

研究成果目錄： (* corresponding author) **h-index:49** (Google Scholar)

Journal papers 期刊論文 IF (impact factor: 2022 ; citation numbers from Google Scholar)

1. Jo-Hsiang Chen, Che-Hsuan Huang, Tzu-Yi Lee, Fang-Chung Chen, Tsung Sheng Kao*, Hao-Chung*, “Advancing LED Technology: The FDCSP Element's Breakthrough in Mini and Micro-LED Packaging and Backlight Module Enhancement” **Discover Nano** submitted (2024).
2. Gajendra Suthar, Chih-Wei Chu, and Fang-Chung Chen*, “High-Performance Self-filtering Organic Photodetectors with Photomultiplication Narrowing” **Adv. Opt. Mater.** under revision (2024). (**IF:9.0**)
3. Tzu-Yi Lee, Chien-Chi Huang, Yu-Ying Hung, Fang-Chung Chen, Yu-Heng Hong, and Hao-Chung Kuo*, “InGaN-based Blue Resonant Cavity Micro-LED Combined with Red-Green-Yellow Quantum Dot Color Conversion Layer for Wide Color Gamut and Energy- Efficient Full-Color Displays” **Discover Nano** under revision (2024).
4. Kuen-Wei Tsai, Min-Hsien Chen, Gajendra Suthar, Yu-Tang Hsiao, Lin-Chieh Cheng, Chuang-Yi Liao, Fang-Chung Chen, Chih-Wei Chu, Yi-Ming Chang*, “Suppressing the Dark Current While Improving the Quantum Efficiency in Shortwave Infrared Organic Photodetectors Through Naphthalenediimide-Based Interlayer” **Adv. Opt. Mater.** accepted (2024). (**IF:9.0**)
5. Wei-Ta Huang, Tzu-Yi Lee, Yi-Hong Bai, Hsiang-Chen Wang, Yu-Ying Hung, Kuo-Bin Hong, Fang-Chung Chen, Chia-Feng Lin, Shu-Wei Chang, Jung Han, Jr-Hau He, Yu-Heng Hong*, Hao-Chung Kuo*, “InGaN-based blue resonant cavity micro-LEDs with staggered multiple quantum wells enabling full-color and low-crosstalk micro-LED displays” **Next Nanotechnology** 5, 100048 (2024).
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8. Gajendra Suthar, Yu-Tang Hsiao, Kuen-Wei Tsai, Chuang-Yi Liao, Chih-Wei Chu, Yi-Ming Chang*, Fang-Chung Chen*, “Morphological effects on the performance of broadband organic photomultiplication photodetectors containing selenium substituted non-fullerene acceptors” **Adv. Funct. Mater.** 33, 2301538 (2023). (**IF:19.0**)
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- Yu-Heng Hong*, Chiao-Yun Chang*, Hao-Chung Kuo*, “Investigations on the high performance of InGaN red micro-LEDs with single quantum well for visible light communication applications” **Discover Nano** 18, 95 (2023).
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30. Li Fen Chu, Chao-Feng Sung, Yuh-Zheng Lee, Fang Chung Chen, Meng-Chyi Wu, and Chih Wei Chu ”Ambipolar charge carrier transport in C₆₀ and Poly(3-hexylthiophene) blends of organic semiconductor thin film transistors and their logic circuits” International Conference on Solid State Devices and Materials 2009 (SSDM 2009)
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32. Jyh-Lih Wu, Kuo-Huang Hsieh, Wen-Chang Chen and Fang-Chung Chen*, “Highly efficient inverted bulk-heterojunction polymer photovoltaic devices with transparent contacts” 215th Electrochemical Society Meeting (2009).
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34. Fang-Chung Chen* “High-performance polymer solar cells” Printed electronics Asia 08’ **(invited oral presentation)**
35. Fang-Chung Chen*, Cheng-Hsiang Liao, Wei-Pang Huang, Tom Huang “Improved Air-stability of n-Channel Organic Thin Film Transistors via Surface Modification on Gate Dielectrics” Pacific Rim Meeting on Electrochemical and Solid-state Science (PRiME) (2008). (oral presentation)
36. Yung-Shiuan Chen, Shang-Chieh Chien, Fang-Chung Chen*, Jan-Tian Lian, Chien-Lung Tsou and Chi-Neng Mo “Enhanced power efficiency of single-layer white triplet polymer light-emitting diodes by blending with polymer oxides” Society for Information Display (2008).
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40. Fang-Chung Chen*, Chu-Jung Ko, and Yi-Kai Lin “Highly efficient polymer photovoltaic devices with bulk heterogeneous *p-n* junctions” 212th ECS meeting (2007) (oral presentation)
41. Shang-Chieh Chien and Fang-Chung Chen* “Polymeric electrophosphorescent devices with low turn-on voltage and high power efficiency by blending with poly(ethylene glycol)” Society for Information Display (2007)
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43. Fang-Chung Chen*, Chu-Jung Ko, and Yi-Kai Lin “Microwave annealing processes in polymer photovoltaic devices” MRS (Spring 2007) (oral presentation)
44. Fang-Chung Chen*, Wen-Kuei Huang, and Jih-Ping Lu “High-quality Microlens Arrays Fabricated by Ink-jet Printing and Micro-contact Printing” MRS (Spring 2007) (oral presentation)
45. Chiao-Shun Chuang, Shu-Ting Tsai, Fang-Chung Chen*, and Han-Ping D. Shieh “Organic thin-film transistors with reduced-photosensitivity” The 13th International Display Workshops, Otsu, Japan, Dec. 6 (2006)
46. Fang-Chung Chen*, Ssu-Fang Liu and Wen-Sheng Wang “Polarized polymer light-emitting diodes with conducting alignment layers” The 6th International Conference on Electroluminescence of Molecular materials and Related Phenomena, Hong Kong (August 2006). (oral presentation)
47. Wen-Kuei Huang, Jih-Ping Lu and Fang-Chung Chen* “Fabrication of a microlens array using ink-jet printing on a pre-patterned substrate by self-assembled monolayers” Micro & Nano Engineering, (2006).
48. Fang-Chung Chen*, Tung-Hsien Chen, and Yung-Sheng Lin, “Novel electrode architecture for transparent organic thin-film transistors” International Meeting on Information Display/International Display Manufacturing Conference, Korean (2006). (oral presentation)
49. Wen-Kuei Huang, Wen-Sheng Wang, Hui-Chun Kan, and Fang-Chung Chen* “Enhanced Light Out-coupling Efficiency of OLEDs with Self-organized Microlens Arrays” Society for Information Display (2006).
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51. Chiao-Shun Chuang, Yung-Sheng Lin, Li-Jen Kung, Dong-Sian Chen, Fang-Chung Chen*, and Han-Ping D. “Organic Thin-Film Transistors based on Nanocomposite Gate Insulators for High-

