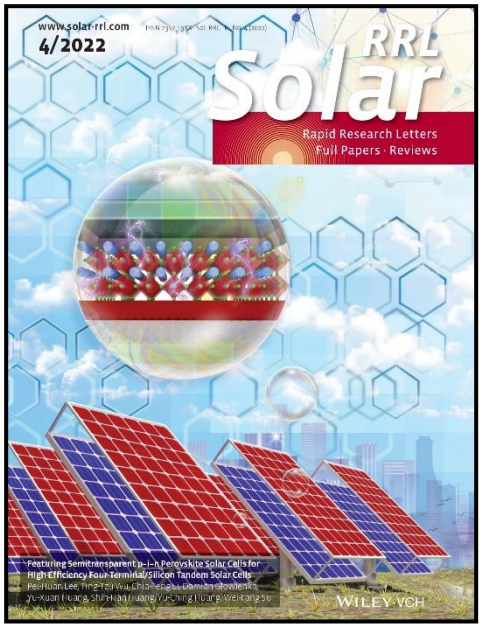
Prof. Yu-Ching Huang of Ming Chi University of Technology (Update 2023/02/09)

SCI Journal Paper

2023-

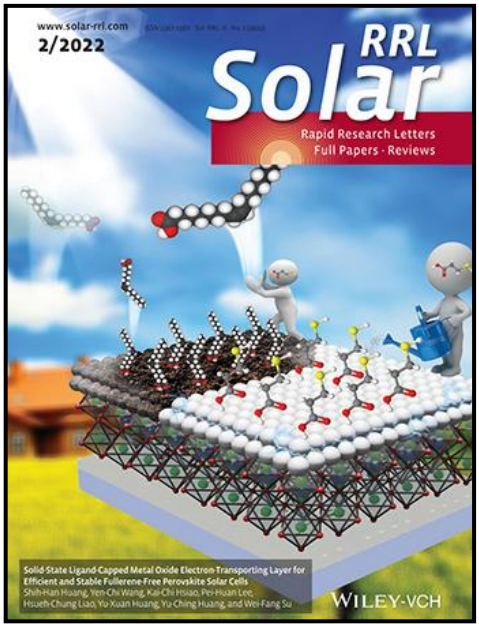
1. Yun-Ming Sung, Cheng-Hsun-Tony Chang, Cheng-Si Tsao*, Hua-Kai Lin, Hou-Chin Cha, Pei-Cheng Jiang, Tian-Cheng Liu, Kang-Wei Chang, Yu-Ching Huang*, and Jyh-Shen Tsay*, "Dramatic Improvement in The Stability and Mechanism of High-Performance Inverted Polymer Cells Featuring a Solution-Processed Buffer Layer", **2023**, ***Nanoscale***, Advance Article. (▲**:0**; SCI; **IF:8.307** at 2021; Ranking:23/161=14.3% in Physics, Applied)

2022-



2. Pei-Huan Lee, Ting-Tzu Wu, Chia-Feng Li, Damian Glowienka, Yu-Xuan Huang, Shih-Han Huang, Yu-Ching Huang*, and Wei-Fang Su*, "Featuring Semitransparent p-i-n Perovskite Solar Cells for High-Efficiency Four-Terminal/Silicon Tandem Solar Cells", **2022**, ***Solar RRL***, 6, 2100891. (▲**:0**; SCI; **IF:9.173** at 2021; Ranking:61/345=17.8% in Materials Science, Multidisciplinary) **(Selected as an inside front cover of Solar RRL!!)**

3. Shih-Han Huang, Yen-Chi Wang, Kai-Chi Hsiao, Pei-Huan Lee, Hsueh-Chung Laio, Yu-Xuan Huang, Yu-Ching Huang*, and Wei-Fang Su, "Solid-State Ligand-Capped Metal Oxide Electron-Transporting Layer for Efficient and Stable Fullerene-Free Perovskite Solar Cells", **2022**, ***Solar RRL***, 6, 2100671. (▲**:0**; SCI; **IF:9.173** at 2021; Ranking:61/345=17.8% in Materials Science, Multidisciplinary) **(Selected as a back cover of Solar RRL!!)**



