Prof. Yu-Ching Huang of Ming Chi University of Technology (Update 2025/02/26)

■ SCI Journal Paper

2025-

1. Yu-Ching Huang*, Sheng-Wen Huang, Chia-Feng Li, Shih-Han Huang, Feng-Yu Tsai, and Wei-Fang Su, "A Comprehensive Optimization of Highly Efficient MA-Free Wide-Bandgap Perovskites for 4-T Perovskite/Silicon Tandem Solar Cells", **2025**, ***Chemical Engineering Journal***, 503, 158272. (▲**:0**; SCI; **IF:13.3** at 2023; Ranking:3/81=3.7% in Engineering, Environmental)

2. Jiawen Cong, Zhi-Hao Huang, Shun-Wei Liu, Zhenghui Luo*, Fu-Zong Liu, Zhanxiang Chen, Kun-Mu Lee, Yu-Ching Huang*, and Chuluo Yang*, "Efficient SWIR Organic Photodetectors with Spectral Detection Extending to 1.4 µm Using a Benzobisthiadiazole-Based Acceptor", **2025**, ***Small***, 2025, 2410418. (▲**:0**; SCI; **IF:13.0** at 2023; Ranking:14/179=7.8% in Physics, Applied)

3. Chin-Wei Lin, Jing-Han Huang, Po-Han Lin, Ting-Bin Chen, Li-Min Wang, Yu-Ching Huang*, and Kuen-Lin Chen*, "Ultrasensitive MiRNA-135a-5p Biochip for Early Alzheimer's Disease Detection Utilizing Magneto-Optical Faraday Effect and Magnetoplasmonic Nanoparticles", **2025**, ***Sensors and Actuators B: Chemical***, 427, 137134. (▲**:0**; SCI; **IF:8.0** at 2023; Ranking:5/106=4.6% in Chemistry, Analytical)

4. Priyanka Chaudhary, Dun-Heng Tan, Chia-Hsien Lee, Chun-Yu Chang, Ting-Han Lin, Ming-Chung Wu*, Wei-Fang Su, Meng-Fang Lin*, and Yu-Ching Huang*, "3D-Printed Artificial Cornea Featuring Aligned Fibrous Structure and Enhanced Mechanical Strength", **2025**, ***International Journal of Bioprinting***, 11, 598-613. (▲**:0**; SCI; **IF:6.8** at 2023; Ranking:17/123=13.8% in Engineering, Biomedical)

5. Yu-Sheng Hsiao*, Jen-Hsien Huang, Shih-An Liu, Jui-Hsiung Huang, Lin-Yang Weng, Sheng-Wei Liao, Chih-Wei Hu, Wei Kong Pang, Shih-Chieh Hsu*, Huei Chu Weng*, and Yu-Ching Huang*, "Designing Core-Shell $LiNi_{0.5}Mn_{1.5}O_4$-Based Cathode Materials with Enhanced Rate Capability and Improved Cycling Stability", **2025**, ***Applied Surface Science***, 684, 161892. (▲**:0**; SCI; **IF:6.3** at 2023; Ranking:1/23=4.3% in Materials Science, Coatings & Films)

6. Shih-Han Huang, Yu-Hsiang Chen, Hou-Chin Cha, Damian Glowienka, Ming-Chung Wu*, and Yu-Ching Huang*, "Polymer-Enhanced Active Layer Crystallization in Low-Temperature Carbon-Based Perovskite Solar Cells", **2025**, ***Energy & Fuels***, 39, 1401-1408. (▲**:0**; SCI; **IF:5.2** at 2023; Ranking:51/171=29.8% in Engineering, Chemical) **(Selected as a supplementary cover of Energy & Fuels!!)**