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 54. Fang-Chung Chen, and Yang Yang*, “Enhanced efficiency of plastic photovoltaic devices by blending with ionic solid electrolytes” MRS (Spring 2003) (oral presentation)
 55. Fang-Chung Chen, and Yang Yang*, Qibing Pei, “Phosphorescent light-emitting electrochemical cells” MRS (Spring 2003) (post presentation)
 56. Yang Yang*, Fang-Chung Chen, Mark. E. Thompson, “High performance polymer light-emitting diodes” ACS (Fall 2002). This paper is published in **Polymer Reprints**, 43, 487 (2002).
 57. Fang-Chung Chen, Shun-Chi Chang, Yang Yang*, “Energy transfer and triplet exciton confinement in phosphorescent polymer light-emitting diodes” TMS 2002 Electronic Materials Conference, (Spring 2002) (oral presentation)
 58. Fang-Chung Chen, Shu-Chi Chang, Gufeng He, Seungmoom Pyo, Jie Liu, Yang Yang*, Sergey Lamansky, Mark E. Thompson, Junji Kido, “The search of polymeric hosts for phosphorescent polymer light-emitting diodes” ICEL-3 (2001) (oral presentation)
 59. Shun-Chi Chang, Fang-Chung Chen, Shu-Chi Chang, Yang Yang* “The search of host materials in phosphorescent polymer light-emitting diodes” MRS (2001) (post presentation)

