oxide", **2019 A-COE The 11th Asian Conference on Organic Electronics (A-COE 2019)**, Nov. 6-9, New Taipei, Taiwan.
37. Yu-Ching Huang*, Chia-Feng Li, Zhi-Hao Huang, Po-Hung Liu, Yu-Xuan Huang, Kai-Shan Huang, and Yun-Ming Sung, "Investigation for Indoor Performance of Organic Photovoltaics Based on Non-fullerene Acceptors Materials", **2019 FAPS The 6th Federation of Asian Polymer Societies Polymer Congress (FAPS 2019)**, Oct. 27-30, Taipei, Taiwan. (Oral Presentation)

2018-

38. Yu-Ching Huang*, Yun-Ming Sung, Chia-Feng Li, Zhi-Hao Huang, Po-Hung Liu, and Cheng-Si Tsao, "Slot-Die Coated Small Molecule Photovoltaics with High Efficiency and Enhanced Photo-Stability", **2018 ISOS-11 The 11th International Summit on Organic and Hybrid Photovoltaics Stability (ISOS-11 2018)**, Oct. 21-25, Suzhou, China.

2017-

39. Chia-Te Yen, Zhe-Cheng Hu, Yu-Ching Huang*, Zheng-Lin Yu, Yun-Ming Sung, Hou-Chin Cha, Tsui-Yun Chung, Cheng-Yu Chen, Ching-Yu Lee, and Cheng-Si Tsao*, "Towards Highly Efficient Organic Photovoltaics under Indoor Light Illumination", **2017 IUMRS-ICA International Union of Materials Research Societies International Conference in Asia (IUMRS-ICA 2017)**, Nov. 5-9, Taipei, Taiwan.
40. Hou-Chin Cha, Tsui-Yun Chung, Yu-Ching Huang*, Yun-Ming Sung, Chia-Te Yen, Zheng-Lin Yu, Cheng-Yu Chen, Ching-Yu Lee, Zhe-Cheng Hu, and Cheng-Si Tsao*, "Roll-to-roll Printing Fabrication Fully-Solution Large-Area Flexible Organic Photovoltaic Module under Air", **2017 IUMRS-ICA International Union of Materials Research Societies International Conference in Asia (IUMRS-ICA 2017)**, Nov. 5-9, Taipei, Taiwan.
41. Yun-Ming Sung, Ching-Yu Lee, Yu-Ching Huang*, Zheng-Lin Yu, Hou-Chin Cha, Chia-Te Yen, Tsui-Yun Chung, Cheng-Yu Chen, Zhe-Cheng Hu, and Cheng-Si Tsao*, "Improvement of Photo-Stability of Highly Efficient Organic Photovoltaics by Surface Modification of ZnO Nanoparticles", **2017 IUMRS-ICA International Union of Materials Research Societies International Conference in Asia (IUMRS-ICA 2017)**, Nov. 5-9, Taipei, Taiwan.

42. Yun-Ming Sung, [Yu-Ching Huang*](#), Hou-Chin Cha, Chia-Te Yen, Zheng-Lin Yu, Tsui-Yun Chung, Cheng-Yu Chen, Ching-Yu Lee, Zhe-Cheng Hu, Chih-Min Chuang, Charn-Yin Chen, and Cheng-Si Tsao*, "Effect of Buffer Layer between Photoactive Layer and Top Electrode on the Burn-in Thermal Degradation of Organic Photovoltaics", **2017 ISOS The 10th International Summit on Stability of Organic and Perovskite Solar Cells (ISOS-10 2017)**, Oct. 18-20, Malta.

2016-

43. [Yu-Ching Huang*](#), Zheng-Lin Yu, Hou-Chin Cha, Chia-Te Yen, Yun-Ming Sung, De-Han Lu, Tsui-Yun Chung, Yu-Han Su, Chih-Min Chuang, Charn-Yin Chen, and Cheng-Si Tsao, "Effect of Hole Transport Layer on The Thermal and Damp-Heat Stability of Large-Area Sprayed-Coating Inverted Polymer Solar Cells", **2016 ISOS The 9th International Summit on Stability of Organic and Perovskite Solar Cells (ISOS-9 2016)**, Oct. 12-14, Germany.
44. [Yu-Ching Huang*](#), Hou-Chin Cha, Zheng-Lin Yu, De-Han Lu, Chia-Te Yen, Tsui-Yun Chung, Yun-Ming Sung, Yu-Han Su, Chih-Min Chuang, Charn-Yin Chen, and Cheng-Si Tsao, "Improvement in Performance and Stability of Large-Area Printed Inverted Polymer Solar Cells and Module", **2016 EU PVSEC The 32th European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC 2016)**, June, 20-24, Munich, Germany.

