CURRICULUM VITAE (short version)

YIFEN WANG

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Education

MBA.	Washington State University, Pullman, WA.
Ph.D.	Engineering Science, Washington State University, Pullman, WA. Major: Biosystems Engineering.
M.S.	Engineering, University of Washington, Seattle, WA. Major: Environmental Engineering.
B.S.	Engineering, Shanghai Fisheries University, Shanghai, P.R. of China Major: Food/Chemical Engineering.

Employment

2014 – Current	Professor, Dept. of Biosystems Engineering, Auburn University. School of Fisheries, Aquaculture and Aquatic Sciences, Auburn University.
2013 – 2017	Professor and Executive Associate Dean, College of Food Science and Technology, Shanghai Ocean University.
2011– 2012	Senior Visiting Expert, Food and Agriculture Organization of the United Nations.
2009 – 2014	Associate Professor,
2004 – 2009	Assistant Professor, Dept. of Biosystems Engineering, Auburn University. Department of Fisheries and Allied Aquacultures, Auburn University.
2003 – 2004	Postdoctoral Research Associate & Sr. Project Manager, Dept. of Biological Systems Engineering, Washington State University.
1999 – 2002	Research Assistant**,** Part time Dept. of Biological Systems Engineering, Washington State University.
1998 – 1999	Research Assistant**,** Part time Dept. of Civil and Environmental Engineering, University of Washington.
1995 – 1998	Food Scientist, Chinese Academy of Fisheries Science, Shanghai, P.R. of China.
1993 – 1995	Director, Manufacturing Plant, Senegal Fisheries Company, Dakar, Senegal
1990 – 1993	Food Scientist, Chinese Academy of Fisheries Science, Shanghai, P.R. of China.

Professional Services

2021 – Current: Editorial Board Member, Food Hydrocolloids.
2017 – 2017: Representative, Promotion and Tenure Committee, College of Agriculture, Auburn University
2014 – Current: Associate Editor, Journal of Aquatic Food Product Technology.
2014 – Current: Member and Chairman, Global Programs Adversary Committee, Colleague of Agriculture, Auburn University.
2013 – 2017: Adjunct Professor, College of Food Science and Technology, Ocean University of China.
2012 – Current: Core faculty member, Food Systems Initiative Virtual Faculty, Auburn University.
2012 – 2013: Chairman, Auburn University Chinese Professional Association.
2010 – Current: Certified Seafood HACCP trainer, Association of Food and Drug Officials.
2008 – 2011: Auburn University Senate.
2008 – Current: Associate Editor, International Journal of Agricultural & Biological Engineering.
2008 – Current: Member, Research Advisory Committee, College of Agriculture and AAES, Alabama.
2006 – 2012: Visiting Professor, Hubei Academy of Agricultural Sciences, Wuhan, Hubei, P.R. of China.
2005 – 2012: Visiting Professor, Shanghai Fisheries University, Shanghai, China.
2005 – 2008: Member of the Food Safety Expert Board for the 2008 Beijing Olympic Games, the BMOFSSC and the Olympic Organizing Committee. A14-member international board that will play a key role in ensuring food safety and security at the 2008 Summer Olympic Games.
2005 – 2010: Chairman, Vice Chairman, secretary, Alabama State Section of the American Society of Agricultural Engineers.

Professional Societies

Member, Institute of Food Technologist.
Member, Institute For Thermal Processing Specialists.
Member, Association of Food and Drug Officials.
Member, American Society of Agricultural Engineers.

Books and Book Chapters Last five years (2017 to 2022)

Ma, Y., Liu, S., Wang, Yi, and Wang, Y., 2022. Comprehensive utilization of lipid and starch from wet microalgae directly. Chapter 8 in Algae Biotechnology, Ashfaq Ahmad, Fawzi Banat, and Hanifa Taher (Ed). Elsevier Publishers.

Zhong, J., Finglas, P., Wang, Y., and Wang, X., 2019. Editorial, Application of Atomic Force Microscopy in Food Science. *Trends in Food Science & Technology* 87 (2019) 1-2.