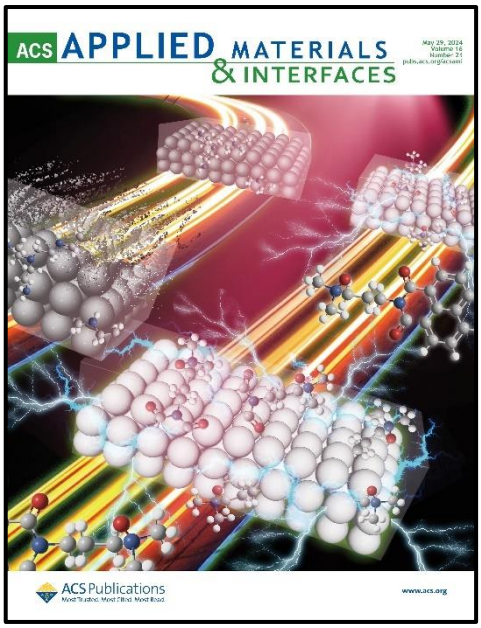
2024-

7. Yu-Sheng Hsiao, Chao-Yuan Lin, Lin-Yang Weng, Chun-Han Hsu, Ta-Hung Cheng, Jen-Hsien Huang, Nian-Jheng Wu, Wei Kong Pang, Shih-Chieh Hsu*, Huei Chu Weng*, and Yu-Ching Huang*, "In-Situ Synthesis of NbC Nanoparticle-Decorated Polyimide-Derived graphene for Enhanced Thermal Management", **2024**, ***Chemical Engineering Journal***, 483, 149007. (▲**:0**; SCI; **IF:13.3** at 2023; Ranking:3/81=3.7% in Engineering, Environmental)

8. Yu-Sheng Hsiao, Jen-Hsien Huang, Lin-Yang Weng, Ta-Hung Cheng, Han-Hsin Chiang, Cheng-Zhang Lu, Huei-Chu Weng*, Lars Thomsen, Bruce Cowie, Wei-Kong Pang*, and Yu-Ching Huang*, "Advancing Li_3VO_4 as A High-Performance Anode Material for Use in Lithium-Ion Batteries and Lithium-Ion Capacitors", **2024**, ***Chemical Engineering Journal***, 489, 150973. (▲**:0**; SCI; **IF:13.3** at 2023; Ranking:3/81=3.7% in Engineering, Environmental)

9. Jinu Park, Hyunjin Cho, Joonyun Kim, Yu-Ching Huang, Nakyung Kim, Seoyeon Park, Yunna Kim, Sukki Lee, Jiyoung Kwon, Doh C. Lee*, and Byungha Shin*, "Efficient and Spectrally Stable Pure Blue Light-Emitting Diodes Enabled by Phosphonate Passivated $CsPbBr_3$ Nanoplatelets with Conjugated Polyelectrolyte-Based Energy Transfer Layer", **2024**, ***EcoMat***, 6, e12487. (▲**:0**; SCI; **IF:10.7** at 2023; Ranking:55/438=12.6% in Materials Science, Multidisciplinary)

10. Yu-Ching Huang*, Tai-Yuan Wang, Zhi-Hao Huang, and Svette Reina Merden Solante Santiago, "Advancing Detectivity and Stability of Near-Infrared Organic Photodetectors via a Facile and Efficient Cathode Interlayer", **2024, *ACS Applied Materials & Interfaces***, 16, 27576-27586. (▲**:0**; SCI; **IF:8.3** at 2023; Ranking:63/438=14.4% in Materials Science, Multidisciplinary) **(Selected as a supplementary cover of ACS Applied Materials & Interfaces!!)**



11. Chin-Wei Lin, Li-Yu Chen, Yu-Ching Huang, Pradeep Kumar, Yu-Zhi Guo, Chiu-Hsien Wu, Li-Min Wang, and Kuen-Lin Chen*, "Improving Sensitivity and Reproducibility of Surface-Enhanced Raman Scattering Biochips Utilizing Magnetoplasmonic Nanoparticles and Statistical Methods", **2024**, ***ACS Sensors***, 9, 305-314. (▲**:1**; SCI; **IF:8.2** at 2023; Ranking:9/106=8.5% in Chemistry, Analytical)