Domestic Conference Papers 國內研討會論文

1. Gajendra Suthar, Chih-Wei Chu, Fang-Chung Chen* “High-performance narrowband organic photodetectors based on selective exciton activated photomultiplication” Optics & Photonics Taiwan, International Conference 2023 (OPTIC 2023). (Student Paper Award, Oral)
2. Gajendra Suthar, Yu-Tang Hsiao, Kuen-Wei Tsai, Chuang-Yi Liao, Chih-Wei Chu, Yi-Ming Chang*, Fang-Chung Chen* “Morphological effects on the performance of broadband organic photomultiplication photodetectors containing selenium substituted non-fullerene acceptors” Optics & Photonics Taiwan, International Conference 2023 (OPTIC 2023).
3. Tsu-Hsin Li, Chia-Tse Hsu, Fang-Chung Chen* “Machine Learning Models for Predicting Efficiencies of Organic Photomultiple Photodetectors” Optics & Photonics Taiwan, International Conference 2023 (OPTIC 2023).
4. Wen-Chi Lin, Ching-Deng Lin, Fang-Chung Chen* “Effects of Cs ions in Organic-Inorganic Hybrid

- Perovskite Quantum Dots for X-Ray Imaging Applications” Optics & Photonics Taiwan, International Conference 2023 (OPTIC 2023).
5. Yu-Ze Zhang, Chia-Tse Hsu, Fang-Chung Chen* “Rapid Crystal Growth of Quasi-Two-Dimensional Perovskite Single Crystals for Solar Applications Using Alcohols Additives” Optics & Photonics Taiwan, International Conference 2023 (OPTIC 2023).
 6. Gautham Kumara Kabbinahithlu, Fang-Chung Chen* “Plasmonic Enhanced Photoluminescence of Perovskite Quantum Dots Using Gold Nanoparticles and Light-Emitting Applications” Optics & Photonics Taiwan, International Conference 2023 (OPTIC 2023).
 7. Tzu-Yi Lee, Pei-Tien Chen, Chia-Hung Tsai, Fang-Chung Chen, Hao-Chung Kuo* “High Reliability Perovskite Quantum Dots Using Atomic Layer Deposition Passivation for Novel Photonic Applications” Optics & Photonics Taiwan, International Conference 2023 (OPTIC 2023).
 8. Yen-Hsien Chang, Yan-Yu Shiu, Fang-Chung Chen* “Ligand Engineering of Red Perovskite Quantum Dots for Lighting Applications” Optics & Photonics Taiwan, International Conference 2023 (OPTIC 2023).
 9. Fang-Chung Chen* and Ching-Wei Lee “Self-adaptive hole transport layers for efficient inverted perovskite photovoltaics” The 15th Asian Conference on Organic Electronics (A-COE 2023).
(invited oral presentation)
 10. Gajendra Suthar, Yu-Tang Hsiao, Kuen-Wei Tsai, Chuang-Yi Liao, Chih-Wei Chu, Yi-Ming Chang*, Fang-Chung Chen* “Morphological effects on the performance of broadband organic photomultiplication photodetectors containing selenium substituted non-fullerene acceptors” The 15th Asian Conference on Organic Electronics (A-COE 2023). (Student Poster Paper Award)
 11. Gautham Kumara, Fang-Chung Chen* “Photoluminescence Enhancement of Quantum Dots Using Gold Nanoparticle-Decorated Graphene Oxides: Unveiling Plasmonic Effects and Real-World Applications” The 15th Asian Conference on Organic Electronics (A-COE 2023).
 12. Yu-Ze Zhang, Nutchha Khambunkoed, Fang-Chung Chen* “Rapid Crystal Growth of Quasi-Two-Dimensional Perovskite Single Crystals for Solar Applications” The 15th Asian Conference on Organic Electronics (A-COE 2023).
 13. Ching-Wei Lee, Fang-Chung Chen* “Self-Adaptive Transport Layers for Efficient Inverted Perovskite Photovoltaics” Optics & Photonics Taiwan, International Conference 2022 (OPTIC 2022). (Student Poster Paper Award)
 14. Cheng-Han Sung, Yen-Hsien Chang, Chien-Chung Lin, Hao-Chung Kuo, Fang-Chung Chen* “Perovskite quantum dots for light-emitting devices: Photopatternable perovskite quantum dot-polymer nanocomposites” Optics & Photonics Taiwan, International Conference 2022 (OPTIC 2022).