2015-

45. [Yu-Ching Huang*](#), "Large-area Fabrication of High-Performance Polymer Solar Cells", **2015 OPTIC Optics & Photonics Taiwan, International Conference-Annual Meeting of Taiwan Photonics Society (OPTIC 2015)**, Dec. 4-6, National Tsing Hua University, Hsinchu, Taiwan. (Invited Speaker)
46. [Yu-Ching Huang*](#), "Large-Area Printing Technology for Organic Photovoltaics", **2015 IWFPE International Workshop on Flexible & Printable Electronics (IWFPE 2015)**, Nov. 4-6, Korea. (Invited Speaker)
47. Hou-Chin Cha*, [Yu-Ching Huang*](#), Chih-Min Chuang, Chia-Te Yen, De-Han Lu, Cheng-Wei Chou, Zheng-Lin Yu, Charn-Ying Chen, and Cheng-Si Tsao, "Critical Factors for Performance Improvement of Roll-to-Roll Slot-Die Coated Halogen-Free Inverted Polymer Solar Cells", **2015 IWFPE International Workshop on Flexible & Printable Electronics (IWFPE 2015)**, Nov. 4-6, Korea. (Best Poster Award)
48. [Yu-Ching Huang*](#), Hou-Chin Cha, De-Han Lu, Cheng-Wei Chou, Chia-Te Yen, Chih-Min Chuang, Charn-Yin Chen, and Cheng-Si Tsao, "Stability Study of Spray- and Slot-Die-Coated Polymer Solar Cells and Modules", **2015 B-MRS XIV Brazilian Materials Research Society Annual Meeting (B-MRS 2015)**, Sep. 27- Oct. 1, Brazil.
49. Chun-Yu Chang, Cheng-Si Tsao, [Yu-Ching Huang](#), and Wei-Fang Su, "In Situ Synchrotron Scattering Studies of The Crystallization Kinetic of The Drop-Casting Organic-Inorganic Hybrid Perovskite Film", **2015 B-MRS XIV Brazilian Materials Research Society Annual Meeting (B-MRS 2015)**, Sep. 27- Oct. 1, Brazil.
50. Hou-Chin Cha, [Yu-Ching Huang*](#), De-Han Lu, Cheng-Wei Chou, Zheng-Lin Yu, Chia-Te Yen, Chih-Min Chuang, Charn-Ying Chen, and Cheng-Si Tsao, "Performance Improvement of Large-Area Inverted Polymer Solar Cell by Roll-To-Roll Slot-Die-Coated Process", **2015 ISMTII The 12th International Symposium on Measurement Technology and Intelligent Instruments (ISMTII 2015)**, Sep. 22-25, Taiwan.
51. De-Han Lu, [Yu-Ching Huang*](#), Cheng-Wei Chou, Hou-Chin Cha, Zheng-Lin Yu, Chia-Te Yen, Chih-Min Chuang, Charn-Ying Chen, and Cheng-Si Tsao, "Performance of Large-Area Inverted Polymer Solar Cells Improved by Embedded Inject-Printed Ag Grid", **2015 ISMTII The 12th International Symposium on Measurement Technology and Intelligent Instruments (ISMTII 2015)**, Sep. 22-25, Taiwan.