12. Pradeep Kumar, Zu-Yin Deng, Po-Yu Tsai, Chin-Ya Chiu, Chin-Wei Lin, Priyanka Chaudhary, Yu-Ching Huang*, and Kuen-Lin Chen*, "Enhanced Visible-Light Photocatalytic Activity of Fe_3O_4@MoS_2@Au Nanocomposites for Methylene Blue Degradation through Plasmon-Induced Charge Transfer", **2024**, ***Separation and Purification Technology***, 342, 126988. (▲**:0**; SCI; **IF:8.1** at 2023; Ranking:13/171=7.6% in Engineering, Chemical)

13. Yu-Ching Huang†, Sheng-Fan Wang†, Bo-Cheng Chen, Zih-Syuan Yang, Meng-Chi Li, Xun-Ying Wu, Meng-Jey Youh, Hui-Yun Chou, Yu-Xen Lin, Wanchai Assavalapsakul†, Arunee Thitithanyanont, and Li-Chen Su, "Towards Cost-Effective and Lightweight Surface Plasmon Resonance Biosensing for H5N1 Avian Influenza Virus Detection: Integration of Novel Near-Infrared Organic Photodetectors", **2024**, ***Sensors and Actuators B: Chemical***, 400, 134898. (▲**:2**; SCI; **IF:8.0** at 2023; Ranking:5/106=4.6% in Chemistry, Analytical)

14. Chun-Jen Shih, Yi-Sheng Chen, Dian Luo, Chang-Wei Yu, Kuan-Hung Chen, Galing Murokinas, Yu-Chen Huang, Chia-Feng Li, Yu-Ching Huang*, and Shun-Wei Liu*, "Exploring Buried Interface in All-Vapor-Deposited Perovskite Photovoltaics", **2024, *Solar Energy***, 280, 112872. (▲**:0**; SCI; **IF:6.0** at 2023; Ranking:62/173=35.8% in Energy & Fuels)

15. Kai-Leng Huang, Chia-Feng Li, Yu-Chi Chen, Sheng-Wen Huang, Yu-Ching Huang, Wei-Fang Su, and Feng-Yu Tsai*, "Effects of Hydrazine compounds as Additives on The Characteristics of Organic-Inorganic Hybrid Lead-Tin Perovskite Photovoltaic Device", **2024**, ***Journal of Alloys and Compounds***, 1004, 175832. (▲**:0**; SCI; **IF:5.8** at 2023; Ranking:7/91=7.7% in Metallurgy & Metallurgical Engineering)

16. Chia-Feng Li, Shih-Han Cheng, Hou-Chin Cha, Ssu-Yung Chung, Damian Glowienka, Chih-Min Chuang, and Yu-Ching Huang*, "Tailoring the Transport Layer Interface for Relative Indoor and Outdoor Photovoltaic Performance", **2024**, ***ACS Applied Energy Materials***, 7, 10203-10211. (▲**:0**; SCI; **IF:5.4** at 2023; Ranking:49/178=27.5% in Chemistry, Physical)

17. Chieh-Ming Tsai, Chia-Feng Li, Yu-Ching Huang, Feng-Yu Tsai, and Wei-Fang Su*, "Transparent Low Moisture Permeable Coating for Perovskite Solar Cell Encapsulation", **2024**, ***Surface and Coatings Technology***, 482, 130695. (▲**:17**; SCI; **IF:5.3** at 2023; Ranking:4/23=17.4% in Materials Science, Coatings & Films)

18. Yu-Sheng Hsiao, Jen-Hsien Huang, Hong-Yu Lin, Wei-Kong Pang, Min-Tzu Hung, Ta-Hung Cheng, Shih-Chieh Hsu*, Huei Chu Weng*, and Yu-Ching Huang*, "Surface-Modified Graphite Felt Incorporating Synergistic Effects of TiO_2 Decoration, Nitrogen Doping, and Porous Structure for High-Performance Vanadium Redox Flow Batteries", **2024**, ***Surface and Coatings Technology***, 484, 130785. (▲**:0**; SCI; **IF:5.3** at 2023; Ranking:4/23=17.4% in Materials Science, Coatings & Films)

