

1. Chun-Chih Hsu, Bo-Chao Huang, Michael Schnedler, Ming-Yu Lai, Yuh-Lin Wang, Rafal E. Dunin-Borkowski, Chia-Seng Chang, Ting-Kuo Lee, Philipp Ebert, and Ya-Ping Chiu, Atomically resolved interlayer charge ordering and its interplay with superconductivity in $\text{YBa}_2\text{Cu}_3\text{O}_6.81$. (Submitted)
2. Ting-Hsun Yang, Shao-Heng Yang, Yu-Chuan Chen, Darwin Kurniawan, Wei-Hung Chiang, Ya-Ping Chiu, and Chung-Wei Kung, Probing Local Donor-Acceptor Charge Transfer in a Metal–Organic Framework *via Scanning Tunneling Microscope*. (Revised)
3. Wei-Chao Chen, Cheng-Ying Chen, Yi-Rung Lin, Jan-Kai Chang, Chun-Hsiang Chen, Ya-Ping Chiu, Chih-I. Wu, Kuei-Hsien Chen**, Li-Chyong Chen*, Interface engineering of CdS/CZTSSe heterojunctions for enhancing the $\text{Cu}_2\text{ZnSn}(\text{S},\text{Se})_4$ solar cell efficiency. *Materials Today Energy*, 13, 256 (2019).
4. Hung-Chang Hsu, Bo-Chao Huang, Shu-Cheng Chin, Cheng-Rong Hsing, Duc-Long Nguyen, Michael Schnedler, Raman Sankar, Rafal E. Dunin-Borkowski, Ching-Ming Wei, Chun-Wei Chen, Philipp Ebert*, and Ya-Ping Chiu*, Photodriven Dipole Reordering: Key to Carrier Separation in Metalorganic Halide Perovskites. *ACS Nano*, 13, 4, pp 4402 (2019).
5. M. D. Siao, W. C. Shen, R. S. Chen*, Z. W. Chang, M. C. Shih, Y. P. Chiu and C. M. Cheng, Two-dimensional electronic transport and surface electron accumulation in MoS_2 , *Nature Communications* 9 (1), 1442 (2018).
6. Bo-Chao Huang, Pu Yu*, Y. H. Chu, Chia-Seng Chang, Ramamoorthy Ramesh, Rafal E. Dunin-Borkowski, Philipp Ebert, and Ya-Ping Chiu* (2018, Feb). Atomically Resolved Electronic States and Correlated Magnetic Order at Termination Engineered Complex Oxide Heterointerfaces. *ACS nano*, 12 (2), 1089 (2018).
7. Heng-Jui Liu, Jing-Ching Wang, Deok-Yong Cho, Kang-Ting Ho, Jheng-Cyuan Lin, Bo-Chao Huang, Yue-Wen Fang, Yuan-Min Zhu, Qian Zhan, Lin Xie, Xiao-Qing Pan, Ya-Ping Chiu, Chun-Gang Duan, Jr-Hau He, and Ying-Hao Chu*. Giant Photoresponse in Quantized SrRuO_3 Monolayer at Oxide Interfaces. *ACS Photonics*, 5, 1041 (2018).
8. Tzu-Pei Chen, Chung-Wei Lin, Shao-Sian Li, Yung-Han Tsai, Cheng-Yen Wen, Wendy Jessica Lin, Fei-Man Hsiao, Ya-Ping Chiu, Kazuhito Tsukagoshi, Minoru Osada*, Takayoshi Sasaki, and Chun-Wei Chen* (2018, Jan). Self-Assembly Atomic Stacking Transport Layer of 2D Layered Titania for Perovskite Solar Cells with Extended UV Stability. *Advanced Energy Materials*, 8(2), 1701722 (2018).
9. Min-Chuan Shih, Shao-Sian Li, Cheng-Hua Hsieh, Ying-Chiao Wang, Hung-Duen Yang, Ya-Ping Chiu*, Chia-Seng Chang, and Chun-Wei Chen* (2017, Feb). Spatially Resolved Imaging on Photocarrier Generations and Band Alignments at