4. Yun-Ming-Sung, Cheng-Si Tsao*, Hua-Kai Lin, Hou-Chin Cha, and Yu-Ching Huang*, "Scale-Up Fabrication and Characteristic Study of Oligomer-Like Small-Molecule Solar Cells by Ambient Halogen-Free Sheet-to-Sheet and Roll-to-Roll Slot-Die Coating", **2022, *Solar Energy***, 231, 536-545. (▲**:0**; SCI; **IF:7.188** at 2021; Ranking:37/119=31% in Energy & Fuels)

5. Meng-Fang Lin, Kang-Wei Chang, Chia-Hsien Lee, Xin-Xian Wu, and Yu-Ching Huang*, "Electrospun P3HT/PVDF-HFP Semiconductive Nanofibers for Triboelectric Nanogenerators", **2022**, ***Scientific Reports***, 12, 14842. (▲**:0**; SCI; **IF:4.997** at 2021; Ranking:19/74=25.7% in Multidisciplinary Science)

6. Tienli Ma, Chiehming Tsai, Shyhchyang Luo, Weili Chen, Yu-Ching Huang*, and WeiFang Su*, "Chemical Structures and Compositions of Peptide Copolymer Films Affect Their Functional Properties for Cell Adhesion and Cell Viability", **2022**, ***Reactive and Functional Polymers***, 175, 105265. (▲**:0**; SCI; **IF:4.966** at 2021; Ranking:17/90=18.9% in Polymer Science)

7. Zhi-Hao Huang, Madhuja Layek, Chia-Feng Li, Yu-Ching Huang*, and Kun-Mu Lee*, "Cesium Lead Bromide Nanocrystals: Synthesis, Modification, and Application to O_2 Sensing", **2022**, ***Sensors***, 22, 8853. (▲**:0**; SCI; **IF:3.847** at 2021; Ranking:29/87=33.3% in Chemistry, Analytical)

2021-

8. Yun-Ming Sung, Meng-Zhen Li, Dian Luo, Yan-De Li, Sajal Biring, Yu-Ching Huang, Chun-Kai Wang, Shun-Wei Liu*, and Ken-Tseng Wong**, "A Micro-Cavity Forming Electrode with High Thermal Stability for Semi-Transparent Colorful Organic Photovoltaic Exceeding 13% Power Conversion Efficiency", **2021**, ***Nano Energy***, 80, 105565. (▲**:9**; SCI; **IF:19.069** at 2021; Ranking:18/345=5.2% in Materials Science, Multidisciplinary)

9. Pei-Huan Lee, Ting-Tzu Wu, Chia-Feng Li, Damian Głowienka, Yi-Hsuan Sun, Yi-Ting Lin, Hung-Wei Yen, Cheng-Gang Huang, Yulia Galagan, Yu-Ching Huang*, and Wei-Fang Su*, "Highly Crystalline Colloidal Nickel Oxide Hole Transport Layer for Low-Temperature Processable Perovskite Solar Cell", **2021**, ***Chemical Engineering Journal***, 412, 128746. (▲**:0**; SCI; **IF:16.744** at 2021; Ranking:4/142=2.8% in Engineering, Chemical)

10. Yun-Ming Sung, Abdul Khalik, Akbar, Sajal Biring, Chia-Feng Li, Yu-Ching Huang*, and Shun-Wei Liu*, "The Effect of ZnO Preparation on the Performance of Inverted Polymer Solar Cells Under One Sun and Indoor Light", **2021**, ***Journal of Materials Chemistry C***, 9, 1196-1204. (▲**:0**; SCI; **IF:8.067** at 2021; Ranking:24/161=14.9% in Physics, Applied) **(Selected as an inside back cover of Journal of Materials Chemistry C!!)**

11. Ching-Yu Lee, Cheng-Si Tsao, Hua-Kai Lin, Hou-Chin Cha, Tsui-Yun Chung, Yun-Ming Sung, and Yu-Ching Huang*, "Ensapsulation Improvement and Stability of Ambient Roll-to-Roll Slot-Die Coated Organic Photovoltaic Modules", **2021, *Solar Energy***, 213, 136-144. (▲**:2**; SCI; **IF:7.188** at 2021; Ranking:37/119=31% in Energy & Fuels)