19. Yu-Ching Huang*, Chih-Chien Lee, Yung-Yuan Lee, Ssu-yung Chung, Hui-Chieh Lin, Uma Kasimayan*, Chia-Feng Li, and Shun-Wei Liu*, "High-Efficiency ITO-Free Organic Solar Cells Through Top Illumination", **2024**, ***Materials Advances***, 5, 2411-2419. (▲**:0**; SCI; **IF:5.2** at 2023; Ranking:195/438=44.5% in Materials Science, Multidisciplinary)

20. Minh Nhat Pham, Chun-Jen Su, Yu-Ching Huang, Kun-Ta Lin, Ting-Yu Huang, Yu-Ying Lai, Chen-An Wang, Yong-Kang Liaw, Ting-Han Lin, Keng-Cheng Wan, Cheng-Tai He, Yu-Han Huang, Yong-Ping Yang, Hsuan-Yen Wei, U-Ser Jeng, Jrjeng Ruan, Chan Luo, Ye Huang, Guillermo C. Bazan, and Ben B. Y. Hsu*, "Forming Long-Range Order of Semiconducting Polymers through Liquid-Phase Directional Molecular Assemblies", **2024**, ***Macromolecules***, 57, 3544-3556. (▲**:0**; SCI; **IF:5.1** at 2023; Ranking:11/94=11.7% in Polymer, Science)

21. Hou-Chin Cha, Chia-Feng Li, Tsui-Yun Chung, Wei-Yang Ma, Cheng-Si Tsao*, and Yu-Ching Huang*, "Spray-Coated MoO_3 Hole Transport Layer for Inverted Organic Photovoltaics", **2024**, ***Polymers***, 16, 981. (▲**:0**; SCI; **IF:4.7** at 2023; Ranking:17/94=18.1% in Polymer Science)

22. Tsui-Yun Chung, Hou-Chin Cha*, Chih-Min Chuang, Cheng-Si Tsao, Damian Glowienka, Yi-Han Wang, Hui-Chun Wu, and Yu-Ching Huang*, "Developing Screen-Printing Processes for Silver Electrodes Towards All-Solution Coating Processes for Solar Cells", **2024**, ***Polymers***, 16, 3012. (▲**:0**; SCI; **IF:4.7** at 2023; Ranking:17/94=18.1% in Polymer Science)

23. Pradeep Kumar†, Shih-Han Huang†, Chia-Yi Hsu, Ssu-Yung Chung, Hou-Chin Cha, Chih-Min Chuang, Kuen-Lin Chen*, and Yu-Ching Huang*, "Enhancing Power Conversion Efficiency of Organic Solar Cells with Magnetoplasmonic Fe_3O_4@Au@m-ABS Nanoparticles", **2024**, ***Nanomaterials***, 14, 1175. (▲**:0**; SCI; **IF:4.4** at 2023; Ranking:60/179=33.5% in Physics, Applied)

24. Kai-Chi Hsiao†, Ching-Mei Ho†, Ting-Han Lin, Shih-Hsuan Chen, Yin-Hsuan Chang, Ying-Han Liao, 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", **2024**, ***International Journal of Energy Research***, 2024, 9990559. (▲**:2**; SCI; **IF:4.3** at 2023; Ranking:4/40=10.0% in Nuclear Science & Technology)

25. Chun-Yu Chang, An-Jey A. Su, Meng-Fang Lin, Kai-Chi Hsiao, Yu-Ting Lin, Yu-Sheng Hsiao, Ming-Chung Wu*, Yu-Ching Huang*, and Wei-Fang Su*, "Investigating Long Term Storage Stability and Drug Release Behavior of Polypeptide Based Fibrous Scaffold for Tissue Engineering Application", **2024**, ***Materials Chemistry and Physics***, 321, 129503. (▲**:0**; SCI; **IF:4.3** at 2023; Ranking:137/438=31.3% in Materials Science, Multidisciplinary)

