

鲍泽华，浙江大学化学工程与生物工程学院“百人计划”研究员，浙江大学杭州国际科创中心双聘研究员，入选国家海外高层次人才项目。在清华大学获得生物科学与技术学士学位（2010），师从饶子和院士；在美国伊利诺伊大学香槟分校获得生物化学博士学位（2017），师从合成生物学著名专家 Huimin Zhao 教授；之后前往美国波士顿大学生物设计中心从事博士后研究（2020），师从合成生物学著名专家 Ahmad S. Khalil 教授。以第一/通讯作者在 *Nat Biotechnol*、*Sci Adv*、*Biotechnol Bioeng*、*ACS Synth Biol*、*Mol Ther*、*Trends Microbiol* 等期刊发表多篇高水平论文，担任 *BMC Biotechnology* 编委。主持国家高层次人才青年人才、国家自然科学基金、国家重点研发计划子课题、浙江大学百人计划、浙江大学杭州国际科创中心青年人才卓越计划、浙江大学校科技创新团队 2.0 计划、杭州恩和生物科技有限公司横向等项目。长期从事基因编辑和基因调控技术研究，主导开发了饱和基因编辑技术 (*Science Advances*, 2024)、高通量单碱基精度基因组编辑技术 (*Nature Biotechnology*, 2018)、多位点基因组编辑技术 (*ACS Synthetic Biology*, 2015, ESI 高被引论文) 和哺乳动物细胞基因调控技术 (*Biotechnology and Bioengineering*, 2025; *ACS Synthetic Biology*, 2017, F1000 推荐论文)。

五篇代表作 (*共同第一作者; #通讯作者) :

1. Y. Sang*, L. Xu*, **Z. Bao**# (2024) Development of artificial transcription factors and their applications in cell reprogramming, genetic screen, and disease treatment. *Molecular Therapy* 32 (12), 4208-4234.
 - 人工转录因子在生命健康领域的应用 (创刊 25 年来浙江大学第四篇受邀综述)
 - 美国基因与细胞治疗学会会刊, 影响因子 12.1
2. L. Deng, Y. Zhou, Z. Cai, J. Zhu, Z. Li, **Z. Bao**# (2024) Massively parallel CRISPR-assisted homologous recombination enables saturation editing of full-length endogenous genes in yeast. *Science Advances* 10 (20), eadj9382.
 - 首次报导酵母饱和基因编辑
 - *Science* 子刊, 影响因子 11.7
3. Z. Cai*, W. Xie*, **Z. Bao**# (2024) Broadening the targetable space: engineering and discovery of PAM-flexible Cas proteins. *Trends in Microbiology* 32 (8), 728-731.
 - 基因编辑蛋白优化改造 (受邀综述)
 - *Cell* 子刊, 影响因子 14.0
4. **Z. Bao**, M. Hamedirad, P. Xue, H. Xiao, I. Tasan, R. Chao, J. Liang, H. Zhao# (2018) Genome-scale engineering of *Saccharomyces cerevisiae* with single nucleotide precision. *Nature Biotechnology* 36 (6), 505-508.
 - 首次报导酵母高通量基因编辑
 - *Nature* 子刊, 影响因子 33.1, 引用 200+
 - 美国能源部技术报告近十年重大进展、美国科学促进会推荐
5. **Z. Bao***, H. Xiao*, J. Liang, L. Zhang, X. Xiong, N. Sun, T. Si, H. Zhao# (2015) Homology-Integrated CRISPR-Cas (HI-CRISPR) system for one-step multigene disruption in *Saccharomyces cerevisiae*. *ACS Synthetic Biology* 4 (5), 585-594.
 - 全球第三篇酵母基因编辑论文, 应用于 10 余种天然产物制造及多种微生物菌株重构
 - ESI 高被引论文, 引用 400+

Dr. Zehua Bao is currently a principal investigator in the College of Chemical and Biological Engineering at Zhejiang University. He is also affiliated with ZJU-Hangzhou Innovation Center. Before joining ZJU, Dr. Bao conducted undergraduate research with Zihao Rao at Tsinghua University, doctoral research with Huimin Zhao at UIUC, and postdoctoral research with Mo Khalil at BU. Dr. Bao's primary research interest centers around developing high-throughput, multiplex genome editing and regulation tools for cellular and protein engineering, with first/corresponding author publications in *Nat Biotechnol*, *Sci Adv*, *Biotechnol Bioeng*, *ACS Synth Biol*, *Mol Ther*, *Trends Microbiol*, etc. His major contributions include the development of CHASE, CHAnGE, HI-CRISPR, and CRISPRa tools, which have won him the prestigious National Young Talents award.