Peer-reviewed Journal Papers Last five years (2017 to 2022)

Ding, K., Wang, Y., and Luan, D., 2022. Effects of High Temperature Short Time Processing on nutrition quality of Pacific saury (*Cololabis saira*) using extracted fatty acids as the indicator. *Food Science & Nutrition*

Wang, P., Wang, Y., Peng,Y. and Liu, S., 2022. Non-isothermal crystallization kinetics of polypropylene homopolymer/impact copolymer composites

Peng, Y., Liu, S., Wang, P., Wang, Y. and Wang, X., 2022. Formulating Polypropylene with Desired Mechanical Properties through Melt Compounding of Homopolymer and Impact Copolymer. *Polymer Crystalliza,* (2022) 3084446.

Hao, Y., Zhang, M., Tao, N., Li, L., Xua, C., Deng, S., and Wang, Y., 2022. Antibacterial Mechanism of Free and Immobilized Chitosan or Lysozyme on Staphylococcus aureus and Escherichia coli.

Wang, Y., Wang, Y., and Luan, D., 2022. Study on amino acids degradation of rainbow trout fillets during different high temperature short time processing. *Foods.*

Chen, J., Li, Y., Wang, Y., Yakubu, S., Tang, H., and Li, L., 2022. Active polylactic acid/tilapia fish gelatin-sodium alginate bilayer films: application in preservation of Japanese sea bass (*Lateolabrax japonicus*). Food Packaging and Shelf Life, 33 (2022) 100915.

Wang, J., Zhang, J., Walton, W., and Wang, Y., 2022. Free amino acids changes of eastern oyster (*crassostrea virginica*) cultured by three treatments during cold storage and linear relationships with consumer preferences.

Zhang, M., Tao, N., Li, L., Xu, C., Deng, S., and Wang, Y., 2022. Non-migrating Active Antibacterial Packaging and Its Application in Grass Carp Fillets. *Food Packaging and Shelf Life,* 31 (2022) 100786.

Ma, Y., Liu, S., Wang, Y., and Wang, Y., 2022. Processing wet microalgae for direct biodiesel production: optimization of the two-stage process assisted by radio frequency heating. *International Journal of Green Energy* Manuscript DOI: 10.1080/15435075.2022.2070023

Guo, C., Wang, Y., and Luan, D., 2021. Study the synergism of microwave thermal and non-thermal effects on microbial inactivation and fatty acid quality of salmon fillet during pasteurization process. LWT - *Food Science and Technology*, 152 (2021) 112280. DOI:10.1016/j.lwt.2021.112280.

Hu, L., Wang, Y., Guo, C., Lai, K., and Luan, D., 2021. Exploring the microwave non-thermal effects on the fatty acid composition of Atlantic salmon (*Salmo salar*) during pasteurization using the same time-temperature profiles method. *Journal of Food Processing and Preservation* DOI: 10.1111/jfpp.15950.

Poozesh, S., Karam, M., Akafuah, N., and Wang, Y., 2021. Integrating a model predictive control into a spray dryer simulator for a closed-loop control strategy. *International Journal of Heat and Mass Transfer* 170 (2021): DOI: 10.1016/j.ijheatmasstransfer.2021.121010

Jiménez-Bonilla1, P., Feng, J., Zhang, J., Wang, Y., Blersch, D., Gonzalez-de-Bashan, L., Gaillard, P., Guo, L., and Wang, Y., 2021. Identification and investigation of autolysin genes in *Clostridium saccharoperbutylacetonicum* N1-4 for enhanced biobutanol production. *Applied and Environmental Microbiology* 2021, 87 (7): e02442-20.

Zhang, J., Liu, S., Walton, W. C., and Wang, Y., 2021. Volatile Organic Compounds of Eastern Oyster (Crassostrea Virginica) Cultured by Two Treatments and

Their Changes during Cold Storage. *Aquaculture Research* 2021 (52):1442–1452. DOI:10.1111/are.14998

Huang, Y., Wang, Y., Li, Y., Luo, C., Yang, C., Shi, W., and Li, L., 2020. Covalent Immobilization of Polypeptides on Polylactic Acid (PLA) Films and Their Application to Fresh Beef Preservation. *Journal of Agricultural and Food Chemistry* 2020 (68): 10532–10541.