26. Priyanka Chaudhary, Arpit Verma, Sandeep Chaudhary, Mahesh Kumar, Meng-Fang Lin*, Yu-Ching Huang*, Kuen-Lin Chen, and Bal Chandra Yadav*, "Design of a Humidity Sensor for a PPE Kit Using a Flexible Paper Substrate", **2024**, ***Langmuir***, 40, 9602-9612. (▲**:0**; SCI; **IF:3.7** at 2023; Ranking:87/231=37.7% in Chemistry, Multidisciplinary)

2023-

27. Po-Ting Lai, Cheng-Yueh Chen, Hao-Cheng Lin, Bo-Yuan Chuang, Kai-Hua Kuo, Christopher R. Greve, Tsung-Kai Su, Guang-Hsun Tan, Chia-Feng Li, Sheng-Wen Huang, Kai-Yuan Hsiao, Eva M. Herzig, Ming-Yen Lu, Yu-Ching Huang, Ken-Tsung Wong*, and Hao-Wu Lin*, "Harnessing 2D Ruddlesden-Popper Perovskite with Polar Organic Cation for Ultrasensitive Multibit Nonvolatile Transistor-Type Photomemristors", **2023**, ***ACS Nano***, 17, 25552-25564. (▲**:0**; SCI; **IF:15.8** at 2023; Ranking:24/438=5.5% in Materials Science, Multidisciplinary)

28. Yu-Ching Huang*, Zhi-Hao Huang, Tai-Yung Wang, Priyanka Chaudhary, Jen-Fu Hsu, and Kun-Mu Lee*, "A Promising Non-Fullerene Acceptor for Near-Infrared Organic Photodetectors Operating with Low Dark Current and High Response Speed", **2023**, ***Chemical Engineering Journal***, 464, 142633. (▲**:8**; SCI; **IF:13.3** at 2023; Ranking:3/81=3.7% in Engineering, Environmental)

29. Chun-Jen Shih, Yu-Ching Huang, Tai-Yung Wang, Chang-Wei Yu, I-Sheng Hsu, Abdul Khalik Akbar, Jai-Yi Lin, Sajal Biring, Jiun-Haw Lee*, and Shun-Wei Liu*, "Transparent Organic Upconversion Devices Displaying High-Resolution, Single-Pixel, Low-Power Infrared Images Perceived by Human Vision", **2023**, ***Science Advances***, 9, eadd7526. (▲**:10**; SCI; **IF:11.7** at 2023; Ranking:10/135=7.4% in Multidisciplinary Science)

30. Nurul Ridho Al Amin, Chih-Chien Lee, Yu-Chen Huang, Chun-Jen Shih, Richie Estrada, Sajal Biring, Meng-Hsueh Kuo, Chia-Feng Li, Yu-Ching Huang*, and Shun-Wei Liu*, "Achieving a Highly Stable Perovskite Photodetector with a Long Lifetime Fabricated via an All-Vacuum Deposition Process", **2023,** ***ACS Applied Materials & Interfaces***, 15, 21284-21295. (▲**:3**; SCI; **IF:8.3** at 2023; Ranking:63/438=14.4% in Materials Science, Multidisciplinary)

31. M. Mustaqeem*, S. Kamal, N. Ahmad, Pi-Tai Chou, Kung-Hsuan Lin, Yu-Ching Huang, Gunag-Yu Guo, Christy Roshini Paul Inbaraj, Wei-Kuo Li, Hsuan-Chun Yao, Kuang-Lieh Lu*, and Yang-Fang Chen*, "Chiral Metal-Organic Framework Based Spin-Polarized Flexible Photodetector with Ultrahigh Sensitivity", **2023**, ***Materials Today Nano***, 21, 100303. (▲**:0**; SCI; **IF:8.2** at 2023; Ranking:84/438=19.2% in Materials Science, Multidisciplinary)

32. 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***, 15, 3375-3386. (▲**:4**; SCI; **IF:5.8** at 2023; Ranking:42/179=23.5% in Physics, Applied)

