



# Wen-Yen Tzeng 曾文彥

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Materials Characterization Laboratory

## Research Field

Functional materials  
Strongly correlated materials  
Laser spectroscopy

## Education

Ph. D., Department of Electrophysics, National Chiao Tung University, Taiwan

## Publications

### 1.1 Journal Papers

1.1.1 Nguyen Nhat Quyen, Wen-Yen Tzeng, Chih-En Hsu, I-An Lin, Wan-Hsin Chen, Hao-Hsiang Jia, Sheng-Chiao Wang, Cheng-En Liu, Yu-Sheng Chen, Wei-Liang Chen, Ta-Lei Chou, I-Ta Wang, Chia-Nung Kuo, Chun-Liang Lin, Chien-Te Wu, Ping-Hui Lin, Shih-Chang Weng, Cheng-Maw Cheng, Chang-Yang Kuo, Chien-Ming Tu, Ming-Wen Chu, Yu-Ming Chang, Chin Shan Lue\*, Hung-Chung Hsueh\*, Chih-Wei Luo\*, Three-dimensional ultrafast charge-density- density wave dynamics in CuTe, *Nature Communication*, 2024, **15**, 2386.

1.1.2 Yu-Chan Tai, Wen-Yen Tzeng, Jhen-Dong Lin, Yi-Hou Kuo, Fu-Xiang Rikudo Chen, Ruei-Jhe Tu, Ming-Yang Huang, Shyh-Shii Pai, Nick Weihan Chang, Sheng-Yang Tseng, Chi Chen, Chun-Liang Lin\*, Atsushi Yabushita, Shun-Jen Cheng\*, and Chih-Wei Luo\*, Directly Unveiling the Energy Transfer Dynamics between Alq<sub>3</sub> Molecules and Si by Ultrafast Optical Pump–Probe Spectroscopy, 2023, *Nano Letters*, **23**, 10490.

1.1.3 Ping-Chun Wu, Chia-Chun Wei, Qilan Zhong, Sheng-Zhu Ho, Yi-De Liou, Yu-Chen Liu, Chun-Chien Chiu, Wen-Yen Tzeng, Kuo-En Chang, Yao-Wen Chang, Junding Zheng, Chun-Fu Chang, Chien-Ming Tu, Tse-Ming Chen, Chih-Wei Luo, Rong Huang, Chun-Gang Duan, Yi-Chun Chen, Chang-Yang Kuo, and Jan-Chi Yang\*, Twisted oxide lateral homostructures with conjunction tenability, 2022, *Nature Communication*, **13**, 2565.

1.1.4 Cheng-Chieh Lin, Ting-Ran Liu, Sin-Rong Lin, Karunakara Moorthy Boopathi, Chun-Hao Chiang, Wen-Yen Tzeng, Wan-Hsiu Chang Chien, Hua-Shu Hsu, Chih-Wei Luo, Hui-Ying Tsai, Hsin-An Chen, Pai-Chia Kuo, Jessie Shiue, Jau-Wern Chiou, Way-Faung Pong, Chia-Chun Chen\*, and Chun-Wei Chen\*, Spin-Polarized Photocatalytic CO<sub>2</sub> Reduction of Mn-Doped Perovskite Nanoplates, 2022, *Journal of the American Chemical Society*, **144**, 15718.

1.1.5 Fu-He Hsiao, Cheng-Chu Chung, Chun-Hao Chiang, Wei-Neng Feng, Wen-Yen Tzeng, Hung-Min Lin, Chien-Ming Tu, Heng-Liang Wu, Yu-Han Wang, Wei-Yen Woon, Hsiao-Chien Chen, Ching-Hsiang Chen, Chao-Yuan Lo, Man-Hong Lai, Yu-Ming Chang, Li-Syuan Lu, Wen-Hao Chang, Chun-Wei Chen\*, and Chih-Wei Luo\*, Using Exciton/Trion Dynamics to Spatially Monitor the Catalytic Activities of MoS<sub>2</sub> during the Hydrogen Evolution Reaction, 2022, ACS Nano, **16**, 4298.

1.1.6 Yi-De Liou, Sheng-Zhu Ho, Wen-Yen Tzeng, Yu-Chen Liu, Ping-Chun Wu, Junding Zheng, Rong Huang, Chun-Gang Duan, Chang-Yang Kuo, Chih-Wei Luo, Yi-Chun Chen, and Jan-Chi Yang\*, Extremely Fast Optical and Nonvolatile Control of Mixed-Phase Multiferroic BiFeO<sub>3</sub> via Instantaneous Strain Perturbation, 2021, Advanced Materials, **33**, 2007264.

1.1.7 Wen-Yen Tzeng, Ya-Hsin Tseng, Tien-Tien Yeh, Chien-Ming Tu, Raman Sankar, Yu-Han Chen, Bang-Hao Huang, Fang-Cheng Chou, and Chih-Wei Luo\*, Selenium nanoparticle prepared by femtosecond laser-induced plasma shock wave, 2020, Optics Express, **28**, 685.

1.1.8 P. C. Cheng, W. Y. Tzeng, Y. J. Chu, C. W. Luo\*, A. A. Zhukov\*, J. Whittaker, J.-Y. Lin\*, K. H. Wu, J. Y. Juang, M. Liu, I. V. Morozov, A. I. Boltalin, and A. N. Vasiliev, 3D visualizations of nanoscale phase separation and ultrafast dynamic correlation between phases in (Na<sub>0.32</sub>K<sub>0.68</sub>)<sub>0.95</sub>Fe<sub>1.75</sub>Se<sub>2</sub>, 2019, Physical Review Materials, **3**, 034802.3.

1.2 Conference Papers

## Academic Projects

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2.1 MOST

2.1.1 Laser Scanning Confocal Spectromicroscopy Study of Junctions in Lateral Homostructure Complex Oxides (Project number: NSTC 114-2112-M-153 -003 -MY3)

2.2 MOE

2.3 Others

## Relevant Experience

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3.1 Academic Experience

3.2 Teaching Experience

3.3 Others