15. Hung-Nien Yu, Tsu-Hsin Li, Fang-Chung Chen* “Machine Learning Models for Predicting Power Conversion Efficiencies of Indoor Organic Photovoltaics” Optics & Photonics Taiwan, International Conference 2022 (OPTIC 2022).
16. Huai-Yu Lei, Tzu-Yu Hsu, Fang-Chung Chen* “Plasmonic Effects of Gold Nanoparticles on the Performance of TADF Organic Light-Emitting Diodes” Optics & Photonics Taiwan, International Conference 2021 (OPTIC 2021).
17. Hoong Lien Lai, Jing-Yuan Su, Fang-Chung Chen* “Metal-Organic Frameworks as Hole Injection Materials for Organic Light-Emitting Diodes” Optics & Photonics Taiwan, International Conference 2021 (OPTIC 2021).
18. Gautham Kumar and Fang-Chung Chen* “Plasmonic Effect of Bimetallic Au-Cu Alloy Nanoparticles on Indoor Performance of Organic Photovoltaics” Optics & Photonics Taiwan, International Conference 2020 (OPTIC 2020).
19. Yi-Fong Lai, Shun-Yu Xie and Fang-Chung Chen* “Surface Treatments Lead to Simultaneous Efficiency Improvement in Perovskite Solar Cells for Both Outdoor and Indoor applications” Optics & Photonics Taiwan, International Conference 2020 (OPTIC 2020).
20. Tzu-Hsueh Wu, Yung-Fang Yang and Fang-Chung Chen* “Surface Passivation on Single-Crystal Perovskite Micro-Plates Improves the Performance of Solar Cells” Optics & Photonics Taiwan, International Conference 2020 (OPTIC 2020).
21. Hao-Yeu Tsai, Hung-Wen Huang and Fang-Chung Chen* “Vertical Oriented Quasi-Two-Dimensional Perovskite Single Crystal Micro-Plates for Highly Efficient Solar Cells” Optics & Photonics Taiwan, International Conference 2020 (OPTIC 2020).
22. Fang-Chung Chen*, Hsin-Hung Sung, Chien-Chen Kuo Hung-Sheng Chiang and Hong-Lin Yue “Perovskite Single Crystals for Photovoltaic Applications” International Conference on Emergent Functional Matter Science 2020. Yilan, Taiwan.
23. Fang-Chung Chen*, Ming-Ju Wu, Chien-Chen Kuo, Lu-Syuan Jhuang, Shun-Shing Yang, Po-Han Chen, Zong-Chun Hsieh, Nai-Wei Teng, “Emerging Organic and Perovskite Photovoltaic Devices for Indoor Applications” Optics & Photonics Taiwan, International Conference 2019 (OPTIC 2019).
(invited oral presentation)
24. Yi-Fong Lai, and Fang-Chung Chen*, “Virtual Screening of Conjugated Polymers for Organic Photovoltaic Devices Using Support Vector Machines and Ensemble Learning” The 7th RIKEN-NCTU Symposium on Physical and Chemical Sciences (2019). (Master Student Paper Award)
25. Fang-Chung Chen* “Off-grid Photovoltaics for Smart Applications” The EITA Conference on New Materials, Nanotechnology and New Energy 2019, Hsinchu, Taiwan **(invited oral presentation)**
26. Wun-Jhen Chen, Tzu-Hsueh Wu, Fang-Chung Chen* “Enhancing the Performance of Perovskite