33. Yu-Ching Huang*, and Chia Feng Li, "Insights into the Photovoltaic Mechanism of Organic Photovoltaics Under Solar and Artificial Light", **2023**, ***Journal of Materials Chemistry C***, 11, 14079-14087. (▲**:0**; SCI; **IF:5.7** at 2023; Ranking:34/179=19.0% in Physics, Applied) **(Selected as an back cover of Journal of Materials Chemistry C!!)**

34. Chia-Feng Li, Hung-Che Huang, Shih-Han Huang, Yu-Hung Hsiao, Priyanka Chaudhary, Chun-Yu Chang, Feng-Yu Tsai, Wei-Fang Su, and Yu-Ching Huang*, "High-Performance Perovskite Solar Cells and Modules Fabricated by Slot-Die Coating with Nontoxic Solvents", **2023**, ***Nanomaterials***, 13, 1760. (▲**:2**; SCI; **IF:4.4** at 2023; Ranking:60/179=33.5% in Physics, Applied)

35. Yun-Hsiu Tseng, Tien-Li Ma, Dun-Heng Tan, An-Jey A. Su*, Kia M. Washington, Chun-Chieh Wang, Yu-Ching Huang, Ming-Chung Wu*, and Wei-Fang Su, "Injectable Hydrogel Guides Neurons Growth with Specific Directionality", **2023**, ***International Journal of Molecular Sciences***, 24, 7952. (**:1**; SCI; **IF:4.9** at 2023; Ranking:83/231=35.9% in Chemistry, Multidisciplinary)

36. Ting-Han Lin†, Yin-Hsuan Chang†, Ting-Hung Hsieh†, Yu-Ching Huang*, and Ming-Chung Wu*, "Electrospun SnO_2/WO_3 Heterostructure Nanocomposite Fiber for Enhanced Acetone Vapor Detection", **2023**, ***Polymers***, 15, 4318. (▲**:0**; SCI; **IF:4.7** at 2023; Ranking:17/94=18.1% in Polymer Science)

37. Yu-Ching Huang*†, Hou-Chin Cha†, Shih-Han Huang, Chia-Feng Li, Svette Reina Merden Santiago, and Cheng Si-Tsao*, "Highly Efficient Flexible Roll-to-Roll Organic Photovoltaics Based on Non-Fullerene Acceptors", **2023**, ***Polymers***, 15, 4005. (▲**:1**; SCI; **IF:4.7** at 2023; Ranking:17/94=18.1% in Polymer Science)

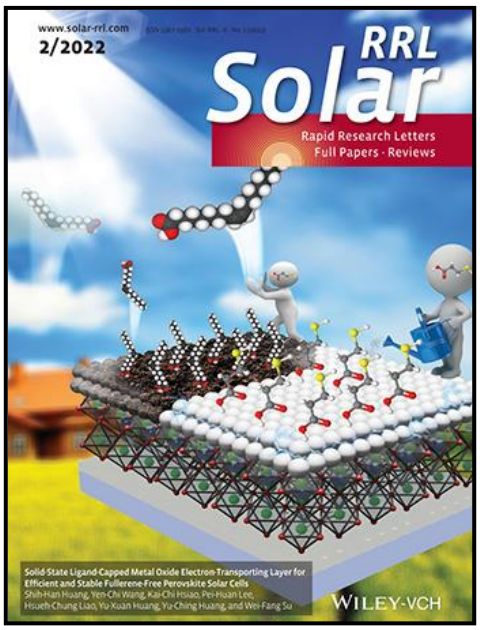
38. Hou-Chin Cha, Yu-Ching Huang*, Chia-Feng Li, and Cheng-Si Tsao*, "Uniformity and Process Stability of the Slot-Die Coated PTB7:$PC_{71}BM$ Organic Photovoltaic Improved by Solvent Additives", **2023**, ***Materials Chemistry and Physics***, 302, 127684. (▲**:1**; SCI; **IF:4.3** at 2023; Ranking:137/438=31.3% in Materials Science, Multidisciplinary)

