

## 上海市自然科学奖

项目名称：优质高蛋白玉米形成机制

代表性论文目录：

1. Yongcai Huang, Haihai Wang, Yidong Zhu, Xing Huang, Shuai Li, Xingguo Wu, Yao Zhao, Zhigui Bao, Li Qin, Yongbo Jin, Yahui Cui, Guangjin Ma, Qiao Xiao, Qiong Wang, Jiechen Wang, Xuerong Yang, Hongjun Liu, Xiaoduo Lu, Brian A Larkins, Wenqin Wang, Yongrui Wu. (2022). THP9 enhances seed protein content and nitrogen-use efficiency in maize. *Nature*, 612(7939), 292–300.
2. Yongcai Huang, Haihai Wang, Xing Huang, Qiong Wang, Jiechen Wang, Dong An, Jiqin Li, Wenqin Wang, Yongrui Wu. (2019). Maize VKS1 Regulates Mitosis and Cytokinesis During Early Endosperm Development. *The Plant cell*, 31(6), 1238–1256.
3. Zhiyong Zhang, Xixi Zheng, Jun Yang, Joachim Messing, Yongrui Wu. (2016). Maize endosperm-specific transcription factors O2 and PBF network the regulation of protein and starch synthesis. *Proceedings of the National Academy of Sciences of the United States of America*, 113(39), 10842–10847.
4. Tao Yang, Liangxing Guo, Chen Ji, Haihai Wang, Jiechen Wang, Xixi Zheng, Qiao Xiao, Yongrui Wu. (2021). The B3 domain-containing transcription factor ZmABI19 coordinates expression of key factors required for maize seed development and grain filling. *The Plant cell*, 33(1), 104–128.
5. Haihai Wang, Yongcai Huang, Qiao Xiao, Xing Huang, Changsheng Li, Xiaoyan Gao, Qiong Wang, Xiaoli Xiang, Yidong Zhu, Jiechen Wang, Wenqin Wang, Brian A Larkins, Yongrui Wu. (2020). Carotenoids modulate kernel texture in maize by influencing amyloplast envelope integrity. *Nature communications*, 11(1), 5346.

主要完成单位：中国科学院分子植物科学卓越创新中心，上海师范大学

主要完成人：巫永睿，王文琴，黄永财，王海海，杨桃

提名者：中国科学院上海分院

提名等级：一等奖