- Solar Cells by Utilizing the Local Surface Plasmon Effects of Copper Nanoparticles” The EITA Conference on New Materials, Nanotechnology and New Energy 2019, Hsinchu, Taiwan.
27. Shi-Da Huang, Ren-Yung Yang, Fang-Chung Chen* “Plasmonic Effects of Gold Nanoparticles on the Performance of Perovskite Quantum Dot Light-Emitting Diodes” The EITA Conference on New Materials, Nanotechnology and New Energy 2019, Hsinchu, Taiwan.
 28. Hsin-Hung Sung, Hung-Sheng Chiang, Ren-Yung Yang, Fang-Chung Chen* “Fabrication and Characteristic of Mixed-Cation Single-Crystal Plates for Perovskite Solar Cells” The EITA Conference on New Materials, Nanotechnology and New Energy 2019, Hsinchu, Taiwan.
 29. Yu-Chang Lin, Wun-Jhen Chen, and Fang-Chung Chen* “Solution-Processable Copper Nanoparticles for Plasmonic-Enhanced Perovskite Solar Cells” Optics & Photonics Taiwan, International Conference 2018 (OPTIC 2018).
 30. Chen-Min Yang, Lu-Syuan Jhuang, Fang-Chung Chen* “Plasmonic Effects of Gold Nanoparticles on the Performance of Perovskite Light-Emitting Diodes” Optics & Photonics Taiwan, International Conference 2018 (OPTIC 2018).
 31. Ming-Ju Wu, Chien-Chen Kuo, and Fang-Chung Chen* “Band-gap Engineering of Perovskite Photovoltaic Devices for Indoor Applications” Optics & Photonics Taiwan, International Conference 2018 (OPTIC 2018).
 32. Xin-Jie Chen, Ming-Ju Wu, and Fang-Chung Chen* “Semitransparent Perovskite Solar Cells and their Tandem Structures Assembled with Si Cells” Optics & Photonics Taiwan, International Conference 2017 (OPTIC 2017)
 33. Pang-Hua Huang, Yi-Chun Lai, Sih-Han Chen, Peichen Yu*, and Fang-Chung Chen ” Hybrid Carbon Nanotube/Silicon Schottky Junction Solar Cells” Optics & Photonics Taiwan, International Conference 2016 (OPTIC 2016)
 34. Chi-Yu Yang, Hao-Wu Lin*, Ken-Tsung Wong*, and Fang-Chung Chen* “Efficient Excimer Delay Fluorescence Organic Light Emission Devices Based on Fluorene Derivatives” Optics & Photonics Taiwan, International Conference 2016 (OPTIC 2016)
 35. Guan Yu Chen, Tsung Sheng Kao, Kuo Bin Hong, Yu Hsun Chou, Jiong Fu Huang, Fang Chung Chen*, Tien Chang Lu* “Lasing performance enhanced by localized surface plasmon in solution-processed perovskites” Optics & Photonics Taiwan, International Conference 2016 (OPTIC 2016) (oral presentation)
 36. Zong-Chun Hsieh, Po-Han Chen and Fang-Chung Chen* ” Organic Photovoltaic Devices Prepared with a Low-Band-Gap Polymer for Low Light Applications” Optics & Photonics Taiwan, International Conference 2015 (OPTIC 2015)
 37. Shun-Shing Yang, Nai-Wei Teng, and Fang-Chung Chen* ”Organic Photovoltaic Devices for