39. An-Jey A. Su, Ning Jiang, Shyh-Chyang Luo, Kia M. Washington, Ming-Chung Wu, Yu-Ching Huang*, and Wei-Fang Su*, "Fibrous Polypeptide Based Bioscaffold Delivery of Minocycline Hydrochloride for Nerve Regeneration", **2023**, ***Materials Chemistry and Physics***, 305, 127974. (▲**:0**; SCI; **IF:4.3** at 2023; Ranking:137/438=31.3% in Materials Science, Multidisciplinary)

40. Seoungjun Ahn, Wei-Hao Chiu, Hsin-Ming Cheng, Vembu Suryanarayanan, Gao Chen, Yu-Ching Huang*, Ming-Chung Wu*, and Kun-Mu Lee*, "Enhancing Efficiency and Stability of Perovskite Solar Cells Through Two-Step Deposition Method with the Addition of Cesium Halides to PbI_2 Precursor", **2023,** ***Organic Electronics***, 120, 106847. (▲**:1**; SCI; **IF:2.7** at 2023; Ranking:77/179=43.0% in Physics, Applied)

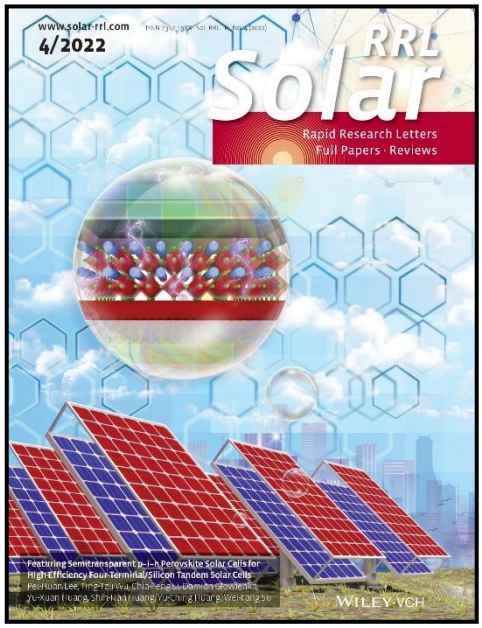
41. Shao-Jiun Yang, Tzu-Yi Yu, Jia-Shing Yu, Yu-Ching Huang, Meng-Fang Lin*, and Wei-Fang Su, "Novel Polypeptide Composite Fibers Scaffold with Internal Chemical Boundary", **2023,** ***Journal of Polymer Research***, 30, 312. (▲**:0**; SCI; **IF:2.6** at 2023; Ranking:43/94=45.7% in Polymer Science)

2022-



42. 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. (▲**:11**; SCI; **IF:6.0** at 2023; Ranking:114/438=26.0% in Materials Science, Multidisciplinary) **(Selected as an inside front cover of Solar RRL!!)**

43. 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. (▲**:1**; SCI; **IF:6.0** at 2023; Ranking:114/438=26.0% in Materials Science, Multidisciplinary) **(Selected as a back cover of Solar RRL!!)**



44. 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. (▲**:6**; SCI; **IF:6.0** at 2023; Ranking:62/173=35.8% in Energy & Fuels)

45. Tienli Ma, Chiehming Tsai, Shyhchyang Luo, Weili Chen, Yu-Ching Huang*, and Wei-Fang 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. (▲**:2**; SCI; **IF:4.5** at 2023; Ranking:39/171=22.8% in Engineering, Chemical)

46. Pradeep Kumar, Utkarsh Kumar, Yu-Ching Huang, Po-Yi Tsai, Chia-Hao Liu, Chiu-Hsien Wu, Wen-Min Huang, and Kuen-Lin Chen*, "Photocatalytic Activity of a Hydrothermally Synthesized γ-Fe_2O_3@Au/MoS_2 Heterostructure for Organic Dye Degradation Under Green Light", **2022**, ***Journal of Photochemistry & Photobiology A: Chemistry***, 433, 114186. (▲**:6**; SCI; **IF:4.1** at 2023; Ranking:72/178=40.4% in Chemistry, Physical)