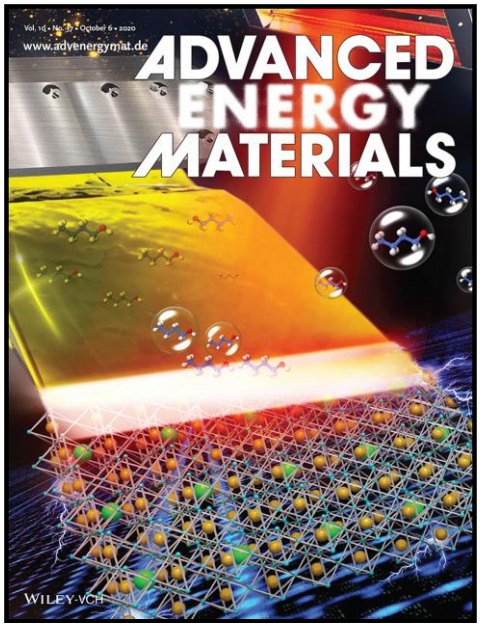
12. Zong-Liang Tseng*, Shih-Hung Lin, Jian-Fu Tang, Yu-Ching Huang, Wei-Lun Huang, Yi-Ting Lee, and Lung-Chien Chen*, "Polymeric Hole Transport Materials for Red $CsPbI_3$ Perovskite Quantum-Dot Light-Emitting Diodes", **2021, *Polymers***, 13, 896. (▲**:0**; SCI; **IF:4.967** at 2021; Ranking:16/90=17.8% in Polymer Science)

13. Jing-Han Chen*, Tej Poudel Chhetri, Chung-Kai Chang, Yu-Ching Huang, David P. Young, Igor Dubenko, Saikat Talapatra, Naushad Ali, and Shane Stadler, "The Influence of Hydrostatic Pressure and Annealing Conditions on the Magnetostructural Transitions in MnCoGe", **2021, *Journal of Applied Physics***, 129, 215108. (▲**:0**; SCI; **IF:2.877** at 2021; Ranking:74/161=46.0% in Physics, Applied)

2020-

14. Chuang-Yi Liao, Yao Chen, Chun-Chieh Lee, Gang Wang Nai-Wei Teng, Chia-Hao Lee, Wei-Long Li, Yu-Kuang Chen, Chia-Hua Li, Hsiuan-Lin Ho, Phoebe Huei-Shuan Tan, Binghao Wang, Yu-Ching Huang, Ryan M. Young, Michael R. Wasielewski, Tobin J. Marks*, Yi-Ming Chang*, and Antonio Facchetti*, "Processing Strategies for an Organic Photovoltaic Module with Over 10% Efficiency", **2020**, ***Joule***, 4, 189-206. (▲**:0**; SCI; **IF:46.048** at 2021; Ranking:2/163=1.2% in Chemistry, Physical)

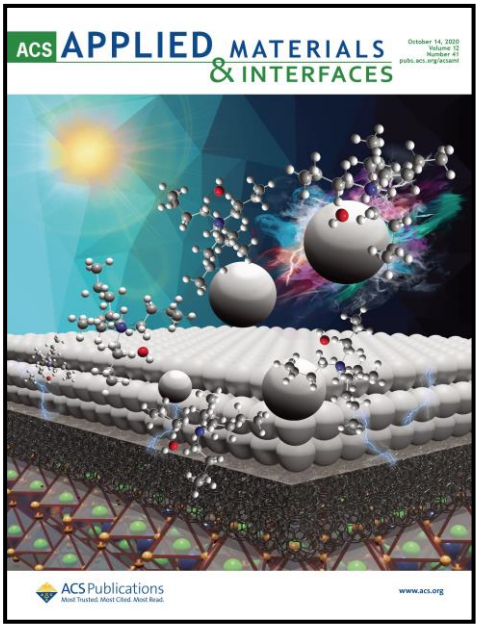
15. Shih-Han Huang, Cheng-Kang Guan, Pei-Huan Lee, Hung-Che Huang, Chia-Feng Li, Yu-Ching Huang*, and Wei-Fang Su*, "Toward All Slot-Die Fabricated High Efficiency Large Area Perovskite Solar Cell Using Rapid Near Infrared Heating in Ambient Air", **2020**, ***Advanced Energy Materials***, 10, 2001567. (▲**:32**; SCI; **IF:29.698** at 2021; Ranking:9/345=2.6% in Materials Science, Multidisciplinary) **(Selected as an inside back cover of Advanced Energy Materials!!)**