Li, L., Song, W., Shen, C., Dong, Q., Wang, Y., and Zuo, S., 2020. Active packaging film containing oregano essential oil microcapsules and their application for strawberry preservation. *Journal of Food Processing and Preservation* DOI: 10.1111/jfpp.14799.

Kataria, J., Garner, L. J., Monu, E. A., Wang, Y. and Morey, A., 2020. Investigating the effects of Functional Ice (FICE) on *Salmonella-food* safety, microbial spoilage and quality of raw poultry thigh meat during refrigerated storage. *PLOS ONE* 2020, 15(6): e0234781.

Jiménez-Bonilla, P., Zhang, J., Wang, Y., Blersch, D., de-Bashan, L., and Wang, Y., 2020. Enhancing the tolerance of Clostridium saccharoperbutylacetonicum to lignocellulosic-biomass-derived inhibitors for efficient biobutanol production by overexpressing efflux pumps genes. *Bioresource Technology,* 312 (2020) 123532. DOI:10.1016/j.biortech.

Guo, C., Wang, Y., and Luan, D., 2020. Non-Thermal Effects of Microwave Processing on Inactivation of *Clostridium Sporogenes* in Solid Food Products. *LWT - Food Science and Technology* DOI: 10.1016/j.lwt.2020.109861

Zhang, J., Hong, W., Wang, Y., and Wang, Y., 2020. Enhancing plasmid transformation efficiency and enabling CRISPR-Cas9/Cpf1-based genome editing in *Clostridium tyrobutyricum*. *Biotechnology & Bioengineering* (2020) 117: 2911-2917.

Chen, Z., Zhou, J., Wang, Y., and Wang, Y., 2020. Nano on micro: tuned microbial metabolisms by nano-based artificial mediators to enhance and expand production of biochemical. *Current Opinion in Biotechnology* 64 (2020):161–168.

Ma, Y., Wang, P., Wang, Y., Liu, S., Wang, Q., and Wang, Y., 2020. Fermentable sugar production from wet microalgae residual after biodiesel production assisted by radio frequency heating Renewable Energy. *Renewable Energy* 155 (2020): 827– 836.

Ma, Y., Liu, S., Wang, Y., Adhikari, S., Dempster, T.A., and Wang, Y., 2019. Direct biodiesel production from wet microalgae assisted by radio frequency heating. *Fuel* DOI: 10.1016/j.fuel.2019.115994.

Miao, L., Walton, W. C., Wang, L., and Wang, Y., 2019. Characterization of Polylactic Acids-Polyhydroxybutyrate based Packaging Film with Fennel Oil, and Its Application on Oysters. *Food Packaging and Shelf Life* 22 (2019)100388.

Zhang, R., Wang, Y., Wang, X., and Luan, D., 2019. Study of heating characteristics for a continuous 915 MHz pilot scale microwave thawing system. *Food Control* 104 (2019) 105-114.

Wang, P., Zhang, J., Feng, J., Wang, S., Guo, L., Wang, Y., Lee, Y. Y., Taylor, S., McDonald, T., and Wang, Y., 2019. Enhancement of acid re-assimilation and biosolvent production in *Clostridium saccharoperbutylacetonicum* through metabolic engineering for efficient biofuel production from lignocellulosic biomass. *Bioresource Technology* 281 (2019) 217–225.

Yang, C., Tang, H., Wang, Y., Liu, Y., Wang, J., Shi, W., and Li, L., 2019. Evaluation of Active Compounds Release from PLA-PBSA Films for the Application of Salmon Slice. *Food Packaging and Shelf Life* DOI: 10.1016/j.fpsl.2019.100393.

Chen, H., Li, L., Ma, Y., McDonald, T., and Wang, Y., 2019. Development of Active Packaging Film Containing Bioactive Components Encapsulated in β-Cyclodextrin and Its Application. *Food Hydrocolloids* 90 (2019) 360–366.

Wang, P., Chen, Y., Wang, Y., Lee, Y., Zong, W., Taylor, S., McDonald, T, and Wang, Y., 2019. Towards comprehensive lignocellulosic biomass utilization for bioenergy production: Efficient biobutanol production from acetic acid pretreated switchgrass with Clostridium saccharoperbutylacetonicum N1-4. *Applied Energy* 236 (2019) 551–559.