- Perovskite/PbI₂ Heterointerfaces of Perovskite Solar Cells by Light-Modulated Scanning Tunneling Microscopy. *Nano Letters*, 17(2), 1154 (2017).
- 10. Fu-Yu Shih, Yueh-Chun Wu, Yi-Siang Shih, Ming-Chiuan Shih, Tsuei-Shin Wu, Po-Hsun Ho, Chun-Wei Chen, Yang-Fang Chen, Ya-Ping Chiu & Wei-Hua Wang*, Environment-insensitive and gate-controllable photocurrent enabled by bandgap engineering of MoS₂ junctions. *Scientific Reports*, 7:44768 (2017).
 - 11. F.-M. Hsiao, M. Schnedler, V. Portz, Y.-C. Huang, B.-C. Huang, M.-C. Shih, C.-W. Chang, L.-W. Tu, H. Eisele, R. E. Dunin-Borkowski, Ph. Ebert, and Y.-P. Chiu (2017, Jan). Probing defect states in polycrystalline GaN grown on Si(111) by sub-bandgap laser-excited scanning tunneling spectroscopy. *Journal of Applied Physics*, 121(1), 015701 (2017).
 - 12. Heng-Jui Liu, Jheng Cyuan - Lin, Yue-Wen Fang, Jing-Ching Wang, Bo-Chao Huang, Xiang Gao, Rong Huang, Philip R. Dean, Peter D. Hatton, Yi-Ying Chin, Hong-Ji Lin, Chien-Te Chen, Yuichi Ikuhara, Ya-Ping Chiu, Chia-Seng Chang, Chun-Gang Duan, Qing He*, and Ying-Hao Chu* (2016, Dec). A metal-insulator transition of the buried MnO₂ monolayer in complex oxide heterostructure. *Advanced Materials*, 28(41), 9142 (2016).
 - 13. Zhiyuan Sun, Ori Hazut, Bo-Chao Huang, Ya-Ping Chiu*, Chia-Seng Chang, Roie Yerushalmi*, Lincoln J. Lauhon*, and David N. Seidman* (2016, Jul). Dopant Diffusion and Activation in Silicon Nanowires Fabricated by ex situ Doping: A Correlative Study via Atom-Probe Tomography and Scanning Tunneling Spectroscopy. *Nano Letters*, 16(7), 4490 (2016).
 - 14. Jheng-Cyuan Lin, Tra-Vu Thanh, Dung-Sheng Tsai, Tai-Te Lin, Po-Cheng Huang, Wei-Lun Hsu, Hui Jun Wu, Rong Huang, Nguyen Van Chien, Ryuji Yoshida, Jiunn-Yuan Lin, Yuichi Ikuhara, Ya-Ping Chiu, Shangjr Gwo, Din Ping Tsai, Jr-Hau He, and Ying-Hao Chu* (2016, Jan). Control of metal-insulator transition at complex oxide heterointerface through visible light. *Advanced Materials*, 28(4), 764 (2016).
 - 15. Po-Hsun Ho, Chun-Hsiang Chen, Fu-Yu Shih, Yi-Ren Chang, Wei-Hua Wang, Min-Chuan Shih, Wei-Ting Chen, Min-Ken Li, Yi-Siang Shih, Ya-Ping Chiu*, Chun-Wei Chen* (2015, Dec). Precisely-controlled ultrastrong photoinduced doping at graphene-heterostructures assisted by trap-state-mediated charge transfer. *Advanced Materials*, 27(47), 7809 (2015).
 - 16. Po-Hsun Ho, Wei-Chen Lee, Yi-Ting Liou, Ya-Ping Chiu, Yi-Siang Shih, Chun-Chi Chen, Pao-Yun Su, Min-Ken Li, Hsuen-Li Chen, Chi-Te Liang and Chun-Wei Chen* (2015, Sep). Sunlight-activated graphene-heterostructure transparent cathodes: enabling high-performance n-graphene/p-Si Schottky junction photovoltaics. *Energy & Environmental Science*, 8(7), 2085 (2015).

17. Ya-Ping Chiu*, Bo-Chao Huang, Min-Chuan Shih, Po-Cheng Huang and Chun-Wei Chen (2015, Sep). Atomic-scale mapping of electronic structures across heterointerfaces by cross-sectional scanning tunneling microscopy. *Journal of Physics: Condensed Matter*, 27(34), 343001 (2015)
18. Ori Hazut, Bo-Chao Huang, Adi Pantzer, Iddo Amit, Yossi Rosenwaks, Amit Kohn, Chia-Seng Chang, Ya-Ping Chiu*, and Roie Yerushalmi* (2014, Aug). Parallel p–n Junctions across Nanowires by One-Step Ex Situ Doping. *ACS Nano*, 8(8), 8357 (2014).J. C. Yang, C. H. Yeh, Y. T. Chen, S. C. Liao, R. Huang, H. J. Liu, C. C. Hung,S. H. Chen, S. L. Wu, C. H. Lai, Y. P. Chiu, P. W. Chiu and Y. H. Chu* (2014, Jul). Conduction control at ferroic domain walls via external stimuli. *Nanoscale*, 6(18), 10524 (2014)