

張皓凱 博士後研究員

相關應用諮詢

- 材料系貴重儀器(TEM、SEM、XRD、EPMA、XPS、AFM)委託測試、檢測與諮詢
- 材料性質分析

諮詢時間

- 周一至周五 08:00-17:00

聯絡方式

- 辦公室:材料科技館 R401
- 電話(03)571-5131 分機:33896

學歷

- 國立清華大學材料科學工程研究所 博士

經歷

- 2021~迄今 國立清華大學貴重儀器使用中心 博士後研究員

專長

- 溶膠凝膠法
- 多孔材料
- 有機無機複合材料。
- 染料敏化太陽能電池之電極結構設計與優化。
- 冷凍鑄造法製備異向性多孔材料及其應用。
- Evaporation system、Sputtering system、PLD system、MPCVD 製備薄膜材料。
- 真空設備維修與改善。

著作

- H.-K. Chang and P.-Y. Chen, "Synthesis of silica-based scaffolds with high porosity and controllable microstructure by a sintering-free sol-gel/freeze-casting hybrid method under mild conditions," *Journal of Materials Research and Technology*, vol. 9, no. 6, pp. 16167-16178, 2020.
- H.-K. Chang, C.-W. Huang, C.-C. Chiu, H.-J. Wang, and P.-Y. Chen, "Fabrication of Anisotropic Poly(vinyl alcohol) Scaffolds with Controllable Mechanical Properties and Structural Recoverability under Compression via a Freeze-Casting Technique," *Macromolecules*, vol. 53, no. 20, pp. 8809-8818, 2020.
- Y. H. Lo, C. Y. Yang, H. K. Chang, W. C. Hung, and P. Y. Chen, "Bioinspired Diatomite Membrane with Selective Superwettability for Oil/Water Separation," *Sci Rep*, vol. 7, no. 1, p. 1426, May 3 2017.
- Y. C. Chuang, H. K. Chang, G. L. Liu, and P. Y. Chen, "Climbing upstream: Multi-scale structural characterization and underwater adhesion of the Pulin river loach (*Sinogastromyzon puliensis*)," *J Mech Behav Biomed Mater*, vol. 73, pp. 76-85, Sep 2017.
- B. S. Liaw, T. T. Chang, H. K. Chang, W. K. Liu, and P. Y. Chen, "Fish scale-extracted hydroxyapatite/chitosan composite scaffolds fabricated by freeze casting-An innovative strategy for water treatment," *J Hazard Mater*, vol. 382, p. 121082, 2020.
- W.-K. Liu, B.-S. Liaw, H.-K. Chang, Y.-F. Wang, and P.-Y. Chen, "From Waste to Health: Synthesis of Hydroxyapatite Scaffolds From Fish Scales for Lead Ion Removal," *Jom*, vol. 69, no. 4, pp. 713-718, 2017.
- G. L. Liu, H. K. Chang, Y. C. Chuang, Y. M. Lin, and P. Y. Chen, "Reversible Underwater Adhesion: The Unique C-shaped Suckers of Net-winged Midge Larvae (*Blepharicera* sp.)," *Sci Rep*, vol. 10, no. 1, p. 9395, Jun 10 2020.