

高分子材料實驗室

程耀毅 博士

學歷：美國麻省理工學院

現任：台北科技大學分子系/有機高分子所教授

電話：(02)27712171#2433, 0937099005

E-mail: ycheng@mail.ntut.edu.tw

高分子材料實驗室

程耀毅教授

主要研究方向

- Polymer nanocomposites
- Polymer blends
- Copper nanowires
- Low-k dielectric

研究題目

- 聚醯亞胺複合材的製備與研究
 - 導電銅漿製備研究
-

研究成果

- Y.-P. Lee, C.-C. Lin, C.-C. Hsiao, P.-A. Chou 1, Y.-Y. Cheng, C.-C. Hsieh and Chi-An Dai, "Nanopiezoelectric Devices for Energy Generation Based on ZnO Nanorods/Flexible-Conjugated Copolymer Hybrids Using All Wet-Coating Processes", *Micromachines*, **11**, 2020, 14(SCI)
 - Y.-P. Lee, C.-J. Chiang, P.-C. Jen, B.-T. Chou, Leeyih Wang, Y.-Y. Cheng, Y.-H. Lee, Y.-F. Chen, C.-C. Hsieh, and C.-A. Dai, "Synergistic In Situ Hybrid Synthesis of Highly Crystalline P3HT/ZnO Nanowires at Elevated Pressures", *ACS Applied Energy Materials*, **1**, 2018, 1930(SCI)
 - W.-Y. Ma, Y.-Y. Cheng*, J.-K. Chen, K.-H. Chan, Z.-J. Lin, W.-H. Chou, and W.-C. Chang, "Synthesis of Antioxidative Conductive Copper Inks with Superior Adhesion", *Journal of Nanoscience and Nanotechnology*, **17**, 2017, 1 (SCI)
 - K.-Y. Hwa, Vincent H. S. Chang, Y.-Y. Cheng, Y.-D. Wang, P.-S. Jan, Boopathi Subramani, M.-J. Wu, B.-K. Wang, "Analyzing polymeric matrix for fabrication of a biodegradable microneedle array to enhance transdermal delivery", *Biomed Microdevices*, **19**, 2017, 84 (SCI).(SCI)
 - Y.-Y. Cheng*, H-M Hsiao, Z-X Li, M-J Ho, M-F Hsu, S-J Hsiang, "Synthesis and characterization of polyimide/modified mCOC composites", *Journal of Applied Polymer Science*, **133**, 2016, 44144 (SCI)
 - Cheng, Y. Y.; Chang, C. J.; Chang, C. C.; Peng, K. M. and Dai, C. A., "Preparation and Characterization of Porous Hydrogen Silsesquioxane by Sol-gel Process", *Solid State Phenomena*, **111**, 2006, 115. (SCI)
 - H.-H. Ko, and Y.-Y. Cheng*, "Modified Graphene Sheets/Polyimide Composites Prepared Using In-Situ Polymerization", *Nanoscience and Nanotechnology Letters*, **7**, 2015, 537- 545. (SCI) (SCI)
 - H.-H. Ko, Y.-Y. Cheng* and C.-A. Dai, "Silane Modified MWNT/Polyimide Composites Prepared Using In-Situ Polymerization", *Nanoscience and Nanotechnology Letters*, **6**, 2014, 190- 196. (SCI)
-

研究計劃

- 1. “Preparation of high-performance and conductive copper electrodes that prevent oxidation on flexible substrates”, 2020-2021.
 - 2. “Low-temperature preparation of highly transparent and conductive copper electrodes on flexible substrates”, 2019-2020.
-