- Indoor Applications” Optics & Photonics Taiwan, International Conference 2015 (OPTIC 2015)
38. Shun-Shing Yang and Fang-Chung Chen* ”Organic Photovoltaic Devices for Indoor Applications” 2015 International Conference on Flexible and Printed Electronics, (The 6th ICFPE, 2015, Taipei)
 39. Zong-Chun Hsieh and Fang-Chung Chen* ” Organic Photovoltaic Devices Prepared with a Low-Band-Gap Polymer for Low Light Applications” 2015 International Conference on Flexible and Printed Electronics, (The 6th ICFPE, 2015, Taipei)
 40. Wai-Chen Lin, Hung-Wen Hsu, and Fang-Chung Chen* ” Polymer Solar Cells Prepared with Photoexfoliated Fluorinated Graphite as Cathode Buffer Layer” 2015 International Conference on Flexible and Printed Electronics, (The 6th ICFPE, 2015, Taipei)
 41. Chun-Hao Lin, Jiong-Fu Huang, and Fang-Chung Chen*, “Plasmonic Effects of Gold Nanoparticle-Decorated Graphene Oxide Nanocomposites on the Performance of Polymer Light-Emitting Devices” Optics & Photonics Taiwan, International Conference 2014 (OPTIC 2014).
 42. Ming-Kai Chuang, Shun-Shing Yang and Fang-Chung Chen*, “PEGylated gold nanoparticle-decorated graphene oxides for realizing synergistic plasmonic effects on polymer solar cells” Optics & Photonics Taiwan, International Conference 2014 (OPTIC 2014).
 43. Fang-Chung Chen* “Plasmonic nanostructures for light-trapping in organic photovoltaic devices” International Conference on New Materials, Nanotechnology and New Green Energy 2014 (EITA–New Materials 2014) (**invited talk**).
 44. Fang-Chung Chen* Ming-Kai Chuang, and Shih-Wei Lin, “Graphene Derivatives for Organic Optoelectronics” Graphene 2014 International Conference (Nov. 2014) (**invited talk**).
 45. Fang-Chung Chen*, Ming-Kai Chuang, and Shih-Wei Lin, “Plasmonic nanostructures for polymer photovoltaic devices” International Symposium on Organic Photovoltaics (OPV-2014) (**invited talk**).
 46. Chun-Hsien Chou, Fang-Chung Chen*, Li Wen-Chieh, Lin Yao-Leng, Wu Cheng-Han “Anti-reflection encapsulant for solar cells” Annual Meeting of The Physical Society of Republic of China, 2014.
 47. Chun-Hsien Chou and Fang-Chung Chen* “Ray-tracing Designed Microlenses for Improving Flexible Waveguiding Photovoltaics” Optics & Photonics Taiwan, International Conference 2013 (OPTIC 2013) (**student paper award**).
 48. An-Kai Ling, Chun-Hao Lin, and Fang-Chung Chen* “Enhanced Light Out-Coupling Efficiency of Polymer Light-Emitting Devices by Blending Low Refractive Index materials” Optics & Photonics Taiwan, International Conference 2013 (OPTIC 2013).
 49. Yan-Hao Liao, Fang-Chung Chen*, Michael H. Huang and Min-Yi Yang “Au Nanosheets Induced Surface Plasmon to Enhance Performance of Organic Solar Cells” Optics & Photonics Taiwan,

International Conference 2013 (OPTIC 2013).

50. Yen-Tseng Lin, and Fang-Chung Chen* “Multiple-device stacked structures for High-performance organic cells” Optics & Photonics Taiwan, International Conference 2013 (OPTIC 2013).
51. Chun-Hsien Chou and Fang-Chung Chen* “A Novel Concentrator Design with High Performance Flexible Waveguiding Photovoltaics” Photovoltaic Science and Engineering Conference (International PVSEC-23).
52. Shih-Wei Lin, Ming-Kai Chuang, and Fang-Chung Chen* “Gold nanoparticle–decorated graphene oxide nanocomposites for plasmonic-enhanced polymer photovoltaic devices” Photovoltaic Science and Engineering Conference (International PVSEC-23).
53. Kim-Shih Tan, Jyh-Lih Wu, Fang-Chung Chen*, Shu-Hao Chang, and Hsing-Yu Tuan “Near-Infrared Laser–Driven Polymer Photovoltaic Devices Containing Upconversion Nanocrystals”, Optics & Photonics Taiwan, International Conference 2012 (OPTIC 2012, formerly OPT 2012).
54. Chuan-Sheng Kao and Fang-Chung Chen* “Plasmonic-Enhanced Polymer Solar Cells with Inverted Structures”, Optics & Photonics Taiwan, International Conference 2012 (OPTIC 2012, formerly OPT 2012).
55. Fang-Chung Chen* “Light Harvesting Schemes for High-performance Polymer Solar Cells” International Conference on Functional Organic Materials and Related Devices 2012.
56. Chen-Wei Lin and Fang-Chung Chen* “Small Molecule Sensitizers in Polymer Photodetectors for Extended Spectral Response” Symposium on Nano Device Technology 2012.
57. Ya-Wei Chung, Hsieh Po-Cheng, Yu-Ze Chen, Yu-Lun Chueh, and Fang-Chung Chen* “Effect of Doping Ratio on the Electrical Properties of Zirconium-Indium-Zinc-Oxide Thin-film Transistors Fabricated by Using a Solution Process” Taiwan Display Conference (2012).
58. Shao-Tang Chuang, and Fang-Chung Chen* “Realization of Broad Spectral Response of Organic Photomultiple Photodetectors through Codoping Near-Infrared Dyes” International Photonics Conference (IPC 2011).
59. Jyh-Lih Wu, Ming-Kai Chuang, Kim-Shih Tan, and Fang-Chung Chen* “Near-Infrared Laser-Driven Polymer Photovoltaic Devices and Their Biomedical Applications” International Photonics Conference (IPC 2011).
60. Shu-Cheng Lin, and Fang-Chung Chen* “Charge Blocking Layers for Improving Detectivity of Organic Photomultiple Photodetectors” International Photonics Conference (IPC 2011).
61. Wai-Chen Lin*, Mei-Ju Lee, Chao-Feng Sung, Fang-Chung Chen “Inverted and semitransparent polymer solar cells” The Asian Conference on Organic Electronics” (ACOE 2011).
62. Fang-Chung Chen* “Light Harvesting Schemes for High-performance Polymer Solar Cells” 2011 Asia Pacific Academy of Materials (APAM) (2011) **(Invited)**

