

劉柏良

著作目錄

期刊論文

1. Jen-Chuan Tung*, Chi-Hsuan Lee, Po-Liang Liu, and Yin-Kuo Wang (2022, Jun). Electronic Band Structures of the Possible Topological Insulator $\text{Pb}_2\text{BiBrO}_6$ and $\text{Pb}_2\text{SeTeO}_6$ Double Perovskite: An Ab Initio Study. *Applied Sciences*, Vol. 12, pp. 5913. (SCI, 55/170, ENGINEERING, MULTIDISCIPLINARY). MOST 110-2218-E-A49-020-MBK.
2. Jen-Chuan Tung, Shih-Wei Huang, Che-An Pai, Ray-Hua Horng, Cheng-Chung Chang, Dun-Ru Hung, and Po-Liang Liu* (2022, Jun). Ab Initio Studies of Work Function Changes of CO Adsorption on Clean and Pd-Doped $\text{ZnGa}_2\text{O}_4(111)$ Surfaces for Gas Sensors. *Applied Sciences*, Vol. 12, pp. 5978. (SCI, 55/170, ENGINEERING, MULTIDISCIPLINARY). MOST 110-2218-E-A49-020-MBK. 本人為通訊作者。
3. Apoorva Sood, Fow-Gow Tarntair, Yu-Xuan Wang, Ting-Chang Chang, Yu-Hsuan Chen, Po-Liang Liu, Ray-Hua Horng (2021, Oct). Performance enhancement of ZnGa_2O_4 Schottky type deep-ultraviolet photodetectors by oxygen supercritical fluid treatment. *Results in Physics*, Vol. 29, pp. 104764. (SCI, 18/85, PHYSICS, MULTIDISCIPLINARY, 2020).
4. Jen-Chuan Tung, Ding-Yuan Wang, Yu-Hsuan Chen, and Po-Liang Liu (2021, Jun). Influences of Work Function Changes in NO_2 and H_2S Adsorption on Pd-Doped $\text{ZnGa}_2\text{O}_4(111)$ Thin Films: First-Principles Studies. *Applied Sciences*, Vol. 11, pp. 5259. (SCI, 55/170, ENGINEERING, MULTIDISCIPLINARY). MOST 108-2221-E-005-001. 本人為通訊作者。
5. Jen-Chuan Tung, Yu-Hsuan Hsieh, and Po-Liang Liu (2021, Jun). Strain Induced Topological Insulator Phase in CsPbBr_{3-x} ($x = 0, 1, 2, \text{ and } 3$) Perovskite: A Theoretical Study. *Applied Sciences*, Vol. 11, pp. 5353. (SCI, 55/170, ENGINEERING, MULTIDISCIPLINARY, 2020). MOST 108-2221-E-005-001. 本人為通訊作者。
6. Ray-Hua Horng*, Yu-Cheng Kao, Apoorva Sood, Po-Liang Liu, Wei-Cheng Wang, and Yen-Jui Teseng (2021, Jun). GaInP/GaAs/poly-Si Multi-Junction Solar Cells by in Metal Balls Bonding. *Crystals*, Vol. 11, pp. 726. (SCI, 147/381, MATERIALS SCIENCE, MULTIDISCIPLINARY, 2020). (2021, June), , *Crystals*, Vol. 11, pp. 726 (SCI, 147/381, MATERIALS SCIENCE,

