Resume of Yan Zhang

Basic Information

School :	School of Life and Health Sciences
Gender：	Female
Date of Birth：	199105
Title：	Associate Professor
Education：	Ph.D of Engineering
Tutor：	Master degree
Interest of research:	Application of analytical chemistry to food safety

Academic Background

From September 2009 to July 2013, Yangtze University, Bachelor's degree in Chemistry;
From September 2013 to July 2018, Huazhong University of Science and Technology, Doctor's degree of Materials Physics and Chemistry;
From July 2018 to May 2022, Huazhong University of Science and Technology, Post Doctor of Clinical medicine.

Oversea visiting

2024/05-2025/05, Visiting scholar, The University of Nanyang Technological University;

Enrollment Information

1. Enrollment Discipline: Master of Food Science and Engineering
2. Research direction: elctrochemical sensor, functional materical, food safety
3. Enrollment Year: 2024-2025

Representative Projects

1. The National Natural Science Foundation of China, China.
2. International Science and Technology Cooperation Foundation of Hubei Province.
3. The Postdoctoral Natural Science Foundation Project of China.

Representative Articles

1 **Zhang Yan#***, Lin Tao, Han Minghui, Hu Min, Xu Yun, Huang Wei, Xiao Fei, Zhao Anshun* A microelectrode electrochemical sensing platform based on heteroatoms doped carbon nanotubes arrays with peroxidase-like activity for in-situ detection in live cell. ***Analytica Chimica Acta*** 2024, 1297, 342386.

2 **Zhang Yan#**, Han Minghui, Peng Danni, Qin Haowen, Zheng Hehaoming, Xiao

Jian, Yang Nan*MOF-derived high-density carbon nanotubes “tentacle” with boosting electrocatalytic activity for detecting ascorbic acid. ***Talanta***, https://doi.org/10.1016/j.talanta.2024.126578.

3 **Zhang Yan[#] ,** Lv Qiying, Chi Kai, Li Qilin., Fan Huilin, Cai Bo, Xiao Fei*, Wang Shuai*, Wang Zheng*, Wang Lin* Hierarchical porous carbon heterojunction flake arrays derived from metal organic frameworks and ionic liquid for H_2O_2 electrochemical detection in cancer tissue. ***Nano Research***, 2021,Springer,14, 1335.

4 **Zhang Yan [#] ,** Chi Kai, Xiao Jian, Xu Yangyang, Zhao Anshun, Xu Yun, Sun Yimin, Xiao Fei*, Wang Shuai* Coral-like hierarchical structured carbon nanoscaffold with improved sensitivity for biomolecular detection in cancer tissue. ***Biosensors and Bioelectronics***, 2020, Elsevier,150, 111924.

5 **Zhang Yan [#] ,** Xiao Jian, Sun Yimin, Wang Lu, Dong Xulin, Ren Jinghua, He Wenshan, Xiao Fei*. Flexible nanohybrid microelectrode based on carbon fiber wrapped by gold nanoparticles decorated nitrogen doped carbon nanotube arrays: In situ electrochemical detection in live cancer cells. ***Biosensors and Bioelectronics***, 2018,Elsevier, 100, 453-461.

6 **Zhang Yan [#] ,** Xiao Jian, Lv Qiying, Wang Lu, Dong Xulin, Muhammad Asif, Ren Jinghua, He Wenshan, Sun Yimin, Xiao Fei*, Wang Shuai* 3D heteroatom-doped graphene-wrapped flexible carbon fiber microsensor for real-time hydrogen peroxide detection in live cancer cells . ***Applied Surface Science***, 2023, 611, 155655.

7 Li Qilin [#], **Zhang Yan [#] ,** Fan Huilin, Gong Yuji, Xu Yun, Lv Qiying, Xu Y.unruo, Xiao Fei*, Wang Shuai*, Wang Zheng*, Wang Lin* In vitro and in vivo detection of lactate with nanohybrid-functionalized Pt microelectrode facilitating assessment of tumor development. ***Biosensors and Bioelectronics***, 2021, Elsevier, 191, 113474.

8 **Zhang Yan [#] ,** Xiao Jian [#] , Lv Qiying, Wang Shuai* Self-supported transition metal phosphide based electrodes as high-efficient water splitting cathodes. ***Frontiers of Chemical Science and Engineering,*** 2018, Springer,12, 494.

9 **Zhang Yan[#]** , Qin Haowen, Han Minghui, Xiao Jian *, Yang Nan *. Electrochemical sensor based on three-dimensional skeleton/skin ink for the ultrasensitive detection of dopamine released from neural cells. ***Microchemical Journal*** 2023, Elsevier, 193, 109199.

10 Yang Wenbo, Hu Hongzhi, Pan Qing, Deng Xiangyu, **Zhang Yan***, Shao Zengwu*. In Iron-polydopamine coated multifunctional nanoparticle SiO_2@PDA/Fe^{3+}-FA mediated low temperature photothermal for chemodynamic therapy of cisplatin-insensitive osteosarcoma. ***Materials & Design*** 2023, Elsevier, 227, 111785

11 Xiao Jian*, Wang Yongjian, Liu Junyao, Yang Yang, **Zhang Yan***, Luo Xiaogang*. Hierarchical Ni/Ni_4Mo nanosheets array on carbon fiber as a bifunctional electrocatalyst for urea-oxidation-assisted water splitting. ***International Journal of Hydrogen Energy*** 2023, Elsevier, https://doi.org/10.1016/j.ijhydene.2023.07.131.

12 Xi Jiangbo [#] , **Zhang Yan [#] ,** Wang Qijun[#] , Xiao Jian, Chi Kai, Duan Xianming, Chen Jun, Tang Chunyan, Sun Yimin*, Xiao Fei*, Wang Shuai* Multi-element doping design of high-efficient carbocatalyst for electrochemical sensing of cancer cells. ***Sensors & Actuators: B. Chemical*** 2018, Elsevier, 273, 108-117.

13 Xiao Jian, Qiao Rongzhi, **Zhang Yan***, Luo Xiaogang* Porous Co2P film coated on carbon fiber as highly performance electrocatalyst toward overall water splitting. ***International Journal of Hydrogen Energy***. 2021, Elsevier,46, 31-40.

14 **Zhang Yan [#] ,** Xiao Jian, Lv Qiying, Wang Lu, Dong Xulin, Muhammad Asif, Ren Jinghua, He Wenshan, Sun Yimin, Xiao Fei*, Wang Shuai* In situ electrochemical sensing and real-time monitoring live cells based on freestanding nanohybrid paper electrode assembled from 3D functionalized graphene framework. ***ACS Applied Material & Interfaces***, 2017, American Chemical Society,44, 38201-38210.

15 Dai Jiahao[#], Cai Bo[#], **Zhang Yan[#]**, Zhao Shukun, Zhao Xingzhong, Wang Guobin*, Wang Lin*, and Wang Zheng *.Gelatin-coated ZnO array nanoplatform for sapture, drug resistance identification, and recovery of circulating tumor cells. ***Advanced Material Technologies*** 2023, Wiley, 2201584