

A. 期刊論文

a. SCI/SSCI 期刊論文

1. H-T Liao, B-W Shih, W-P Hsieh, D-Y Su, **F.-Y. Tsai***, “Enhanced thermoelectric properties of atomic-layer-deposited ZnO-Based superlattice thin films by tuning the composition and structure of interlayers”, *Ceramics International* (2022), 48, 7, 10202-10208, <https://doi.org/10.1016/j.ceramint.2021.12.233>
2. M.-H. Tseng, D.-Y. Su, G.-L. Chen, **F.-Y. Tsai***, “Nano-Laminated Metal Oxides/Polyamide Stretchable Moisture- and Gas-Barrier Films by Integrated Atomic/Molecular Layer Deposition”, *ACS Appl. Mater. Interfaces* (2021), DOI: 10.1021/acsami.1c03895
3. S.-M. Hsu, D.-Y. Su, **F.-Y. Tsai**, J.-Z. Chen, I.-C. Cheng, “Flexible Complementary Oxide Thin-Film Transistor-Based Inverter With High Gain”, *IEEE Trans. Electron. Devices* (2021), 68, 3, 1070-1074
4. C.-H. Hou, S.-H. Hung, L.-J. Jhang, K.-J. Chou, Y.-K. Hu, P.-T. Chou, W.-F. Su, **F.-Y. Tsai**, J. Shieh, J.-J. Shyue, “Validated Analysis of Component Distribution Inside Perovskite Solar Cells and Its Utility in Unveiling Factors of Device Performance and Degradation”, *ACS Appl. Mater. Interfaces* (2020), 12, 20, 22730-22740
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7. D.-Y. Su, C.-C. Hsu, W.-H. Lai, **F.-Y. Tsai***, “Fabrication, mechanisms, and properties of high-performance flexible transparent conductive gas-barrier films based on Ag nanowires and atomic layer deposition”, *ACS Appl. Mater. Interfaces* (2019), 11, 37, 34212-34221
8. D.-Y. Su, Y.-H. Kuo, M.-H. Tseng, **F.-Y. Tsai***, “Effects of surface pretreatment and deposition conditions on the gas permeation properties and flexibility of Al₂O₃ films on polymer substrates by atomic layer deposition”, *J. Coat. Technol. Res.* (2019), 16(6), p. 1751-1756
9. A. Huang, C.-C. Kan, S.-C. Lo, L.-H. Chen, D.-Y. Su, J. F. Soesanto, C.-C. Hsu, **F.-Y. Tsai***, K.-L. Tung*, “Nanoarchitected design of porous ZnO@copper membranes enabled by atomic-layer-deposition for oil/water separation”, *J. Mem. Sci.* (2019) 582, p. 120-131
10. L.-H. Chen, Y.-R. Chen, A. Huang, C.-H. Chen, D.-Y. Su, C.-C. Hsu, **F.-Y. Tsai**, K.-L. Tung, “Nanostructure depositions on alumina hollow fiber membranes for enhanced wetting resistance during membrane distillation,” *J. Membrane Sci.*, 564 (2018), 227-236
11. C.-H. Hou, J.-J. Shyue, W.-F. Su, **F.-Y. Tsai***, “Catalytic metal-induced crystallization of sol-gel metal oxides for high-efficiency flexible perovskite solar cells”, *J. Mater. Chem. A*, 2018, 6, 16450–16457

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24. **F.-Y. Tsai***, Yu Fu, “Organic thin-film transistors with solution-processed encapsulation”, in *Encapsulation Nanotechnologies*, Chapter 7, pp. 203-221, Scrivener Publishing/Wiley, Beverly, MA, USA
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b. 其他期刊論文

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B. 會議論文

a. 國外會議論文

1. B.-W. Shi, Y.-Y. Wei, M.-H. Tseng, **F.-Y. Tsai**, “Metal Oxide and Polymer Superlattice Films by Atomic and Molecular Layer Deposition”, The 6th Federation of Asian Polymer Societies Polymer Congress (FAPS 2019), (10/27 – 10/30/2019), Taipei, Taiwan
2. **F.-Y. Tsai**, “Functional Thin films for Flexible/Organic Electronics”, CityU-NTU MSE Workshop, Hong Kong (6/24-6/25/2019)
3. C.-H. Hou, J.-J. Shyue, W.-F. Su, and **F.-Y. Tsai**, “Efficient and Stable Flexible Perovskite Solar Cells with Nano-Engineered Solution-Processed NiO Hole-Transporting Layers”, Nanotech France 2018, Paris, France (6/27-6/29/2018)
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 10. Y. Fu, **F.-Y. Tsai**, “Flexible ZnO Thin-Film Transistors by Atomic Layer Deposition”, IRMRS-ICA, Taipei, Taiwan (2011/9/16-2011/9/20)
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b. 國內會議論文

1. M.-H. Tseng, D.-Y. Su, G.-L. Chen, **F.-Y. Tsai***, “Metal Oxides/Polymer Superlattices by Atomic/Molecular Layer Deposition as Stretchable Moisture- and Gas-Barrier Films”, 2022 International Conference on Modern Challenges in Polymer Science and Technology, Taichung, Taiwan
2. Y.-J. Chen, D.-Y. Su, **F.-Y. Tsai**, “Polyacrylate/Graphene Composite Films from Graphene Dispersions Prepared by a Solvothermal Method”, 2020 International Conference on Modern Challenges in Polymer Science and Technology, Taipei, Taiwan

3. M.-Y. Ho, **F.-Y. Tsai**, “Low-temperature Atomic Layer Deposition of Tin Oxide Thin Films as Channel Layers for Thin-Film Transistors”, MRS-T 2020 (11/6 - 11/7/2020), Taipei, Taiwan
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11. C.-W. Chen, D.-Y. Su, **F.-Y. Tsai**, “One-step synthesis of high-aspect-ratio silver nanowires for highly conductive polymer composite fibers”, 2017 Taiwan Polymer Society Meeting (2017)
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C. 其他著作

1. 平面顯示器，高立出版社，97年（共同作者）。
2. **F.-Y. Tsai***, Yu Fu, “Organic thin-film transistors with solution-processed encapsulation”, in *Encapsulation Nanotechnologies*, Chapter 7, pp. 203-221, Scrivener Publishing/Wiley, Beverly, MA, USA