- MULTIDISCIPLINARY, 2020). Impact Factor: 2.589..
7. Jen-Chuan Tung, Bang-Wun Lin, and Po-Liang Liu* (2020, Dec). Intermediate Band Studies of Substitutional V²⁺, Cr²⁺, and Mn²⁺ Defects in ZnTe Alloys. *Applied Sciences*, Vol. 10, pp. 8937. (SCI, 32/91, ENGINEERING, MULTIDISCIPLINARY). MOST 108-2221-E-005-001. 本人為通訊作者. Impact Factor: 2.474.
 8. Jen-Chuan Tung, Tsung-Che Li, Yen-Jui Teseng, and Po-Liang Liu* (2020, Dec). Effect of Nitrogen on the Growth of (100)-, (110)-, and (111)-Oriented Diamond Films. *Applied Sciences*, Vol. 11, pp. 126. (SCI, 32/91, ENGINEERING, MULTIDISCIPLINARY). MOST 108-2221-E-005-001. 本人為通訊作者.
 9. Jen-Chuan Tung, Yi-Hung Chiang, Ding-Yuan Wang, and Po-Liang Liu* (2020, Dec). Adsorption of NO₂ and H₂S on ZnGa₂O₄(111) Thin Films: A First-Principles Density Functional Theory Study. *Applied Sciences*, Vol. 10, pp. 8822. (SCI, 32/91, ENGINEERING, MULTIDISCIPLINARY). MOST 108-2221-E-005-001. 本人為通訊作者. Impact Factor: 2.474.
 10. Sheng-Fang Huang, Yen-Cheng Chang, and Po-Liang Liu* (2020, Dec). New Ternary Compounds of the Composition Cu₂SnTi₃ and Their Crystal Structures. *Applied Sciences*, Vol. 10, pp. 8776. (SCI, 32/91, ENGINEERING, MULTIDISCIPLINARY). MOST 108-2221-E-005-001. 本人為通訊作者. Impact Factor: 2.474.
 11. Po-Liang Liu (2020, Jun). An efficient materials genome method to predict heterostructure interfaces. *Materials Today Communications*, Vol. 23, pp. 100866. (SCI, 151/314, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 108-2221-E-005-001. 本人為第一作者 通訊作者. Impact Factor: 2.678.
 12. Jung-Yao Yeh, Chih-Cheng Chen, Po-Liang Liu*, and Ying-Hsuan Huang (2020, Jan). High-Payload Data-Hiding Method for AMBTC Decompressed Images. *Entropy*, Vol. 22, pp. 145. (SCI, 33/85, PHYSICS, MULTIDISCIPLINARY). MOST 108-2221-E-005-001. 本人為通訊作者. Impact Factor: 2.494.
 13. Ming-Chun Tseng, Dong-Sing Wu, Chi-Lu Chen, Hsin-Ying Lee, Cheng-Yu Chien, Po-Liang Liu, Ray-Hua Horng (2019, Jun). Characteristics of atomic layer deposition-grown zinc oxide thin film with T and without aluminum. *Applied Surface Science*, Vol. 491, pp. 535-543. (SCI, 1/21, MATERIALS SCIENCE, COATINGS & FILMS). Impact Factor: 6.182.
 14. Min-Ru Wu, Wei-Zhong Li, Chun-Yi tung, Chiung-Yi Huang, Yi-Hung Chiang, po-Liang Liu, and Ray-Hua Horng* (2019, Apr). No gas sensor based on ZnGa₂O₄ epilayer grown by metalorganic chemical vapor deposition. *Scientific reports*, Vol. 9, pp. 7459. (SCI, 17/71, MULTIDISCIPLINARY).
 15. Cheng-Yu Chien, Jung-Yao Yeh, Young-Chin Huang, Ming-Tzer Lin, and Po-

Liang Liu (2019, Feb). Ab-initio study of (111) to (001) texture transformation in Ag thin films. *Materials Transactions*, Vol. 60, No. 3 (2019) pp. 437 to 440. (SCI, 282/314, MATERIALS SCIENCE, MULTIDISCIPLINARY). 本人為通訊作者. Impact Factor: 0.731.

16. Li-Chung Cheng, Min-Ru Wu, Chiung-Yi Huang, Tzu-Kuang Juang, Po-Liang Liu, and Ray-Hua Horng* (2019, Jan). Effect of Defects on the Properties of ZnGa₂O₄ Thin-Film Transistors. *ACS Applied Electronic Materials*, Vol. 1, pp. 253-259.
17. Ray-Hua Horng, Chiung-Yi Huang, Sin-Liang Ou, Tzu-Kuang Juang, and Po-Liang Liu (2017, Oct). Epitaxial Growth of ZnGa₂O₄: A New, Deep Ultraviolet Semiconductor Candidate. *Crystal Growth & Design*, Vol. 17, pp. 6071-6078. (SCI, 5/26, CRYSTALLOGRAPHY). Impact Factor: 4.089.