2014-

52. Hou-Chin Cha, [Yu-Ching Huang*](#), Fan-Hsuan Hsu, Chih-Min Chuang, De-Han Lu, Cheng-Wei Chou, Charn-Yin Chen, and Cheng-Si Tsao, "Lowering the Performance Reduction of Up-Scaling Inverted P3HT:PCBM Solar Cells Using Slot-Die-Coating Processing", **2014 EU PVSEC The 29th European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC 2014)**, Sep. 22-26, Amsterdam, The Netherlands.
53. [Yu-Ching Huang*](#), Cheng-Si Tsao*, Tzu-Yen Huang, Hou-Chin Cha, Dhananjaya Patra, Chun-Jen Su, U-Ser Jeng, Kuo-Chuan Ho, Kung-Hwa Wei, and Chih-Wei Chu*, "Hierarchical Bulk Heterojunction Structure of Solution-Processed Small-Molecule Organic Solar Cell Studied by Synchrotron Scattering", **2014 IUMRS-ICEM International Union of Materials Research Societies-International Conference on Electronic Materials (IUMRS-ICEM 2014)**, June 10-14, Taipei, Taiwan. (Best Poster Award)
54. [Yu-Ching Huang*](#), Wei-Chen Chang, Charn-Ying Chen, and Cheng-Si Tsao, "Tailoring a High Performance of Inverted Polymer Solar Cell by Modifying The Electron Transport Layer", **2014 IUMRS-ICEM International Union of Materials Research Societies-International Conference on Electronic Materials (IUMRS-ICEM 2014)**, June 10-14, Taipei, Taiwan.
55. Hou-Chin Cha, [Yu-Ching Huang*](#), Charn-Ying Chen, and Cheng-Si Tsao, "Controlling the Formation of Organic Photoactive Layer of Roll-to-Roll Processed Polymer Solar Cells", **2014 IUMRS-ICEM International Union of Materials Research Societies-International Conference on Electronic Materials (IUMRS-ICEM 2014)**, June 10-14, Taipei, Taiwan.
56. Chun-Yu Chang, [Yu-Ching Huang](#), Hsueh-Chung Liao, and Cheng-Si Tsao*, Chien-An Chen, Meng-Huan Jao, Cheng-Ya Chu and Wei-Fang Su*, "Quantitative Correlation of Nanomorphology and Performance of High-Efficiency Isoindigo-Based Copolymers Solar Cells Tailored by Solvent and Additive", **2014 IUMRS-ICEM International Union of Materials Research Societies-International Conference on Electronic Materials (IUMRS-ICEM 2014)**, June 10-14, Taipei, Taiwan.
57. Meng-Huan Jao, [Yu-Ching Huang*](#), Hsueh-Chung Liao, Cheng-Si Tsao, and Wei-Fang Su, "Morphological Characterization of Vertically Phase-Separated Ternary Polymer Solar Cells toward High Performance", **2014 IUMRS-ICEM International Union of Materials Research Societies-International Conference on Electronic Materials (IUMRS-ICEM 2014)**, June 10-14, Taipei, Taiwan.

2013-

58. Hou-Chin Cha*, [Yu-Ching Huang](#), Chih-Min Chuang, Fan-Hsuan Hsu, De-Han Lu, Cheng-Wei Chou, Charn-Ying Chen, and Cheng-Si Tsao*, "Performance Improvement of Large-Area Roll-To-Roll Slot-Die Coated Inverted Polymer Solar Cell by Tailoring Electron Transport Layer", **2013 PVSEC-23 The 23rd International Photovoltaic Science and Engineering Conference (PVSEC-23 2013)**, Oct. 28-Nov. 1, Taipei, Taiwan.
59. [Yu-Ching Huang*](#), Cheng-Si Tsao*, Hou-Chin Cha, Fan-Hsuan Hsu, Chih-Min Chuang, Chun-Jen Su, U-Ser Jeng, and Charn-Ying Chen, "Hierarchical Structure of Spray-Coated Bulk-Heterojunction Blend Film Studied by Grazing Incidence Small- and Wide- Angle X-Ray Scattering", **2013 PVSEC-23 The 23rd International Photovoltaic Science and Engineering Conference (PVSEC-23 2013)**, Oct. 28-Nov. 1, Taipei, Taiwan.
60. Cheng-Wei Chou, [Yu-Ching Huang*](#), Charn-Ying Chen, and Cheng-Si Tsao, "Effect of Nitrogen Plasma Treatment on All-Sprayed Inverted Polymer Solar Cells", **2013 PVSEC-23 The 23rd International Photovoltaic Science and Engineering Conference (PVSEC-23 2013)**, Oct. 28-Nov. 1, Taipei, Taiwan.
61. De-Han Lu, [Yu-Ching Huang*](#), Cheng-Wei Chou, Charn-Ying Chen, and Cheng-Si Tsao, "Employing a Surface Modifier to Enhance the Performance of Large-Area Inverted Polymer Solar Cells by Spray Coating Process", **2013 PVSEC-23 The 23rd International Photovoltaic Science and Engineering Conference (PVSEC-23 2013)**, Oct. 28-Nov. 1, Taipei, Taiwan.