16. Miaosheng Wang, Ya-Ze Li, Hung-Cheng Chen, Che-Wei Liu, Yi-Sheng Chen, Yuan-Chih Lo, Cheng-Si Tsao, Yu-Ching Huang, Shun-Wei Liu*, Ken-Tsung Wong*, and Bin Hu*, "Unveiling the Underlying Mechanism of Record-High Efficiency Organic Near-Infrared Photodetector Harnessing a Single-Component Photoactive Layer", **2020**, ***Materials Horizons***, 2020, 7, 1171-1179. (▲**:9**; SCI; **IF:15.717** at 2021; Ranking:23/345=6.7% in Materials Science, Multidisciplinary)

17. Shih-Han Huang, Kuo-Yu Tian, Hung-Che Huang, Chia-Feng Li, Wei-Cheng Chu, Kun-Mu Lee, Yu-Ching Huang*, and Wei-Feng Su*, "Controlling the Morphology and Interface of the Perovskite Layer for Scalable High-Efficiency Solar Cells Fabricated Using Green Solvents and Blade Coating in an Ambient Environment", **2020,** ***ACS Applied Materials & Interfaces***, 12, 26041-26049. (▲**:24**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary)

18. Pei-Huan Lee, Ting-Tzu Wu, Kuo-Yu Tian, Chia-Feng Li, Cheng-Hung Hou, Jing-Jong Shyue, Chun-Fu Lu, Yu-Ching Huang*, and Wei-Feng Su*, "Work-Function-Tunable Electron Transport Layer of Molecule-Capped Metal Oxide for a High-Efficiency and Stable p-i-n Perovskite Solar Cell", **2020,** ***ACS Applied Materials & Interfaces***, 12, 45936-45949. (▲**:11**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary) **(Selected as a front cover of ACS Applied Materials & Interfaces!!)**



19. Ming-Chung Wu*, Chih-Kunag Kao, Tz-Feng Lin, Shun-Hsiang Chan, Shih-Hsuan Chen, Chi-Hung Lin, Yu-Ching Huang, Ziming Zhou, Kai Wang, and Chao-Sung Lai*, "Surface Plasmon Resonance Amplified Efficient Polarization-Selective Volatile Organic Compounds CdSe-CdS/Ag/PMMA Sensing Material", **2020**, ***Sensors and Actuators B: Chemical***, 309, 127760. (▲**:7**; SCI; **IF:9.221** at 2021; Ranking:2/64=3.1% in Instruments & Instrumentation)

20. Pei-Huan Lee, Bo-Ting Li, Chia-Feng Lee, Zhi-Hao Huang, Yu-Ching Huang*, and Wei-Feng Su**, "High-Efficiency Perovskite Solar Cell Using Cobalt Doped Nickel Oxide Hole Transport Layer Fabricated by NIR Process", **2020**, ***Solar Energy Materials and Solar Cells***, 208, 110352. (▲**:31**; SCI; **IF:7.305** at 2021; Ranking:29/161=18.0% in Physics, Applied)

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21. Hung-Yu Lin, Chien-Yu Chen, Bo-Wei Hsu, Yu-Lun Cheng, Wei-Lun Tsai, Yu-Ching Huang*, Cheng-Si Tsao, and Hao-Wu Lin*, "Efficient Cesium Lead Halide Perovskite Solar Cells Through Alternative Thousand-Layer Rapid Deposition", **2019**, ***Advanced Functional Materials***, 29, 1905163. (▲**:18**; SCI; **IF:19.924** at 2021; Ranking:8/161=4.9% in Physics, Applied)