63. Fang-Chung Chen*, Jyh-Lih Wu, Yi Hong, and Chia-Ling Lee “Light Trapping Approaches for High-performance Polymer Solar Cells” 16th Opto-electronics and Communications Conference (OECC) (2011). **(Invited)**
64. Ya-Wei Chung, Ying-Pin Chen, and Fang-Chung Chen* “Solution-Processed ZrInZnO Semiconductor for Thin Film Transistors” International Display Manufacturing Conference (IDMC) (2011).
65. Fang-Chung Chen*, Shang-Chieh Chien, Shao-Tang Chuang, and Guan-Lin Cious “High-performance organic photomultiple photodetectors exhibiting broadband response” 2010 International Conference on Optics and Photonics in Taiwan (OPT’ 10)
66. Ming-Kai Chuang and Fang-Chung Chen* “A novel transfer-printing technique for flexible polymer solar cells” 2010 International Conference on Optics and Photonics in Taiwan (OPT’ 10)
67. 陳宗達、陳方中*，可撓式有機薄膜電晶體在彎曲應力下的電性探討，Taiwan Display Conference (2010). (Student paper award)
68. Tzung-Han Tsai, Shang-Chieh Chien, and Fang-Chung Chen* “Performance-enhanced n-channel organic thin-film transistors incorporating poly(ethylene glycol)” Taiwan Display Conference (2010).
69. Shang-Chieh Chien, and Fang-Chung Chen*, “Nanoscale functional interlayers formed through spontaneous vertical phase separation in high-performance polymer photovoltaic devices”, Optics and Photonics Taiwan (OPT) (2009). (Student paper award)
70. Jyh-Lih Wu, Yi Hung, and Fang-Chung Chen*, *The exploitation of optical interference for improving the performance of inverted polymer solar cells”, Optics and Photonics Taiwan (OPT) (2009). (Student paper award)
71. Bing-Ruei Zeng, Fang-Chung Chen*, Shang-Chieh Chien, Chi-Neng Mo, Huai-An Li, and Shou-Cheng Weng, “Hysteresis-free photopatternable dielectrics for flexible organic thin-film transistors” International Display Manufacturing Conference/3D System and Application/Asia Display, (2009).
72. Yi-Hsing Chu, Gao-Ming Wu, Wei-Kuan Yu, Fang-Chung Chen, and Han-Ping D. Shieh, “Complementary circuits of ambipolar organic/oxide thin-film transistors for AMFPD applications” International Display Manufacturing Conference/3D System and Application/Asia Display, (2009). (Best paper award)
73. Jyh-Lih Wu, Fang-Chung Chen*, Kuo-Huang Hsieh, and Wen-Chang Chen *Transparent cathode for bulk-heterojunction organic solar cells”, International Conference on Optics and Photonics in Taiwan (OPT) (2008) (Student paper award)
74. Wen-Che Huang, Shang-Chieh Chien and Fang-Chung Chen*, “Highly efficient semi-transparent

