

Yiming Feng

Assistant Professor in Food
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PROFESSIONAL EXPERIENCE

Jan 2021 -	Assistant Professor in Food Science and Nutrition, California Polytechnic State University (Cal Poly)
Aug 2018 – Dec 2020	Postdoctoral Research Associate, Department of Food Science and Technology, Virginia Tech
Aug 2016 – Jan 2018	Research & Development Scientist, Abbott Nutrition

EDUCATION

May 2018	Ph.D. in Food Science and Human Nutrition	University of Illinois, Urbana-Champaign
Dec 2013	B.S. in Food Science and Human Nutrition	University of Illinois, Urbana-Champaign

RESEARCH INTERESTS

- Deciphering the interplay of food processing, structure, and sensory perception
- Develop processing strategies to control and re-design food structures to reduce salt, sugar, and fat in food formulas while maintaining sensory perception.
- Processing dietary fibers for precise gut microbiome modulation
- Photoreactive self-cleaning food packaging/coating materials
- Upgrade food byproducts for sustainable electrochemical materials

PEER-REVIEWED JOURNAL ARTICLES

Google scholar: <https://scholar.google.com/citations?user=1Fflg24AAAAJ&hl=en>

1. Feng, J., Zhang, J., Ma, Y., **Feng, Y.**, Wang, S., Guo, N., Wang, H., Wang, P., Jiménez-Bonilla, P., Gu, Y., Zhou, J., Zhang, Z., Cao, M., Jiang, D., Wang, S., Liu, X., Shao, Z., Borovok, I., Huang, H., Wang, Y. (2021) Renewable Fatty Acid Ester Production in *Clostridium*. *Nature Communications* 12(1), 1-13.

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2. **Feng, Y.**, Yu, D., Lin, T., Jin, Q., Wu, J., Chen, C., & Huang, H. Complexing hemp seed protein with pectin for improved emulsion stability. *Journal of Food Science*. 2021,1–11. (Featured by IFT)
 3. Tao, L., Hu, A., Mu, L., Kautz, D., Xu, Z., **Feng, Y.**, Huang, H., Lin, F. (2021) A Self-sodiophilic Carbon Host Promotes the Cyclability of Sodium Anode. *Advanced Functional Materials*, 31 (9), 2007556
 4. Wang, W.*, **Feng, Y.***, Chen, W., Adie, K., Liu, D., & Yin, Y. (2021). Citrus pectin modified by microfluidization and ultrasonication: Improved emulsifying and encapsulation properties. *Ultrasonics Sonochemistry*, 70, 105322.
 5. **Feng, Y.***, Tao, L.*, Zheng, Z., Huang, H., & Lin, F. (2020). Upgrading agricultural biomass for sustainable energy storage: Bioprocessing, electrochemistry, mechanism. *Energy Storage Materials*, 31, 274-309.
 6. Jin, Q., Wang, Z., **Feng, Y.**, Kim, Y. T., Stewart, A. C., O'Keefe, S. F., ... & Huang, H. (2020). Grape pomace and its secondary waste management: Biochar production for a broad range of lead (Pb) removal from water. *Environmental Research*, 109442.
 7. Zhang, D., **Feng, Y.**, Huang, H., Khunjar, W., & Wang, Z. W. (2020). Recalcitrant dissolved organic nitrogen formation in thermal hydrolysis pretreatment of municipal sludge. *Environment International*, 138, 105629.
 8. **Feng, Y.***, Tao, L.*, He, Y., Jin, Q., Zheng, Y., Hou, Q., Zheng, Z., Lin, F., Huang, H. (2019). Chemical-enzymatic fractionation to unlock the potential of biomass-derived carbon materials for sodium ion batteries. *Journal of Materials Chemistry A*, 7(47), 26954-26965.
 9. Wang, W*., **Feng, Y.***, Chen, W., Wilder, G., Liu, D., Yin, Y. (2019) Ultrasonic modification of pectin for enhanced 2-furfurylthiol encapsulation: process optimization and mechanisms. *Journal of the science of food and agriculture*
 10. **Feng, Y.**, Ibarra-Sánchez, L. A., Luu, L., Miller, M. J., & Lee, Y. (2019). Co-assembly of nisin and zein in microfluidics for enhanced antilisterial activity in Queso Fresco. *LWT - Food Science & Technology*, 111, 355-362.
 11. Li, X., **Feng, Y.**, Ting, S., Jiang, J., & Liu, Y. (2019). Correlating emulsion properties to microencapsulation efficacy and nutrients retention in mixed proteins system. *Food Research International*, 115, 44-53.
 12. **Feng, Y.**, & Lee, Y. (2019). Microfluidic assembly of food-grade delivery systems: toward functional delivery structure design. *Trends in Food Science & Technology*, 86, 465-478.
 13. Li, X., **Feng, Y.**, Ting, S., Jiang, J., & Liu, Y. (2019). Effect of processing conditions on the physiochemical properties and nutrients retention of spray-dried microcapsules using mixed protein system. *CyTA-Journal of Food*, 17(1), 25-35.
 14. **Feng, Y.**, & Lee, Y. (2019). Microfluidic fabrication of wrinkled protein microcapsules and their nanomechanical properties affected by protein secondary structure. *Journal of Food Engineering*, 246, 102-110.
 15. Li, X., Chen, W., Jiang, J., **Feng, Y.**, Yin, Y., & Liu, Y. (2019). Functionality of dairy proteins and vegetable proteins in nutritional supplement powders: a review. *International Food Research Journal*, 26(6).