47. 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. (▲**:19**; SCI; **IF:3.8** at 2023; Ranking:23/135=17.0% in Multidisciplinary Science)

48. 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. (▲**:1**; SCI; **IF:3.4** at 2023; Ranking:27/106=25.5% in Chemistry, Analytical)

2021-

49. 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. (▲**:27**; SCI; **IF:16.8** at 2023; Ranking:17/438=9.8% in Materials Science, Multidisciplinary)

50. 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. (▲**:11**; SCI; **IF:13.3** at 2023; Ranking:3/81=3.7% in Engineering, Environmental)

51. 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. (▲**:10**; SCI; **IF:6.0** at 2023; Ranking:62/173=35.8% in Energy & Fuels)

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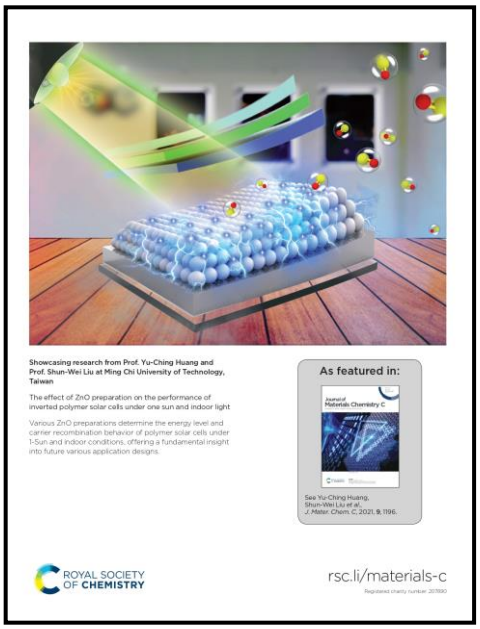

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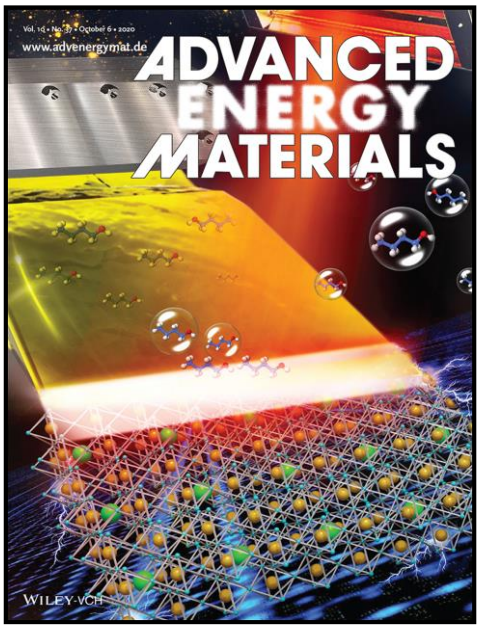

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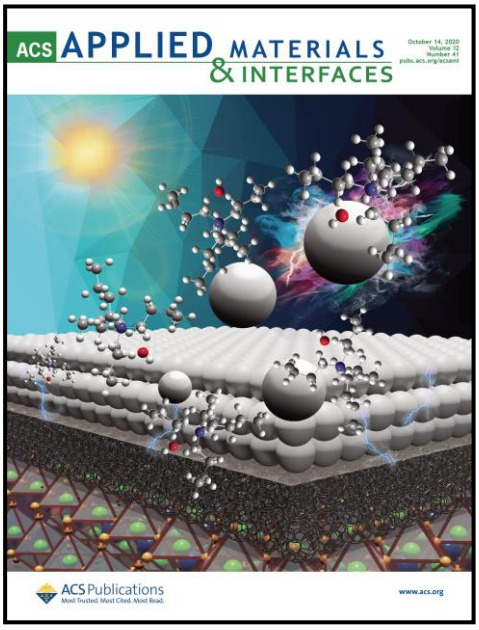

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