
RESUME

Personal Information

Name: Zhiyong Song	Mail: songzhiyong@mail.hzau.edu.cn
Date of birth: Jul. 27th, 1984	Sex: Male
Health: Good	Native place: Xiangtan Hunan, PR.China
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Education Experience

2011.9-2015.6: Zhejiang University, Chemistry, Doctor of science
2008.9-2011.6: Huazhong Agriculture University, Biochemical and Molecular biology,
Master of science
2004.9 -2008.6: Huaihua University, Biology engineering, Bachelor of Engineering

Research Experience

2016.6-Present: Associate Professor in College of Chemistry, Huazhong Agricultural University;
2012.5-2015.6: State Key Laboratory of Pathogen and Biosecurity, Academy of Military Medical Science;
2011.9-2012.5: Department of chemistry, Zhejiang University;
2008.9-2011.6: National Key Laboratory of Crop Genetic Improvement, College of life science and technology, Huazhong Agriculture University.

Publication List

- (1) Yi Liu, Jinmei Wu, Weihui Li, Jinquan Li, Heyou Han*, **Zhiyong Song***. Responsive metal-organic framework nanocarrier delivery system: An effective solution against bacterial infection, *Coordination Chemistry Reviews*, 2023, 496: 215431. (IF: 20.40)
- (2) Jinqiao Zhang, Wantao Tang, Xinyi Zhang, **Zhiyong Song***, Ting Tong*. An Overview of Stimuli-Responsive Intelligent Antibacterial Nanomaterials, *Pharmaceutics*, 2023, 15(8): 2113. (IF: 5.399)
- (3) Geng Zou[#], Lijun He[#], Jing Rao[#], **Zhiyong Song[#]**, Hu Du, Runze Li, Wenjing Wang, Yang Zhou, Lu Liang, Huanchun Chen, Jinquan Li. Improving the safety and efficacy of phage therapy from the perspective of phage-mammal interactions, *FEMS Microbiology Reviews*, 2023, 47(4): fuad042. (IF: 11.299)
- (4) Yi Zhou, Jun Ma, Jianhong Yang, Zhicheng Lv, **Zhiyong Song***, Heyou Han*. Soybean rhizosphere microorganisms alleviate Mo nanomaterials induced stress by improving soil microbial community structure, *Chemosphere*, 2023, 310, 136784. (IF: 8.800)
- (5) Haiyan Huang, Arbab Ali, Yi Liu, Hui Xie, Sana Ullah, Shubham Roy, **Zhiyong Song***, Bing Guo*, Jian Xu*. Advances in Image-Guided Drug Delivery for Antibacterial Therapy, *Advanced Drug Delivery Reviews*, 2023, 192, 114634. (IF: 16.100)
- (6) Jingjing Wang, Yue Liu, Yi Liu, Haiyan Huang, Shubham Roy, **Zhiyong Song***, Bing Guo*. Recent Advances in Nanomedicines for Imaging and Therapy of Myocardial Ischemia-Reperfusion Injury, *Journal of Controlled Release*, 2023, 353, 563-590. (IF:10.799)
- (7) Jun Ma, Yi Zhou, Jiaying Li, **Zhiyong Song***, Heyou Han*. Novel approach to enhance nodulation through continuous induction of ROS by manganese

