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Prof. Ting-Yu Liu received his Ph.D. degree at the Department of Materials Science and Engineering, National Chiao Tung University, Taiwan in 2008. He visited in Department of Materials Science and Engineering, University of Pennsylvania, USA for 1-year research. After that, he was a post-doc fellow at the Institute of Atomic and Molecular Sciences, Academia Sinica, Taiwan from 2009 to 2011, and a project assistant professor at the Institute of Polymer Science and Engineering, National Taiwan University from 2011 to 2013. He is currently a distinguished professor at the Department of Materials Engineering, Ming Chi University of Technology, Taiwan. His research covers nanomaterials, biomaterials, polymer composites, optoelectronic detection (surface-enhanced Raman spectroscopy detection), and electrochemical sensing. He has published more than 100 SCI-indexed journal articles and has gotten an h-index of 32 according to the citation report from Google Scholar.

Selected SCI Publications (10/103)

1. Umamaheswari Rajaji, Mani Govindasamy, Rinky Sha, Razan A. Alshgari, Ruey-Shin Juang*, **Ting-Yu Liu***, 2022. Surface engineering of 3D spinel $Zn_3V_2O_8$ wrapped on sulfur doped graphitic nitride composites Investigation on the dual role of electrocatalyst for simultaneous detection of antibiotic drugs in biological fluids, *Composites Part B*, 242, 110017
2. Ruey-Shin Juang, Yu-Wei Cheng*, Wan-Tzu Chen, Kuan-Syun Wang, Chun-Chieh Fu, Shou-Hsuan Liu, Ru-Jong Jeng, Cheng-Cheung Chen, Ming-Chien Yang*, **Ting-Yu Liu***, 2020. Silver nanoparticles embedded on mesoporous-silica modified reduced graphene-oxide nanosheets for SERS detection of uremic toxins and parathyroid hormone, *Appl. Surf. Sci.*, 521, 146372
3. Yu-Wei Cheng, Chien-Hsin Wu, Wan-Tzu Chen, **Ting-Yu Liu***, Ru-Jong Jeng*, 2019. Manipulated interparticle gaps of silver nanoparticles by dendron-exfoliated reduced graphene oxide nanohybrids for SERS detection, *Appl. Surf. Sci.* 469, 887–895
4. Hsing-Ying Tung, Zhen-Yu Guan, **Ting-Yu Liu**, Hsien-Yeh Chen, 2018. Vapor Sublimation and Deposition to Build Porous Particles and Composites, *Nature Communications*, 9, 2564
5. **Ting-Yu Liu***, Chieh-Ling Chen, Yi-Chen Lee, Tzu-Yi Chan, Yuh-Lin Wang, Jiang-Jen Lin*, 2016. First Observation of Physically Capturing and Maneuvering Bacteria using Magnetic Clays, *ACS Appl. Mater. Interfaces*, 8, 411
6. Jun-Ying Ho, **Ting-Yu Liu***, Jiun-Chiou Wei, Juen-Kai Wang, Yuh-Lin Wang, Jiang-Jen Lin*, 2014. Selective SERS Detecting for Hydrophobic Microorganisms by Tricomponent Nanohybrids of Silver-Silicate Platelet-Surfactant, *ACS Appl. Mater. Interfaces*, 6, 1541-1549
7. **Ting-Yu Liu**, Kun-Tong Tsai, Huai-Hsien Wang, Yu Chen, Yu-Hsuan Chen, Yuan-Chun Chao, Hsuan-Hao Chang, Chi-Hung Lin, Juen-Kai Wang, and Yuh-Lin Wang*, 2011. Functionalized Arrays of Raman-Enhancing Nanoparticles for Capture and Culture-Free Analysis of Bacteria in Human Blood, *Nature Communications*, 2, 538
8. **Ting-Yu Liu**, Kun-Ho Liu, Dean-Mo Liu, San-Yuan Chen and I-Wei Chen*, 2009. Temperature-sensitive Nanocapsules for Controlled Drug Release Caused by Magnetically Triggered Structural Disruption, *Adv. Funct. Mater.*, 19, 616-623

9. **Ting-Yu Liu**, Shang-Hsiu Hu, Dean-Mo Liu, San-Yuan Chen and I-Wei Chen*, 2009. Biomedical Nanoparticle Carriers with Combined Thermal and Magnetic Responses, *Nano Today*, 4, 52-65
10. **Ting-Yu Liu**, Wen-Ching Lin, Li-Ying Huang, San-Yuan Chen and Ming-Chien Yang*, 2005. Hemocompatibility and Anaphylatoxin Formation of Protein-Immobilizing Polyacrylonitrile Hemodialysis Membrane, *Biomaterials*, 26, 1437-1444