22. Yu-Ching Huang*, Wei-Shin Liu, Cheng-Si Tsao*, and Leeyih Wang*, "Mechanistic Insights into the Effect of Polymer Regioregularity on the Thermal Stability of Polymer Solar Cells", **2019, *ACS Applied Materials & Interfaces***, 11, 40310-40319. (▲**:6**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary)

23. Yu-Ching Huang*, Chia-Feng Li, Zhi-Hao Huang, Po-Hung Liu, and Cheng-Si Tsao*, "Rapid and Sheet-to-Sheet Slot-Die Coating Manufacture of Highly Efficient Perovskite Solar Cells Processed Under Ambient Air", **2019, *Solar Energy***, 177, 255-261. (▲**:23**; SCI; **IF:7.188** at 2021; Ranking:37/119=31% in Energy & Fuels)

24. Yu-Ching Huang*, De-Han Lu, Chia-Feng Li, Cheng-Wei Chou, Hou-Chin Cha, and Cheng-Si Tsao, "Printed Silver Grid Incorporated With PEIE Doped ZnO as an Auxiliary Layer for High-Efficiency Large-Area Sprayed Organic Photovoltaics", **2019, *IEEE Journal of Photovoltaics***, 9, 1297-1301. (▲**:2**; SCI; **IF:4.401** at 2021; Ranking:46/161= 28.6% in Physics, Applied)

25. Yun-Ming Sung, Yu-Ching Huang*, Forest Shih-Sen Chien, and Cheng-Si Tsao, "Mechanism and Analysis of Thermal Burn-In Degradation of OPVs Induced by Evaporated HTL", **2019, *IEEE Journal of Photovoltaics***, 9, 694-699. (▲**:4**; SCI; **IF:4.401** at 2021; Ranking:46/161= 28.6% in Physics, Applied)

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26. Shu-Wen Dai, Bo-Wei Hsu, Chien-Cu Chen, Chia-An Lee, Hsiao-Yun Liu, Hsiao-Fang Wang, Yu-Ching Huang, Tien-Lin Wu, Arumugam Manikandan, Rong-Ming Ho, Cheng-Si Tsao, Chien-Hong Cheng, Yu-Lun Chueh, and Hao-Wu Lin*, "Perovskite Quantum Dots with Near Unity Solution and Neat-Film Photoluminescent Quantum Yield by Novel Spray Synthesis", **2018, *Advanced Materials***, 30, 1705532. (▲**:63**; SCI; **IF:32.086** at 2021; Ranking:4/163=2.5% in Chemistry, Physical)

27. Chia-Te Yen, Yu-Ching Huang*, Zheng-Lin Yu, Hou-Chin Cha, Hsia-Tsai Hsiao, Yu-Ting Liang, Forest Shih-Sen Chien, and Cheng-Si Tsao*, "Performance Improvement and Characterization of Spray-Coated Organic Photodetectors", **2018, *ACS Applied Materials & Interfaces***, 10, 33399-33406. (▲**:9**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary)

28. Yu-Ching Huang*, Cheng-Wei Chou, De-Han Lu, Charn-Ying Chen, and Cheng-Si Tsao, "All-Spray-Coated Inverted Semitransparent Organic Solar Cells and Modules", **2018, *IEEE Journal of Photovoltaics***, 8, 144-150. (▲**:10**; SCI; **IF:4.401** at 2021; Ranking:46/161= 28.6% in Physics, Applied)

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29. Chien-Yu Chen, Hung-Yu Lin, Kai-Ming Chiang, Wei-Lun Tsai, Yu-Ching Huang, Cheng-Si Tsao, and Hao-Wu Lin*, "All-Vacuum-Deposited Stoichiometrically Balanced Inorganic Cesium Lead Halide Perovskite Solar Cells with Stabilized Efficiency Exceeding 11%", ***2017***, ***Advanced Materials***, 29, 1605290. (▲**:263**; SCI; **IF:32.086** at 2021; Ranking:4/163=2.5% in Chemistry, Physical)

30. Chih-Yu Chang*, Bo-Chou Tsai, Min-Zhen Lin, Yu-Ching Huang, and Cheng-Si Tsao, "An Integrated Approach Towards the Fabrication of Highly Efficient and Long-Term Stable Perovskite Nanowire Solar Cells", **2017, *Journal of Materials Chemistry A***, 5, 22824-22833. (▲**:23**; SCI; **IF:14.511** at 2021; Ranking:9/119=7.6% in Energy & Fuels)

