

一. SCI 期刊論文總共 102 篇，第一或通訊作者佔 49 篇。以下為著作分別依 A. 材料與 B. 原子能兩類應用領域列舉：

A. 金屬、高分子、奈米有機/無機混摻材料、有機與鈣鈦礦太陽能電池、燃料電池、儲能與能源元件材料領域之 SCI 論文目錄：本項中 2018 年(含)前發表 85 篇，其總被引用次數為 2314 次(依 ISI web of science 統計)，平均每篇被引用 27 次(h index = 28)，本項中近九成論文使用 X 光或中子散射技術做為主要分析工具；*代表通訊作者，Impact Factor (IF) 統計以 2018 年為主，**IF 超過 12.0 之論文有十二篇(擔任第一或通訊作者篇數佔五篇)**，其中兩篇被 ISI 機構列為高度被引用論文(**highly cited paper**)，即論文在 10 年內被引用次數在該 SCI 分類領域排名前 1% 以內。

- (1) Y.-C. Huang*, W.-S. Liu, **C.-S. Tsao***, L. Wang*, “Mechanistic Insights into the Effect of Polymer Regioregularity on the Thermal Stability of Polymer Solar Cells”, *ACS Appl. Mater. Interfaces* (2019), Vol. 11, pp. 40310–40319. (IF = 8.46)
- (2) H.-C. Wang, Y.-C. Lin, C.-H. Chen, C.-H. Huang, B. Chang, Y.-L. Liu, H.-W. Cheng, **C.-S. Tsao**, K.-H. Wei*, “Hydrogen plasma-treated MoSe₂ nanosheets enhance the efficiency and stability of organic photovoltaics”, *Nanoscale* (2019), Vol. 11, pp.17460–17470. (IF = 6.97)
- (3) Y.-C. Huang*, D.-H. Lu, C.-F. Li, C.-W. Chou, H.-C. Cha, **C.-S. Tsao***, “Printed Silver Grid Incorporated With PEIE Doped ZnO as an Auxiliary Layer for High-Efficiency Large-Area Sprayed Organic Photovoltaics”, *IEEE Journal of Photovoltaics* (2019), Vol. 9, pp.1297-1301. (IF = 3.40)
- (4) H.-Y. Lin, C.-Y. Chen, B.-W. Hsu, Y.-L. Cheng, W.-L. Tsai, Y.-C. Huang, **C.-S. Tsao**, H.-W. Lin*, “Efficient Cesium Lead Halide Perovskite Solar Cells through Alternative Thousand-Layer Rapid Deposition”, *Adv. Funct. Mater.* (2019), Vol. 29, pp.1905163. (IF = 15.62)
- (5) H.-W. Cheng, H. Zhang, Y.-C. Lin, N.-Z. She, R. Wang, C.-H. Chen, J. Yuan, **C.-S. Tsao**, A. Yabushita, Y. Zou, F. Gao, P. Cheng, K.-H. Wei*, Y. Yang*, “Realizing Efficient Charge/Energy Transfer and Charge Extraction in Fullerene-Free Organic Photovoltaics via a Versatile Third Component”, *Nano Lett.* (2019), Vol. 19, pp.5053–5061. (IF = 12.28)
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- (7) Y.-M. Sung, Y.-C. Huang, F. S.-S. Chien, **C.-S. Tsao**, “Mechanism and Analysis of Thermal Burn-In Degradation of OPVs Induced by Evaporated HTL”, *IEEE Journal of Photovoltaics* (2019), Vol. 9, pp.694-699. (IF = 3.40)
- (8) K.-L. Liu, C.-H. Chao, H.-C. Lee, **C.-S. Tsao**, J. Fang, N.-L. Wu, C.-Y. Chao*, “A novel non-porous separator based on single-ion conducting triblock copolymer for stable lithium electrode deposition”, *J. Power Sources* (2019), Vol. 419, pp.58–64. (IF = 7.47)
- (9) Y.-C. Huang, **C.-S. Tsao**, S.-K. Wu*, “Evolution and Growth Kinetics of η Precipitates in Naturally Aged MgLiAlZn Alloy Studied by In Situ Small-Angle X-ray Scattering”, *Metallurgical*

& *Materials Transactions A* (2019), Vol. 50A, pp.1949-1959.

- (10) Y.-C. Lin, Y.-J. Lu, **C.-S. Tsao**, A. Saeki, J.-X. Li, C.-H. Chen, H.-C. Wang, H.-C. Chen, D. Meng, K.-H. Wu, Y. Yang, K.-H. Wei, “Enhancing photovoltaic performance by tuning the domain sizes of a small-molecule acceptor by side-chain-engineered polymer donors”, *J. Mater. Chem. A* (2019), Vol. 7, pp.3072–3082. (IF = 10.73)
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- (12) Y.-C. Huang*, C.-F. Lia, Z.-H. Huang, P.-H. Liu, **C.-S. Tsao***, “Rapid and sheet-to-sheet slot-die coating manufacture of highly efficient perovskite solar cells processed under ambient air”, *Solar Energy* (2019), Vol. 177, pp.255–261. (IF = 4.67)
- (13) C.-T. Yen, Y.-C. Huang*, Z.-L. Yu, H.-C. Cha, H.-T. Hsiao, Y.-T. Liang, F. S.-S. Chien, **C.-S. Tsao***, “Performance Improvement and Characterization of Spray-Coated Organic Photodetectors”, *ACS Appl. Mater. Interfaces* (2018), Vol. 10, pp. 33399-33406. (cited times = 5, IF = 8.46)
- (14) Y.-C. Huang, C.-S. Tsao, S.-K. Wu*, “A Study on the Nanoparticles Evolution in Isothermally Aged Strain Glass of Ti_{48.7}Ni_{51.3} Shape Memory Alloy by In Situ Small-Angle X-ray Scattering”, *Metals* (2018), Vol. 8, 352. (cited times = 1)
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- (19) Y. C. Huang*, H. C. Cha, C. Y. Chen, **C. S. Tsao**, “A universal roll-to-roll slot-die coating approach towards high-efficiency organic photovoltaics”, *Progress of Photovoltaic: Res Appl.* (2017), Vol.25, pp. 928–935. (cited times = 16, IF = 7.78)
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