

Yanting WANG, Ph. D.



Professor, Ph.D. supervisor

**School of Life and Health Science,
Hubei University of Technology,
Wuhan 430068, China**

Phone: 13477013393

E-mail: wyt@mail.hzau.edu.cn

Website: <https://bbrc.hbut.edu.cn>

Education

- 2014 - 2018** Ph. D. in Biomass and Bioenergy
Huazhong Agricultural University
- 2005 - 2007** M. S. in Biochemistry and Molecular Biology
Huazhong University of Science and Technology
- 2001 - 2005** B. A. in Biological Engineering
Hubei University

Work Experiences

- 2023 - present** Professor, Ph.D. supervisor, School of Life and Health Science,
Hubei University of Technology
- 2018 - 2023** Senior Engineer, College of Plant Science & Technology,
Huazhong Agricultural University
- 2016 - 2017** Visiting Scholar, DOE Biology Science Research Center,
Complex Carbohydrate Research Center, University of Georgia
- 2008 - 2018** Engineer, College of Plant Science & Technology,
Huazhong Agricultural University
- 2007 - 2008** Research Officer, Wuhan Branch, Chinese Academy of Sciences

Research Interests

Plant cell wall engineering and lignocellulosic biorefinery for bioethanol and biobased material production

Enrollment Information

Master Degree: Biotechnology, Food Science and Engineering, Biology and Medicine
Doctoral Degree: Light Industry Technology and Engineering

Representative Articles (*correspondent; # equal contribution)

Publications: 76 total; cited times = 3060; H-index = 32

1. Ai, Y.[#], Wang, H.[#], Liu, P., Yu, H., Sun, M., Zhang, R., Tang, J., **Wang, Y.***, Feng, S.*
Peng, L.* Insights into contrastive cellulose nanofibrils assembly and nanocrystals
catalysis from dual regulations of plant cell walls. *Science Bulletin*, DOI:
org/10.1016/j.scib.2024.06.013, **2024** (IF: 18.9)
2. **Wang, Y.[#]**, Wen, J. [#], Li, S., Li, J., Yu, H., Li, Y., Ren, X., Wang, L., Tang, J., Zhang, X.,
Liu, Z., Peng, L.* Upgrading pectin methylation for consistently enhanced biomass
enzymatic saccharification and cadmium phytoremediation in rice Ospmes site-mutants.
International Journal of Biological Macromolecules. 262: 130137, **2024** (IF: 8.2)
3. Zhang, R., Gao, H., Wang, T., He, B., Lu, J., Zhu, W., Peng, L., **Wang, Y.*** Challenges and
perspectives of green-like lignocellulose pretreatments selectable for low-cost biofuels
and high-value bioproduction. *Bioresource Technology*. 369: 128315, **2023** (IF: 11.889)
4. Hu, Z. [#], Peng, H.[#], Liu, J., Zhang, H., Li, S., Wang, H., Lv, Z., Wang, Y., Sun, D.,
Tang, J., Peng, L., **Wang, Y.*** Integrating genetic-engineered cellulose nanofibrils of rice
straw with mild chemical treatments for enhanced bioethanol conversion and bioaerogels
production. *Industrial Crops & Products*. 202: 177044, **2023** (IF: 6.449)
5. Peng, H.[#], Zhao, W.[#], Liu, J., Liu, P., Yu, H., Deng, J., Yang, Q., Zhang, R., Hu, Z., Liu, S.,
Sun, D., Peng, L., **Wang, Y.*** Distinct cellulose nanofibrils generated for improved
Pickering emulsions and lignocellulose-degradation enzymes secretion coupled with high
bioethanol production in natural rice mutant. *Green Chemistry*. 24: 2975-2987, **2022** (IF:
11.034)
6. Yu, H., Hu, M., Hu, Z., Liu, F., Yu, H., Yang, Q., Gao, H., Xu, C., Wang, M., Zhang, G.,
Wang, Y., Xia, T., Peng, L., **Wang, Y.*** Insights into pectin dominated enhancements for
elimination of toxic Cd and dye coupled with ethanol production in desirable
lignocelluloses. *Carbohydrate Polymers*. 286: 119298, **2022** (IF: 11.2)
7. Fu, Y., Gao, H., Yu, H., Yang, Q., Peng, H., Liu, P., Li, Y., Hu, Z., Zhang, R., Li, J., Qi, Z.,
Wang, L., Peng, L., **Wang, Y.*** Specific lignin and cellulose depolymerization of
sugarcane bagasse for maximum bioethanol production under optimal chemical fertilizer
pretreatment with hemicellulose retention and liquid recycling. *Renewable Energy*. 200:
1371-1381, **2022** (IF: 8.7)
8. Wang, Y.[#], Liu, P.[#], Zhang, G., Yang, Q., Lu, J., Xia, T., Peng, L. **Wang, Y.*** Cascading of
engineered bioenergy plants and fungi sustainable for low-cost bioethanol and
high-value biomaterials under green-like biomass processing. *Renewable and
Sustainable Energy Reviews*. 137: 110586, **2021** (IF: 16.799)

9. Yang, Q., Zhao, W., Liu, J., He, B., Wang, Y., Yang, T., Zhang, G., He, M., Lu, J., Peng, L. **Wang, Y.*** Quantum dots are conventionally applicable for wide-profiling of wall polymer distribution and destruction in diverse cells of rice. *Talanta*. 208: 120452, **2020** (IF: 6.556)
10. Li, Q., Xie, B., Wang, Y. *, **Wang, Y.***, Peng, L., Li, Y., Li, B., Liu, S.* Cellulose nanofibrils from *Miscanthus floridulus* straw as green particle emulsifier for O/W Pickering emulsion. *Food Hydrocolloids*. 97: 105214, **2019** (IF: 10.7)
11. Li, Y., Zhuo, J., Liu, P., Chen, P., Hu, H., Wang, Y., Zhou, S., Tu, Y., Peng, L., **Wang, Y.*** Distinct wall polymer deconstruction for high biomass digestibility under chemical pretreatment in *Miscanthus* and rice. *Carbohydrate Polymers*. 192: 273-281, **2018** (IF: 11.2)
12. **Wang, Y.#**, Fan, C.#, Hu, H., Li, Y., Sun, D., Wang, Y., Peng, L. * Genetic modification of plant cell walls to enhance biomass yield and biofuel production in bioenergy crops. *Biotechnology Advances*, 34: 997-1017, **2016** (IF: 16.0)
13. **Wang, Y.#**, Huang, J.#, Li, Y., Xiong, K., Wang, Y., Li, F., Liu, M., Wu, Z., Tu, Y., Peng, L. * Ammonium oxalate-extractable uronic acids positively affect biomass enzymatic digestibility by reducing lignocellulose crystallinity in *Miscanthus*. *Bioresource Technology*, 196: 391-398, **2015** (IF: 11.4)