31. Yen-Ju Hsieh, Yu-Ching Huang, Wei-Shin Liu, Yu-An Su, Cheng-Si Tsao*, Syang-Peng Rwei, and Leeyih Wang*, "Insights into Morphological Instability of Bulk Heterojunction PTB7-Th/PCBM Solar Cells Upon High-Temperature Aging", **2017**, ***ACS Applied Materials & Interfaces***, 9, 14808-14816. (▲**:31**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary)

32. Yu-Ching Huang*, Hou-Chin Cha, Charn-Ying Chen, and Cheng-Si Tsao, "A Universal Roll-to-Roll Slot-Die Coating Approach towards High-Efficiency Organic Photovoltaics", **2017, *Progress in Photovoltaics***, 25, 928-935. (▲**:28**; SCI; **IF:8.490** at 2021; Ranking:22/161=13.7% in Physics, Applied)

33. Chia-Yuan Chen*, Zih-Hong Jian, Shih-Han Huang, Kun-Mu Lee, Ming-Hsuan Kao, Chang-Hong Shen, Jia-Min Shieh, Chin-Li Wang, Chiung-Wen Chang, Bo-Zhi Lin, Ching-Yao Lin, Ting-Kuang Chang, Yun Chi, Cheng-Yu Chi, Wei-Ting Wang, Yian Tai, Ming-De Lu, Yung-Liang Tung, Po-Ting Chou, Wen-Ti Wu, Tahsin J. Chow, Peter Chen, Xiang-Hao Luo, Yuh-Lang Lee, Chih-Chung Wu, Chih-Ming Chen, Chen-Yu Yeh, Miao-Syuan Fan, Jia-De Peng, Kuo-Chuan Ho, Yu-Nan Liu, Hsiao-Yi Lee, Chien-Yu Chen, Hao-Wu Lin, Chia-Te Yen, Yu-Ching Huang, Cheng-Si Tsao, Yu-Chien Ting, Tzu-Chien Wei, and Chun-Guey Wu*, "Performance Characterization of Dye-Sensitized Photovoltaics under Indoor Lighting", ***2017***, ***Journal of Physical Chemistry Letters***, 8, 1824-1830. (▲**:41**; SCI; **IF:6.888** at 2021; Ranking:5/36=13.8% in Physics, Atomic, Molecular & Chemical)

34. Yu-Bing Lan, Pin-Hao Sher, Cheng-Kuang Lee, Chun-Wei Pao*, Cheng-Si Tsao*, Yu-Ching Huang, Ping-Tsung Huang, Chih-I Wu, and Juen-Kai Wang*, "Revealing Ordered Polymer Packing during Freeze-Drying Fabrication of a Bulk Heterojuction Poly(3-hexylthiophene-2,5-diyl):[6,6]-Phenyl-C61-butyric Acid Methyl Ester Layer: In Situ Optical Spectroscopy, Molecular-Dynamic Simulation and X-ray Diffraction", **2017**, ***Journal of Physical Chemistry C***, 121, 14826-14834. (▲**:4**; SCI; **IF:4.177** at 2021; Ranking:143/345=41.4% in Materials Science, Multidisciplinary)

35. Chun-Yu Chang, Yu-Ching Huang, Cheng-Si Tsao*, Chien-An Chen, Chun-Jen Su, and Wei-Fang Su*, "Quantitative Correlation of the Effects of Crystallinity and Additives on Nanomorphology and Solar Cell Performance of Isoindigo-Based Copolymers", **2017**, ***Physical Chemistry Chemical Physics***, 19, 23515-23523. (▲**:1**; SCI; **IF:3.945** at 2021; Ranking:9/63=25.0% in Physics, Atomic, Molecular & Chemical)

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36. Kiet Tuong Ly, Ren-Wu Chen Cheng, Hao-Wu Lin*, Yu-Jeng Shiau, Shih-Hung Liu, Pi-Tai Chou*, Cheng-Si Tsao, Yu-Ching Huang, and Yun Chi*, "Near-Infrared Organic Light-Emitting Diodes with Very High External Quantum Efficiency and Radiance", ***2016***, ***Nature Photonics***, 11, 63-68. (▲**:138**; SCI; **IF:39.728** at 2021; Ranking:1/101=1.0% in Optics)