- polymer solar cells”, International Conference on Optics and Photonics in Taiwan (OPT) (2008)
75. Shang-Chieh Chien, Hsin-Chen Tseng and Fang-Chung Chen* “Solvent mixtures for improving device efficiency of polymer photovoltaic devices” International Conference on Optics and Photonics in Taiwan (OPT) (2008).
 76. Yu-Jen Huang, Hsiao-Fen Chang, Su-Ting Tsai, Chiao-Shun Chuang, Jung-An Cheng, Fang-Chung Chen*, and Han-Ping D. Shieh “Color filtering functional organic thin-film transistors” International Display Manufacturing Conference & Exhibition, (2007).
 77. Yin-Ting Shih and Fang-Chung Chen* “The post-annealing effect on the electrical properties of pentacene thin film transistors” International Display Manufacturing Conference & Exhibition, (2007).
 78. Shu-Ting Tsai and Fang-Chung Chen* “Effect of the surface treatments on the turn-on voltages of pentacene-based thin film transistors” International Display Manufacturing Conference & Exhibition, (2007).
 79. Ying-Pin Chen and Fang-Chung Chen* “Effect of deposition temperature on the channel and contact resistance of pentacene thin film transistors” International Display Manufacturing Conference & Exhibition, (2007).
 80. Hao-Wei Ting and Fang-Chung Chen* “Triplet energy transfer between a conjugated polymer and phosphorescent molecules” International Display Manufacturing Conference & Exhibition, (2007).
 81. Yan-Chu Tsai, Shu-Ting Tsai, Chiao-Shun Chuang, Jung-An Cheng, Fang-Chung Chen, and Han-Ping D. Shieh* “Organic thin-film transistors with novel solution-process polymeric gate insulators” International Display Manufacturing Conference & Exhibition, (2007).
 82. Fang-Chung Chen* “Recent Developments in polymer photovoltaic devices” Flexible Electronics – Organic Photovoltaic Workshop (2007). **(Invited)**
 83. Fang-Chung Chen* “Recent development of phosphorescent polymer light-emitting diodes and other organic electronics” The 5th International OLED and PLED workshop in Taipei (2007). **(Invited)**
 84. Jyh-Lih Wu, Fang-Chung Chen*, and Sidney S. Yang “Highly Efficient Organic Solar Cell with an Interlayer of Cesium Carbonate” Optics and Photonics Taiwan (2006).
 85. Yi-Kai Lin, Fang-Chung Chen* and Chu-Jung Ko “Manipulation of the phase separation in organic blends by self-alignment method in sub-micron scale” Optics and Photonics Taiwan (2006).
 86. Shang-Chieh Chien, and Fang-Chung Chen* “Polymer electrophosphorescent devices with Low turn-on voltage and high power conversion efficiencies” Optics and Photonics Taiwan (2006).
 87. Ying-Pin Chen and Fang-Chung Chen* “Effect of deposition temperature on the device properties of pentacene thin-film transistors” Optics and Photonics Taiwan (2006).

88. Chu-Jung Ko, Yi-Kai Lin, and Fang-Chung Chen* “Microwave annealing processes in polymer photovoltaic devices” International Symposium on Flexible electronics and Display, (2006)
89. Tung-Hsien Chen, and Fang-Chung Chen* “Metal oxides as the buffer layers for organic thin-film transistors” Taiwan Display Conference (2006)
90. Li-Jen Kung, and Fang-Chung Chen* “High-performance organic thin-film transistors with copper phthalocyanine-modified source/drain contacts” Taiwan Display Conference (2006)
91. 劉思芳，王文生，陳方中*，偏極化高分子發光二極體之新型導電配向層，Taiwan Display Conference (2006)
92. 甘惠君，王文生，黃文奎，陳方中*，利用自組裝微小陣列透鏡增加有機發光二極體的光耦合效率，Taiwan Display Conference (2006)
93. Fang-Chung Chen* “The development of high-performance organic electronics” ITRI 學員交流論壇, (June 2006) (invited).
94. Fang-Chung Chen* “Organic Photovoltaic Devices for Low Power Sensor Networks” Wireless Sensor Network Workshop 2005
95. Chiao-Shun Chuang, Han-Ping D. Shieh, Yang Yang, and Fang-Chung Chen* “Numerical Prediction of Effective Dielectric Constant in Organic Thin-film Transistors with Nanocomposite Gate Insulator” International Display Manufacturing Conference & Exhibition, (2005).
96. Wen-Kuei Huang, Chu-Jung Ko, Hui-Chun Kan, and Fang-Chung Chen* “Fabrication of self-organized microlens array on plastic substrates” Optics and Photonics Taiwan (2005).

Other Publications

其他 (中文專刊)

1. 高宗聖、陳方中、盧廷昌，2017 年，「淺談鈣鈦礦材料雷射發光特性之操控」，科儀新知，211 期，p60-67。
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