Shi, C., He, Y., Ding, M., Wang, Y., and Zhong, J., 2019. Nanoimaging of Food Proteins by Atomic Force Microscopy. Part II: Application for Food Proteins from Different Sources. *Trends in Food Science & Technology* 87 (2019) 14-25, DOI:10.1016/j.tifs.2018.11.027.

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Ma, Y., Li, L., and Wang, Y., 2018. Development of PLA-PHB Based Biodegradable Active Packaging and Its Application to Salmon. *Packaging Technology and Science* (2018) 31:739–746.

Han, D., Hung, Y-C, Bratcher, C., Monu, E., Wang, Y., and Wang, L., 2018. Formation of sublethally injured Yersinia enterocolitica, Escherichia coli O157:H7, and Salmonella Enteritidis cells after neutral electrolyzed oxidizing water treatments. *Applied and Environmental Microbiology* DOI: 10.1128/AEM.01066-18.

Li, Y., Li, F., Tang, J., Zhang, R., Wang, Y., Koral, T., and Jiao, Y., 2018. Radio frequency tempering uniformity investigation of frozen beef with various shapes and sizes. *Innovative Food Science and Emerging Technologies* 48 (2018): 42-55.

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McCrummen, S.T., Wang, Y., Hanson, T.R., Bott, L., and Liu, S., 2018. Culture environment and the odorous volatile compounds present in pond-raised channel catfish (*Ictalurus punctatus*). *Aquaculture International* (2018) 26:685–694.

Chen, L., Han, D., Zhai, Y., Wang, J., Wang, Y., and Chen, M., 2018. Characterization and Mutational Analysis of Two UDP-Galactose 4-Epimerases in *Streptococcus pneumoniae* TIGR4. *Biochemistry (Moscow)* 83 (1): 37-44.

Wang, J., Zhao, S., Qiu, J., Zhou, Q., Liu, X., Xin, X., Guo, D., Tatyana G. Yudina, T. G., Wang, Y., Sun, H., Chen, X., and Chen, L., 2017. Purification and Characterisation of a Fungicidal Peptide from *Bacillus amyloliquefaciens* NCPSJ7. *Czech Journal of Food Sciences* 35 (2017): 113–121.

Ma, Y., Li, L., and Wang, Y., 2017. Development of antimicrobial active film containing CIN namaldehyde and its application to snakehead (*Ophiocephalus argus*) fish. *Journal of Food Processing Engineering* DOI 10.1111/jfpe.12554

Qiu, J., Chen, X., Netrusov, A.I., Zhou, Q., Guo, D., Liu, X., He, H., Wang, Y., and Chen, L., 2017. Screening and Identifying Antioxidative Components in *Ginkgo biloba* Pollen by DPPHHPLC-PAD Coupled with HPLC-ESI-MS^2. *PLOS One* DOI 10.1371/journal.pone.0170141.

Liu, S., Liao, T., McCrummen, T. S., Hanson, T., and Wang, Y., 2017. Exploration of volatile compounds causing off-flavor in farm-raised channel catfish (*Ictalurus punctatus*) fillet. *Aquaculture International* (2017) 25:413–422.

Wang, B., Pan, P., McDonald, T.P., and Wang, Y., 2017. Development of a capacitance sensing system for monitoring moisture content of spray dried gelatin powders. *Journal of Food Engineering* 195 (2017): 247 – 254.

Luan, D., Wang, Y., Tang, J., and Jain, D., 2017. Frequency Distribution in Domestic Microwave Ovens and Its Influence on Heating Pattern. *Journal of Food Science* 82 (2): 429-436.

Li, Y., Wang, Y., Boyd, C. E., Hanson, T. R., and Liu, S. 2017. Evaluation and Optimization of Chemical Treatments for Reducing Yellow Discoloration of Channel Catfish (*Ictalurus punctatus*) Fillets During Cold Storage. *Journal of Aquatic Food Product Technology* 26 (1): 132 - 137.

Liu, S., Courtwright, C., Wang, Y., and Hanson, T., 2017. Chemical Treatments to Reduce Off-Flavor in Farm-Raised Channel Catfish (*Ictalurus punctatus*) Fillet. *Journal of Food Processing and Preservation* 41(2017): e12886

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