2012-

62. Yu-Ching Huang*, Hou-Chin Cha, Chia-Hsin Lee, Fan-Hsuan Hsu, Chih-Min Chuang, Wei-Fang Su, Cheng-Si Tsao, and Charn-Ying Chen, "Performance and Stability of Inverted Polymer Solar Cells Using Spray Process", **2012 GSAS Organic Solar Cell Symposium and Global School for Advanced Studies (GSAS 2012)**, Sep. 17-21, Taipei, Taiwan.
63. Hou-Chin Cha*, Chih-Min Chuang, Yu-Ching Huang, Fan-Hsuan Hsu, Cheng-Si Tsao, and Charn-Ying Chen, "Ultrasonic Spray-Coating of Polymer Solar Cells", **2012 GSAS Organic Solar Cell Symposium and Global School for Advanced Studies (GSAS 2012)**, Sep. 17-21, Taipei, Taiwan.
64. Fan-Hsuan Hsu, Chih-Min Chuang, Hou-Chin Cha, Yu-Ching Huang, Cheng-Si Tsao, and Charn-Ying Chen, "ITO-Free Polymer Solar Cell Based on Ag Grid/PEDOT:PSS Hybrid Electrode", **2012 GSAS Organic Solar Cell Symposium and Global School for Advanced Studies (GSAS 2012)**, Sep. 17-21, Taipei, Taiwan.

2011-

65. Chih-Min Chuang*, Hou-Chin Cha, Fan-Hsuan Hsu, Yu-Ching Huang, Chia-Hsin Lee, Charn-Ying Chen, Wei-Fang Su, and Cheng-Si Tsao, "Ultrasonic Spray Deposition for Production of Organic Solar Cells", **2011 IUMRS-ICA The 12th International Union of Materials Research Societies International Conference in Asia (IUMRS-ICA 2011)**, Sep. 19-22, Taipei, Taiwan.

2010-

66. Ming-Chung Wu, Chih-Min Chuang, Yu-Ching Huang, Yi-Jen Wu, Kuo-Chung Cheng, Ching-Fuh Lin, Yang-Fang Chen, and Wei-Fang Su*, "Nanopatterned Optical and Magnetic $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ Arrays: Synthesis, Fabrication, and Properties", **SPIE Photonics West 2010**, Jan. 23-28, San Francisco, USA. (Invited Speaker)

2009-

67. Yu-Ching Huang, Ming-Chung Wu, and Wei-Fang Su*, "Quantitative Nanoscale Monitoring Morphology and Optical Properties of Polymer-Nanoparticle Hybrid Material Used in Photovoltaic Devices", **2009 EU PVSEC The 24th European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC 2009)**, Sep. 21-25, Hamburg, Germany.

2008-

68. Yu-Ching Huang, Jen-Hon Hsu, Yulia Galagan, Wei-Chen Yen, Yu-Chia Liao, Chun-Wei Chen, and Wei-Fang Su*, "Improve Charge Separation in P3HT/TiO₂ Nanorod Bulk Heterojunction Solar Cell Using Carboxylate Terminated 3-Hexylthiophene Oligomer", **2008 Organic Microelectronics & Optoelectronics Workshop IV**, July. 7-10, San Francisco, California, USA.
69. Ming-Chung Wu, Yu-Chia Liao, Yi Chou, Chin-Feng Lin, Yu-Ching Huang, Yang-Fang Chen, and Wei-Fang Su*, "Enhance Photoluminescence of Conducting Polymer by Using Gold Surface Plasmon of Dual-Functional Electron Beam Resist", **2008 Organic Microelectronics & Optoelectronics Workshop IV**, July. 7-10, San Francisco, California, USA.
70. Ming-Chung Wu, Chih-Min Chuang, Yu-Ching Huang, Ching-Fuh Lin, Yang-Fang Chen, and Wei-Fang Su*, "Nanopatterned Optical and Magnetic $\text{La}_{0.6}\text{Ca}_{0.4}\text{MnO}_3$ Arrays: Synthesis, Fabrication, and Properties", **2008 MRS Materials Research Society Spring Meeting & Exhibit (MRS 2008)**, Mar. 24-28, San Francisco, California, USA.