37. Yi-Kai Chih, Jian-Chih Wang, Rei-Ting Yang, Chi-Ching Liu, Yun-Chorng Chang, Yaw-Shyan Fu, Wei-Chi Lai, Peter Chen, Ten-Chin Wen, Yu-Ching Huang, Cheng-Si Tsao, and Tzung-Fang Guo*, "NiO_x Electrode Interlayer and $CH_3NH_2/CH_3NH_3PbBr_3$ Interface Treatment to Markedly Advance Hybrid Perovskite-Based Light-Emitting Diodes", **2016**, ***Advanced Materials***, 28, 8687-8694. (▲**:135**; SCI; **IF:32.086** at 2021; Ranking:4/163=2.5% in Chemistry, Physical)

38. Mahmoud E. Farahat, Cheng-Si Tsao, Yu-Ching Huang, Sheng-Hsiung Chang, Widhya Budiawan, Chun-Guey Wu, and Chih-Wei Chu*, "Toward Environmentally Compatible Molecular Solar Cells Processed from Halogen-Free Solvents", ***2016***, ***Journal of Materials Chemistry A***, 4, 7341-7351. (▲**:24**; SCI; **IF:14.511** at 2021; Ranking:9/119=7.6% in Energy & Fuels)

39. Chih-Yu Chang*, Yu-Chia Chang, Wen-Kuan Huang, Wen-Chi Liao, Hung Wang, Chieh Yeh, Bo-Chou Tsai, Yu-Ching Huang, and Cheng-Si Tsao, "Achieving High Efficiency and Improved Stability in Large-Area ITO-Free Perovskite Solar Cells with Thiol-Functionalized Self-Assembled Monolayers", ***2016***, ***Journal of Materials Chemistry A***, 4, 7903-7913. (▲**:55**; SCI; **IF:14.511** at 2021; Ranking:9/119=7.6% in Energy & Fuels)

40. Chun-Yu Chang, Yu-Ching Huang, Cheng-Si Tsao*, and Wei-Fang Su*, "Formation Mechanism and Control of Perovskite Films from Solution to Crystalline Phase Studied by In-Situ Synchrotron Scattering", **2016**, ***ACS Applied Materials & Interfaces***, 8, 26712-26721. (▲**:49**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary)

41. Shu-Hua Chou, Hao-Wei Kang, Shu-Ting Chang, Kuan-Yi Wu, Guillermo C. Bazan, Chien-Lung Wang*, Hong-Lin Lin, Jung-Hao Chang, Hao-Wu Lin*, Yu-Ching Huang, Cheng-Si Tsao, and Ken-Tsung Wong*, "Cofacial versus Coplanar Arrangement in Centrosymmetric Packing Dimers of Dipolar Small Molecules: Structural Effects on the Crystallization Behaviors and Optoelectronic Characteristics", ***2016***, ***ACS Applied Materials & Interfaces***, 8, 18266-18276. (▲**:11**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary)

42. Yu-Ching Huang*, Hou-Chin Cha, Charn-Ying Chen, and Cheng-Si Tsao, "Morphological Control and Performance Improvement of Organic Photovoltaic Layer of Roll-to-Roll Coated Polymer Solar Cells", **2016**, ***Solar Energy Materials and Solar Cells***, 150, 10-18. (▲**:15**; SCI; **IF:7.305** at 2021; Ranking:29/161=18.0% in Physics, Applied)

43. Ming-Chih Lin, Yu-Ching Huang*, Chia-Te Yen, Cheng-Si Tsao, and Yee-Wen Yen, "The Effect of Hole Transport Layer on The Thermal Stability of Inverted Polymer Solar Cells", **2016**, ***Polymer Degradation and Stability***, 134, 245-250. (▲**:7**; SCI; **IF:5.204** at 2021; Ranking:14/90=15.6% in Polymer Science)

