Stanford



Yunxia Chen

Postdoctoral Scholar, Orthopedic Surgery

Bio

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Florida (2024)

STANFORD ADVISORS

- Yunzhi Peter Yang, Postdoctoral Faculty Sponsor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Advanced Manufacturing

Bioprinting

Tissue Engineering

Regenerative Medicine

Publications

PUBLICATIONS

- **Printing fidelity improvement during immersion-phase-separation-based embedded printing of polymers** *ADDITIVE MANUFACTURING*
  Zhou, C., Chen, Y., Shams, A. T., Jin, C., Huang, Y.
  2026; 127

- **Biofabrication and biomedical manufacturing research frontiers in the United States** *BIO-DESIGN AND MANUFACTURING*
  Chen, Y., Phillips, K. R., Alsberg, E., Angelini, T. E., Annabi, N., Atala, A., Bandyopadhyay, A., Bellan, L. M., Bertassoni, L. E., Blazeski, A., Boland, T., Bose, S., Burdick, et al
  2026

- **Self-supported vapor-induced phase-separation direct ink writing of 3D cellular lattices with subroutine-enabled tool path generation** *ADDITIVE MANUFACTURING*
  Ryder, B. J., Robinson, J. T., Chen, Y., Badger, L. N., Sole-Gras, M., Li, G., Pilla, S., Huang, Y.
  2026; 116

- **Deposition Volume Compensation for Enhanced Shape Fidelity in Nested Printing** *JOURNAL OF MANUFACTURING SCIENCE AND ENGINEERING-TRANSACTIONS OF THE ASME*
  Chen, Y., Samouce, C., Shlafer, S. E., Shams, A. T., Yamaguchi, H., Huang, Y.
  2025; 147 (11)

- **Design of Printable Gelatin Composite-PVA Bioink for Self-Supported Fabrication of 3D Thick Porous Constructs.** *ACS biomaterials science & engineering*

Wang, R., Chen, Y., Phillips, K. R., Zhou, C., Robinson, J. T., Iten, D. B., Ver Helst, D. Z., Huang, Y.
2025; 11 (10): 6234-6247

- **Computed Tomography Image-Based Measurements of Cortical Bone Thickness for Improved Bone Tissue Processing and Decision-Making** *MANUFACTURING LETTERS*
  Ungurait, D., Zhou, C., Hutt, K., Chen, Y., Poniatowski, A., Shaara, J., Howell, P., Huang, Y., Yamaguchi, H.
  2025; 44: 148-156

- **Upflow mitigation strategy for nested printing** *CIRP ANNALS-MANUFACTURING TECHNOLOGY*
  Chen, Y., Allo, S., Ren, B., Wu, Y., Yamaguchi, H., Huang, Y.
  2024; 73 (1): 181-184

- **Sequential Dual Alignments Introduce Synergistic Effect on Hexagonal Boron Nitride Platelets for Superior Thermal Performance** *ADVANCED MATERIALS*
  Chen, Y., Gao, Z., Hoo, S. A., Tipnis, V., Wang, R., Mitevski, I., Hitchcock, D., Simmons, K. L., Sun, Y., Sarntinoranont, M., Huang, Y.
  2024; 36 (25)

- **Laponite nanoclay-modified sacrificial composite ink for perfusable channel creation via embedded 3D printing** *COMPOSITES PART B-ENGINEERING*
  Ren, B., Song, K., Chen, Y., Murfee, W., Huang, Y.
  2023; 263

- **Effects of spatial and temporal offset during landing on mixing performance in intersecting-jets printing** *ADDITIVE MANUFACTURING*
  Sole-Gras, M., Christensen, K., Chen, Y., Liang, C., Mei, R., Wallace, D. B., Huang, Y.
  2022; 55

- **A cutting force model based on kinematic analysis in longitudinal and torsional ultrasonic vibration drilling** *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*
  Lu, Y., Yuan, S., Chen, Y.
  2019; 104 (1-4): 631-643

- **Application of Fusion Filtering Algorithm in AGV Localization**
  Han, X., Wu, Y., Chen, Y., IEEE
  IEEE.2017: 6340-6344

- **A Complete Solution for AGV SLAM Integrated with Navigation in Modern Warehouse Environment**
  Chen, Y., Wu, Y., Xing, H., IEEE
  IEEE.2017: 6418-6423