2007-

71. Ming-Chung Wu, Hsi-Hsing Lo, Sharon Chen, Yu-Ching Huang, Yang-Fang Chen, Chun-Wei Chen, and Wei-Fang Su*, "Scanning Near-Field and Confocal Raman Microscopic Investigation of Different Molecular Weight P3HT and TiO₂ System for Photovoltaic Devices", **2007 PVSEC-17 The 17th**

International Photovoltaic Science and Engineering Conference (PVSEC-17 2007), Dec. 3-7, Fukuoka, Japan.

72. Yu-Ching Huang, Ming-Chung Wu, Chun-Wei Chen, and Wei-Fang Su*, "Optical Study of Nanostructure P3HT/PCBM Hybrid Photovoltaic Devices", **2007 PVSEC-17 The 17th International Photovoltaic Science and Engineering Conference (PVSEC-17 2007)**, Dec. 3-7, Fukuoka, Japan.
73. Ming-Chung Wu, Chih-Min Chuang, Yu-Ching Huang, Wei-Che Yen, Hsi-Hsing Lo, Yang-Fang Chen, and Wei-Fang Su*, "Luminescent Nanolithography Made from Polymer Blend of Conjugating Polymer and PMMA", **2007 Taiwan-US Soft Materials Symposium**, Jan. 4-6, Taipei, Taiwan.

2006-

74. Ming-Chung Wu, Yu-Ching Huang, and Wei-Fang Su*, "Silver Cofirability Differences Between $\text{Bi}_{1.5}\text{Zn}_{0.92}\text{Nb}_{1.5}\text{O}_{6.92}$ and $\text{Zn}_3\text{Nb}_2\text{O}_8$ ", **2006 MMA The 4th International Conference on Microwave Material and Their Applications (MMA 2006)**, June. 12-15, Oulu, Finland.
75. Ming-Chung Wu, Ming-Kang Hsieh, Yu-Ching Huang, Cheng-Wei Yen, Welter Huang, and Wei-Fang Su*, "Low Sintering $\text{Ba}_{4.5}\text{Nd}_9\text{Ti}_{18}\text{O}_{54}$ Microwave Ceramics Prepared by CuO Atomic Layer Coated Powder", **2006 MMA The 4th International Conference on Microwave Material and Their Applications (MMA 2006)**, June. 12-15, Oulu, Finland.
76. Yu-Ching Huang, Cheng-Wei Yen, Ming-Chung Wu, and Wei-Fang Su*, "Sol-Gel Synthesis of $\text{Ba}_4\text{Nd}_{9.33}\text{Ti}_{18}\text{O}_{54}$ Fiber and Its Application to Low-Shrinkage Microwave Dielectric Ceramics", **2006 MMA The 4th International Conference on Microwave Material and Their Applications (MMA 2006)**, June. 12-15, Oulu, Finland. (3rd Place Prize Poster Paper)
77. Yu-Ching Huang, Ming-Chung Wu, Tze-Hsuan Chang, Jean-Fu Kiang, and Wei-Fang Su*, "Broadband DR Antenna Made of High-Q Ceramic", **2006 MMA The 4th International Conference on Microwave Material and Their Applications (MMA 2006)**, June. 12-15, Oulu, Finland.

2005-

78. Chih-Min Chuang, Ming-Chung Wu, Yu-Ching Huang, Yang-Fang Chen and Wei-Fang Su*, "Enhanced Photoluminescence of Semiconducting Nanoparticles by Novel Magnetic LSMO Photonic Crystal", **2005 Workshop on Photonic Crystals and Nano Photonics**, Nov. 4-5, Taipei, Taiwan.