

# Resume of Kai-Zhi Jia

## **Basic Information**



School :	School of Life and Health Science
Gender:	Male
Date of Birth:	197605
Title:	Professor
Education:	Ph.D of Microbiology
Tutor:	Master degree
E-mail:	kaizhijia1@163.com
Interest of research:	Enzymatic engineering, Synthetic biology

## **Academic Background**

From September 1996 to July 2000, Hebei Agricultural University, Bachelor's degree in Olericulture;

From September 2000 to July 2003, Hebei Agricultural University, Master's degree of Olericulture;

From September 2003 to November 2006, Nanjing Agricultural University, Ph.D of Microbiology.

## **Postdoctor**

2008/01-2012/06, Postdoctor, Institute of Microbiology, Chinese Academy of Sciences

## **Enrollment Information**

1. Enrollment Discipline: Master of Bioengineering
2. Research direction: Enzymatic engineering, Synthetic biology
3. Enrollment Year: 2024-2025

## **Representative Projects**

1. National Natural Science Foundation of China (Grant Nos. 31570054) " Regulation mechanism controlling transcriptional expression of VOSCs synthase genes during submerged fermentation of *Tuber melanosporum*", China, Project leader.

2. National Natural Science Foundation of China (Grant Nos. 31000024) " Molecular mechanism for butanol toxicity towards *Clostridium acetobutylicum* ", China, Project leader.

3. Open Fund Project of State Key Laboratory (Grant Nos. M2021-09) " Molecular mechanism for specific recognition of non-natural substrate DMEP by glycosyltransferase". China, Project leader.

## **Representative Articles**

1. Depletion of L-methionine in foods with an engineered thermophilic methionine

- $\gamma$ -lyase efficiently inhibits tumor growth. *Journal of Agricultural and Food Chemistry* 2023, 71, 17141-17152.
2. Engineering the entrance of a flavonoid glycosyltransferase promotes the glycosylation of etoposide aglycone. *ACS Synthetic Biology* 2022, 11:1874-1880.
  3. YALI0C22088g from *Yarrowia lipolytica* catalyzes the conversion of L-Methionine into volatile organic sulfur-containing compounds. *Microbial Biotechnology* 2021, 14:1462-1471.
  4. A novel podophyllotoxin derivative with higher anti-tumor activity produced via 4'-demethylepipodophyllotoxin biotransformation by *Penicillium purpurogenum*. *Process Biochemistry* 2020, 96: 220-227.
  5. Enzymatic O-glycosylation of etoposide aglycone by exploration of the substrate promiscuity for glycosyltransferases. *ACS Synthetic Biology* 2019, 8: 2718-2725.