

# Resume of Guang-Ming BAO

## **Basic Information**



School : School of Life and Health Sciences  
Gender: Male  
Date of Birth: 198104  
Title: Distinguished Professor  
Education: Doctor of Philosophy  
Tutor: Doctor degree & Master degree  
Interest of research: Drug detection, Drug innovation, Disease marker detection, Food safety Detection

## **Academic Background**

From September 2000 to July 2004, Hubei Engineering University, Bachelor's degree in Chemistry;

From September 2004 to July 2007, China West Normal University, Master's degree of Organic chemistry;

From October 2007 to September 2010, Osaka University, Doctor of Philosophy in Chemistry.

## **Oversea visiting**

2007/10-2010/09, Studying for a Ph.D., Osaka University, Japan;

## **Enrollment Information**

1. Enrollment Discipline: Pharmacy, Chemistry, Biology and Medicine, Food Science and Engineering, Light Industry Technology and Engineering, Material science and engineering
2. Research direction: Drug detection, Antibacterial nanodrug innovation, Disease marker detection, Food safety detection, Nanozyme, Fluorescence Probe
3. Enrollment Year: Annually

## **Representative Honors and awards**

2023: Awarded the title of "Chutian Scholar" by Hubei Province.

2023: Recognized as "Wuhan Talent" Industry Leading Talent by Wuhan City.

2022: Named "Nanhu Scholar" Distinguished Professor by Hubei University of Technology.

2022: Served as the Principal Investigator of the research team.

2021: Honored as an exemplary individual by Jiangxi Agricultural University.

2020: Named "Young Jinggang Scholar" by Jiangxi Province.

2019: Recognized as "Outstanding Youth of Jiangxi Province".

2016: Awarded the "Future Star" by Jiangxi Agricultural University.

2012: Recognized as an exemplary individual for "Three Educations" at Jiangxi Agricultural University.

2009: Received the Japanese Government Scholarship (MEXT Scholarship) in 2009.

### **Representative Projects**

1. National Natural Science Foundation of China "Construction of intelligent theranostic prodrug for Near-infrared(NIR) fluorescent monitoring and control of BLPB infection " (No. 22166018), China, Project leader.
2. National Natural Science Foundation of China "Construction and evaluation of taste masked enrofloxacin nano-delivery system based on pH-responsive release " (No. 31960720), China, Project leader.
3. National Natural Science Foundation of China "Design, synthesis and pharmacological activity of chitinase inhibitor as potential veterinary drugs " (No. 31560712), China, Project leader.
4. A Sub-topic of the National Key Research and Development Program of China " Research on the Preparation and Intelligent Release of Ivermectin Mesoporous Nanodrugs" (No.2017YFD0501406), China, Project leader.
5. Jiangxi Provincial Outstanding Youth Fund "Construction, Responsive Release, and Indoor Insecticidal Activity of Imidacloprid Nanocontrolled Release System" (No. 20192ACBL21018), Jiangxi Province, Project leader.
6. Special research fund for doctoral programs of Ministry of Education" Rapid synthesis of peptidoglycan derivatives and their immunomodulatory effects on bees" (No. 20113603120006), The Chinese Ministry of Education, Project leader.
7. Jiangxi Provincial Natural Science Project " Preparation of drug loaded nanocapsules and their chitinase responsive release properties" (No. 20151BAB204014), Hubei Province, Project leader.

8. Jiangxi Provincial Natural Science Project " Study on Chitinase Inhibitors Used as Green Animal Fly Killers in Computer Aided Drug Design " (No. 20142BAB214017), Hubei Province, Project leader.
9. Jiangxi Provincial Natural Science Project " Discovery and Activity Study of Peptide Polysaccharides as Immunomodulators for Aquatic Animals" (No. 20112BBF60024), Hubei Province, Project leader.
10. Shanghai Key Laboratory of Chemical Biology Open Fund Key Project " series  $\beta$ -Design, Synthesis, and Activity Study of N-Acetylhexosamine Enzyme Inhibitors " (No. SKLCB-2012-02), Shanghai Key Laboratory of Chemical Biology, Project leader.

### **Representative Articles**

1. Xia YF, Yuan HQ\*, Chen Qiao, Li W, Wang R, Chen PY, Li YX, and **Bao GM\***. A multifunctional  $\text{Eu}^{3+}$ -MOF for simultaneous quantification of malachite green and leuco-malachite green and efficient adsorption of malachite green. *Journal of Hazardous Materials*, **2024**, 465, 133386.
2. Yuan HQ, Xia YF, Zhong YF, Li W, Zhu HD, Wang R, Chen PY, Gao ZM, Zhu XW, Li YX, and **Bao GM\***. Dual-emissive Eu(III)-functionalized metal-organic frameworks for visual, rapid, and intelligent sensing of albendazole and albendazole sulfoxide in animal-origin food. *Analytica Chimica Acta*, **2024**, 1288, 342196
3. **Bao GM**, Cui SQ, Xia YF, Dou ZC, Wei X, Cai ZQ, Chen PY, Zhang Y, Chen YX, and Yuan HQ\*, Dual emissive Cl, N-codoped carbon dots for highly selective and sensitive detection of amphotericin B in milk and wastewater. *Microchemical Journal*, **2024**, 204, 111105.
4. Yang JL#, Yuan HQ#, Fu JH, Luo X, and **Bao GM\***. Facile one-precursor and one-pot synthesis of Girard's reagent T-based carbon dots for bacteria-resistant and anti-biofilm applications. *Biomedical Materials*, **2023**, 18, 045025.
5. Zhong YF#, **Bao GM#**, Qiu M, Xia YF, Li W, Tao YQ, Liu SY, Li SH, Xiao W, Zhang YF, and Yuan HQ\*. Highly Selective and Sensitive Fluorescent Biosensor for the Detection of Serotonin and its Metabolite by  $\text{Eu}^{3+}$ -Doped Metal-Organic Framework. *Chemical Engineering Journal* 442 (2022) 136272.
6. He JX#, Yuan HQ#, Zhong YF, Peng XX, Xia YF, Liu SY, Fan Q, Yang JL, Deng K, Wang XY, and **Bao GM\***. A luminescent  $\text{Eu}^{3+}$ -functionalized MOF for sensitive and rapid detection of tetracycline antibiotics in swine wastewater and pig kidney. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 277 (2022) 121252.

