

Resume of Jun CAI

Basic Information



School : School of Life and Health Sciences
Gender: Male
Date of Birth: 196809
Title: Professor
Education: Ph.D of Environmental Science
Tutor: Doctor's Degree
E-mail: caijun@mail.hbut.edu.cn
Interest of research: Light Industry Technology and Engineering, Bioengineering, Food Science and Engineering

Academic Background

From September 1986 to July 1990, Hubei University of technology, Bachelor's degree of Fermentation Engineering;

From September 1998 to July 2001, Hubei University of technology, Master's degree of Fermentation Engineering;

From September 2002 to July 2006, Wuhan University, Ph.D of Environmental Science.

Oversea visiting

2008/01-2008/06, Visiting scholar, Kyoto Prefectural University, Japan;

Enrollment Information

1. Enrollment Discipline: Master of Light Industry Technology and Engineering, Bioengineering, Food Science and Engineering
2. Research direction: Bioengineering, Food Science and Engineering
3. Enrollment Year: 2023-2024

Representative Projects

1. Ministry of Science and Technology Innovation Program "Microbial fermentation of straw to produce cellulase", China, Project leader.
2. Hubei Province Key Research and Development Plan "Research on the key technology of crayfish shell biological processing", Hubei Province, Project leader.
2. Key project of Hubei Natural Science Foundation "Study on the microbial synthesis and metabolic regulation of glutathione", Hubei Province, Project leader.
3. Natural Science Foundation of Hubei Province "Enzymatic characteristics and kinetics of chitin deacetylase from *Aspergillus nidulatus*". Hubei Province, Project leader.
4. Hubei Province Science and Technology project "The production of high temperature resistant and high activity feeding cellulase by fermentation of straw with recombinant

bacteria".Hubei Province, Project leader.

Representative Articles

1. Purification and characterization of the exo-polygalacturonase from *Zygoascus hellenicus* V25 and its potential application in fruit juice clarification. *Food Science and Biotechnology*, 2016,25(5):1379-1385
2. Biotransformation and detoxification of aflatoxin B1 by extracellular extract of *Cladosporium uredinicola*. *Food Science and Biotechnology*, 2016, 25 (6) : 1789-1794
3. Preparation of chitooligosaccharides from fungal waste mycelium by recombinant chitinase. *Carbohydrate Research*, 2016, 43,1-7
4. Identification of Potential Helicoverpa armigera (Lepidoptera: Noctuidae) Sterol Carrier Protein-2 Inhibitors Through High-Throughput Virtual Screening. *Journal of Economic Entomology*, 2017,110 (4) : 1779-1784
5. Purification and characterization of alkaline lipase production by *Pseudomonas aeruginosa* HFE733 and application for biodegradation in food wastewater treatment. *Biotechnology & Biotechnological Equipment*, 2018,32(3):583-590
6. Structure and toxicity analysis of Aflatoxin B1 biodegraded products by culture supernatant of *Cladosporium uredinicola*. *Science Asia*, 2020,46, 308-314.
7. Co-immobilization of glucose oxidase and catalase in porous magnetic chitosan microspheres for production of sodium gluconate, *International Journal of Chemical Reactor Engineering*, 2022, 20(9):989-1001
8. Improved Fermentation Yield of Doramectin from *Streptomyces avermitilis* N72 by Strain Selection and Glucose Supplementation Strategies, *Fermentation*, 2023,9,121
9. One-step production of biodiesel by wet *Escherichia coli* cells expressing a non-specific and methanol-resistant lipase, *Process Biochemistry*, 2023,125,75-83.
10. Preparation of branched RG-I-rich pectin from red dragon fruit peel and the characterization of its probiotic properties, *Carbohydrate Polymers*, 2023,299,120144.