44. Yu-Ching Huang*, Cheng-Si Tsao*, Hou-Chin Cha, Chih-Min Chuang, Chun-Jen Su, U-Ser Jeng, and Charn-Ying Chen, "Correlation Between Hierarchical Structure and Processing Control of Large-Area Spray-Coated Polymer Solar Cells toward High Performance", **2016**, ***Scientific Reports***, 6, 20062. (▲**:14**; SCI; **IF:4.996** at 2021; Ranking:19/73=26.0% in Multidisciplinary Science)

45. Chih-Yu Chang*, Bo-Chou Tsai, Yu-Cheng Hsiao, Yu-Ching Huang, and Cheng-Si Tsao, "High-Performance Printable Hybrid Perovskite Solar Cells with an Easily Accessible N-Doped Fullerene as Cathode Interfacial Layer", **2016**, ***Physical Chemistry Chemical Physics***, 18, 31836-31844. (▲**:12**; SCI; **IF:3.945** at 2021; Ranking:9/63=25.0% in Physics, Atomic, Molecular & Chemical)

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46. Karunakara Moorthy Boopathi, Mohan Ramesh, Packiyaraj Perumal, Yu-Ching Huang, Cheng-Si Tsao, Yang-Fang Chen, Chih-Hao Lee, and Chih-Wei Chu, " Preparation of Metal Halide Perovskite Solar Cells through Liquid Droplet Assisted Method", **2015**, ***Journal of Materials Chemistry A***, 3, 9257-9263. (▲**:43**; SCI; **IF:14.511** at 2021; Ranking:9/119=7.6% in Energy & Fuels)

47. Hsueh-Chung Liao, Cheng-Si Tsao, Meng-Huan Jao, Che-Pu Hsu, Yu-Ching Huang, Kuo-Yo Tian, Jing-Jong Shyue, Charn-Ying Chen, Chun-Jen Su, and Wei-Fang Su, "Hierarchical I-P and I-N Porous Heterojunction in Planar Perovskite Solar Cells", **2015**, ***Journal of Materials Chemistry A***, 2015, 3, 10526-10535. (▲**:15**; SCI; **IF:14.511** at 2021; Ranking:9/119=7.6% in Energy & Fuels)

48. Chun-Yu Chang, Cheng-Ya Chu, Yu-Ching Huang, Chien-Wen Huang, Shuang-Yuan Chang, Chien-An Chen, Chi-Yang Chao, and Wei-Fang Su, "Tuning Perovskite Morphology by Polymer Additive for High Efficiency Solar Cell", **2015**, ***ACS Applied Materials & Interfaces***, 7, 4955-4961. (▲**:250**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary)

49. Mohan Ramesh, Karunakara Moorthy Boopathi, Tzu-Yen Huang, Yu-Ching Huang, Cheng-Si Tsao, and Chih-Wei Chu, "Using an Airbrush Pen for Layer-By-Layer Growth of Continuous Perovskite Thin Films for Hybrid Solar Cells", **2015**, ***ACS Applied Materials & Interfaces***, 7, 2359-2366. (▲**:78**; SCI; **IF:10.383** at 2021; Ranking:49/345=14.2% in Materials Science, Multidisciplinary)

50. Yu-Ching Huang, Cheng-Si Tsao*, Yi-Ju Cho, Kuan-Chen Chen, Kai-Ming Chiang, Sheng-Yi Hsiao, Chang-Wen Chen, Chun-Jen Su, U-Ser Jeng, and Hao-Wu Lin*, "Insight into Evolution, Processing and Performance of Multi-length-Scale Structures in Planar Heterojunction Perovskite Solar Cells", **2015**, ***Scientific Reports***, 5, 13657. (▲**:31**; SCI; **IF:4.996** at 2021; Ranking:19/73=26.0% in Multidisciplinary Science)

51. 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*, "Quantitative Characterization and Mechanism of Formation of Multilength-Scale Bulk Heterojunction Structures in Highly Efficient Solution-Processed Small-Molecule Organic Solar Cells", **2015**, ***Journal of Physical Chemistry C***, 119, 16507-16517. (▲ **:7**; SCI; **IF:4.177** at 2021; Ranking:143/345=41.4% in Materials Science, Multidisciplinary)

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