7. Jiang LR<sup>#</sup>, Chen TH<sup>#</sup>, Song EW, Fan Y, Min DY, Zeng LT\*, and **Bao GM\***. High-Performance Near-Infrared Fluorescence Probe for Fast and Specific Visualization of Harmful Sulfite in Food, Living Cells, and Zebrafish. *Chemical Engineering Journal*, **2022**, *427*, 131563.
8. Bian YN, Wang YL, Yuan HQ, **Bao GM\***, Su DD\*. A portable colorimetric and fluorescent sensor for the fast visual detection of phosgene. *Dyes and Pigments*, **2022**, *198*, 110009.
9. Yang JL<sup>#</sup>, Yuan HQ<sup>#</sup>, Liu BS, He JX, Fan Q, Deng K, Song DP, and **Bao GM\***. Facile one-pot synthesis of chitosan-based nanoparticles for pH responsive enrofloxacin delivery. *Materials Today Communications*, **2021**, *29*, 102883.
10. Chen TH<sup>#</sup>, Jiang LR<sup>#</sup>, Hou JT, Wang W, Zeng LT\*, and **Bao GM\***. A Portable Chromogenic and Fluorogenic Membrane Sensor for Ultrasensitive, Specific and Instantaneous Visualizing Lethal Phosgene. *Journal of Materials Chemistry A*, **2020**, *8*, 24695–24702.
11. Zhu BT<sup>#</sup>, Wu XL<sup>#</sup>, Rodrigues J, Hu XC\*, Sheng RL\*, and **Bao GM\***. A dual-analytes responsive fluorescent probe for discriminative detection of ClO<sup>-</sup> and N<sub>2</sub>H<sub>4</sub> in living cells. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, **2021**, *246*, 118953.
12. Chen TH<sup>#</sup>, Jiang LR<sup>#</sup>, Yuan HQ, Zhang Y\*, Su DD\*, and **Bao GM\***. A flexible paper-based chemosensor for colorimetric and ratiometric fluorescence detection of toxic oxalyl chloride. *Sensors and Actuators B: Chemical*, **2020**, *319*, 128289.
13. Hu XC, Zeng HY, Chen TH, Yuan HQ, Zeng LT\*, and **Bao GM\***. Fast and visual detection of a chemical warfare agent mimic using a simple, effective and portable chemosensor. *Sensors and Actuators B: Chemical*. **2020**, *319*, 128282.
14. Zeng LT\*, Chen TH, Chen BQ, Yuan HQ, Sheng RL\*, and **Bao GM\***. A distinctive mitochondria-targeting and in situ activated near-infrared fluorescent probe for visualizing sulfur dioxide derivatives and their fluctuation *in vivo*. *Journal of Materials Chemistry B*, **2020**, *8*, 1914-1921. (2020 Journal of Materials Chemistry B most popular articles)
15. Zeng LT\*, Wu XL, Hu Q, Yuan HQ, and **Bao GM\***. A single fluorescent chemosensor for discriminative detection of bisulfite and benzoyl peroxide in food with different emission. *Sensors and Actuators B: Chemical*, **2019**, *299*, 126994.
16. Wu XL, Zeng LT\*, Chen BQ, Zhang M\*, Rodrigues J, Sheng RL\*, and **Bao GM\***. A selective cascade reaction-based probe for colorimetric and ratiometric fluorescence detection of benzoyl peroxide in food and living cells. *Journal of Materials Chemistry B*, **2019**, *7*, 5775-5781. (Selected as one of 2019 JMC-B **HOT Papers**).

17. Duan C, Zhang JF, Hu YB, Zeng LT\*, Su DD\*, and **Bao GM\***. A distinctive near-infrared fluorescence turn-on probe for rapid, sensitive and chromogenic detection of sulfite in food. *Dyes and Pigments*, **2019**, *162*: 459-465. (🏆 🏆 🏆 - Highly Cited Papers).
18. Xu JC, Yuan HQ, Zeng LT\*, **Bao GM\***. Recent progress in Michael addition-based fluorescent probes for sulfur dioxide and its derivatives. *Chinese Chemical Letters*, **2018**, *29(10)*: 1456–1464.
19. Wu JJ, Ye Z, Wu F, Wang HY, Zeng LT\*, and **Bao GM\***. A rhodamine-based fluorescent probe for colorimetric and fluorescence lighting-up determination of toxic thiophenols in environmental water and living cells. *Talanta*, **2018**, *181*: 239-247.
20. Wu F, Hu Q, Xu JC, Wang HY, Yuan HQ, Zeng LT\*, and **Bao GM\***. A new fluorescent chemodosimeter for ultra-sensitive determination of toxic thiophenols in environmental water samples and cancer cells. *Sensors and Actuators B: Chemical*, **2018**, *254(1)*: 21-29.