16. **Feng, Y.**, Albiol Tapia, M., Okada, K., Castaneda Lazo, N. B., Chapman-Novakofski, K., Phillips, C., & Lee, S. Y. (2018). Consumer Acceptance Comparison Between Seasoned and Unseasoned Vegetables. *Journal of Food Science*, 83(2), 446-453. ([Listed as Top 10 articles in “Journal of Food Science”, 2018](#))
17. Wang, W., Wang, L., **Feng, Y.**, Pu, Y., Ding, T., Ye, X., & Liu, D. (2018). Ultrasound-assisted lye peeling of peach and comparison with conventional methods. *Innovative Food Science & Emerging Technologies*, 47, 204-213.
18. **Feng, Y.**, & Lee, Y. (2017). Microfluidic fabrication of hollow protein microcapsules for rate-controlled release. *RSC Advances*, 7(78), 49455-49462.
19. Olenskyj, A. G., **Feng, Y.**, & Lee, Y. (2017). Continuous microfluidic production of zein nanoparticles and correlation of particle size with physical parameters determined using CFD simulation. *Journal of Food Engineering*, 211, 50-59.
20. **Feng, Y.**, & Lee, Y. (2016). Surface modification of zein colloidal particles with sodium caseinate to stabilize oil-in-water Pickering emulsion. *Food Hydrocolloids*, 56, 292-302. (web of science top 1% highly cited)
21. **Feng, Y.**, & Lee, Y. (2014). Effect of specific mechanical energy on in-vitro digestion and physical properties of extruded rice-based snacks. *Food and Nutrition Sciences*, 5(19), 1818-1827.

*Co-first author

BOOK CHAPTERS

1. **Feng, Y.** Liu, X., Lee, Y. (2021) Chapter 3: Designing food structure using microfluidics. *Food Structure and Functionality*, **Elsevier**
2. **Feng, Y.** Killer, S., Lee, Y. (2020) Chapter 7: ζ -potential: origin, principals, measurements, and applications. *Nanoencapsulation in the Food Industry*, **Elsevier**

CONFERENCE PRESENTATIONS

1. **Feng, Y.** & Huang, H. (2021), Complexing Hemp Seed Protein with Pectin for Improved Emulsion Stability. *IFT 2021 Annual Meeting (poster)*
2. **Feng, Y.**, Wang, W., Yin, Y. (2020), Synergistic modification of pectin using microfluidization and ultrasound for enhanced emulsification. *ACS 2020 National Meeting & Expo, Philadelphia (oral)*
3. **Feng, Y.**, Ibarra-Sánchez, L. A., Luu, L., Miller, M. J., & Lee, Y. (2018). Co-assembly of nisin and zein in microfluidics for enhanced antilisterial activity in Queso Fresco. *Conference of Food Engineering (CoFE), Minneapolis (poster)*
4. Li, X., **Feng, Y.**, Dimler, S., Chiang, P. L., Chen, B., Ting, S. (2017) The role of milk protein and vegetable protein in nutritional supplement powder during microencapsulation. *FCT 2017 annual meeting, Baltimore (poster)*
5. Li, X., **Feng, Y.**, Dimler, S., Chiang, P. L., Chen, B., Ting, S. (2017) Correlating emulsion properties to microencapsulation efficacy and nutrients retention in mixed proteins system. *Abbott ANTE 2017 annual meeting, Columbus (poster)*

6. **Feng, Y.,** Li, X. (2017). The Role of Milk Protein and Vegetable Protein in Nutritional Supplement Powders during Microencapsulation Processing. *20th Global Summit on Food Processing, Safety & Technology, Las Vegas (oral)*
7. **Feng, Y.,** & Lee, Y. (2017). Microfluidic Fabrication of Hollow Protein Microcapsules for Controlled Release. *IFT 2017 Annual Meeting, Las Vegas (Poster)*
8. **Feng, Y.,** & Lee, Y. (2015). Synergistic Effect of Zein Colloidal Nanoparticles and Sodium Caseinate (NaCas) in Stabilizing Oil-in-Water Pickering Emulsion. *IFT 2015 Annual Meeting, Chicago (Poster)*

PROFESSIONAL SERVICES

- Editorial board: *Journal of Future Foods* (Elsevier), *Discover Food* (Springer Nature)
- Guest editor: Special issue "Novel Approaches for Developing and Characterizing Value-Added Applications of Food and Agricultural Byproducts" in *Foods*
- Journal reviewer: International Journal of Biological Macromolecules, Journal of Cereal Science, New Journal of Chemistry, Heliyon, Journal of Food Science, ACS Food Science & Technology, Journal of the Science of Food and Agriculture, Food & Function, ES Food & Agroforestry
- Grant reviewer: USDA NIFA