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- ferrite nanomaterials, *Journal of Nanobiotechnology*, 2022, 20, 168. (IF: 10.200)
- (8) Yang Wu[#], **Zhiyong Song**[#], Guiyun Deng, Kai Jiang, Huajuan Wang, Xueji Zhang* and Heyou Han*. Gastric Acid Powered Nanomotors Release Antibiotics for In Vivo Treatment of Helicobacter pylori Infection, *Small*, 2021, 2006877. (IF: 13.300)
 - (9) Yang Wu, Guiyun Deng, Kai Jiang, Huajuan Wang, **Zhiyong Song***, Heyou Han*. Photothermally triggered nitric oxide nanogenerator targeting type IV pili for precise therapy of bacterial infections, *Biomaterials*, 2021, 120588. (IF: 13.999)
 - (10) Huajuan Wang[#], Jin Zhang[#], **Zhiyong Song**[#], Yongli Mu, MF Foda, Yang Wu, Heyou Han. An intelligent platform based on acidity-triggered aggregation of gold nanoparticles for precise photothermal ablation of focal bacterial infection, *Chemical Engineering Journal*, 2021, 127076. (IF: 15.100)
 - (11) Jun Ma[#], **Zhiyong Song**[#], Jianhong Yang, Youning Wang, Heyou Han*. Cobalt Ferrite Nanozyme for Efficient Symbiotic Nitrogen Fixation via Regulating Reactive Oxygen Metabolism, *Environmental Science: Nano*, 2021, 8(1): 188-203. (IF: 7.300)
 - (12) Jianhong Yang[#], **Zhiyong Song**[#], Jun Ma, Heyou Han*. Toxicity of Molybdenum-Based Nanomaterials on the Soybean–Rhizobia Symbiotic System: Implications for Nutrition, *ACS Applied Nano Materials*, 2020, 3 (6), 5773-5782. (IF: 5.900)
 - (13) Yang Wu[#], **Zhiyong Song**[#], Huajuan Wang, Heyou Han* Endogenous stimulus-powered antibiotic release from nanoreactors for a combination therapy of bacterial infections, *Nature Communications*, 2019, 10 (1), 4464. (IF: 16.600)
 - (14) Shuojun Li[#], **Zhiyong Song**[#], Caiyun Liu, Xiaolin Chen*, Heyou Han*. Biomimetic Mineralization-Based CRISPR/Cas9 Ribonucleoprotein Nanoparticles for Gene Editing, *ACS Applied Materials & Interfaces*, 2019, 11 (51), 47762-47770. (IF: 9.500)
 - (15) **Zhiyong Song**[#], Yang Wu[#], Huajuan Wang, Heyou Han*. Synergistic antibacterial effects of curcumin modified silver nanoparticles through ROS-mediated pathways, *Materials Science and Engineering: C*, 2019, 99, 255-263. (IF: 7.900)
 - (16) **Zhiyong Song**[#], Yang Wu[#], Qi Cao, Huajuan Wang, Xiangru Wang, Heyou Han*. pH-Responsive, Light-Triggered on-Demand Antibiotic Release from Functional Metal–Organic Framework for Bacterial Infection Combination Therapy, *Advanced Functional Materials*, 2018, 28 (23), 1800011. (IF: 19.000)
 - (17) **Zhiyong Song**, Xiaoyu Wang*, Genxing Zhu, Qinggong Nian, Hangyu Zhou, Dong Yang, Chengfeng Qin, Ruikang Tang*. Virus capture and destruction by label - free graphene oxide for detection and disinfection applications, *Small*, 2015, 11(9-10): 1171-1176. (IF: 13.300)
 - (18) **Zhiyong Song**, Long Liu, Xiaoyu Wang, Yongqiang Deng, Qingong Nian, Guanchuan Wang, Shunya Zhu, Xiaofeng Li, Hangyu Zhou, Tao Jiang, Xurong Xu, Ruikang Tang*, Chenfeng Qin*. Intracellular delivery of biomineralized monoclonal antibodies to combat viral infection, *Chemical Communications*, 2016, 52(9): 1879-1882.

Research interests/areas of expertise

1. Nanotechnology and treatment of pathogenic microbial infections;
2. Nano-drug delivery;
3. Nano vaccine;

Academic part-time jobs

Biomedical Engineering Communications Editorial Board, Asian Journal of Pharmaceutical Sciences Young Editorial Board, Burns & Trauma Young Editorial Board, iMeta Young Editorial Board, Acta Materia Medica Young Editorial Board, Nano TransMed Young Editorial Board , Journal of Huazhong Agricultural University Young Editorial Board, Journal of Fujian Normal University Young Editorial Board, Journal of South China Agricultural University Young Editorial Board, Member of Chinese Chemical Society, Member of Functional Materials and Devices Committee, Senior member of China Society of Micron and Nanotechnology.