

## Fei Liu

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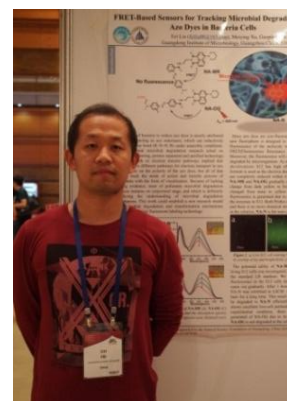
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### EDUCATION:

B. Sc. Jinan University, China 2001-2005

M.S. Fine Chemistry, Dalian University of Technology, China 2005-2008

Ph.D. Fine Chemistry, Dalian University of Technology, China 2008-2012



### ACADEMIC POSITIONS:

2016-present Associate Professor of Microbiology, Guangdong Institute of Microbiology

2016-2018 Visiting Scholar, The University of Sydney.

2013-2016 Post-doctoral, Guangdong Institute of Microbiology

### AREAS OF RESEARCH INTEREST:

- 1, Fluorescent tracing cell micro environmental sensitive;
- 2, Nanoparticles and quantum dots for applications ranging in biomedical imaging;
- 3, Single molecule spectroscopy and super-resolution techniques used in biomacromolecule imaging

### Representative publications (selected from 170 papers)

1. Luo, Y. †, **Liu, Fei**†, Li, E., Fang, Y., Zhao, G., Dai, Xu. M. Y., Sun, G. (2019). FRET-based fluorescent nanoprobe platform for sorting of active microorganisms by functional properties. *Biosensors and Bioelectronics*, **2020**, 148, 111832. (co-first author)
2. **Liu, Fei**, Wang, C., Sui, X., Riaz, M. A., Xu, M., Wei, L., & Chen, Y. Synthesis of graphene materials by electrochemical exfoliation: Recent progress and future potential. *Carbon Energy*. **2019**;1:173–199.
3. **Liu Fei**, Luo Y, Xu M. Viscosity measurements using a two-photon ratiometric fluorescent sensor with two rotors. *Tetrahedron letters*, **2018**, 59(52): 4540-4544.
4. Jacek L. Kolanowski†, **Fei Liu**†, Elizabeth J. *NewChem. Soc. Rev.*, 2018, **47**, 195-208. (co-first author)
5. **Fei Liu**, Juan Du, Da Song, Meiyong Xu,\* and Guoping Sun. A Sensitive Fluorescent Sensor for the Detection of Endogenous Hydroxyl Radical in Living Cells, Bacteria and Direct Imaging of its Ecotoxicity in Living Zebra Fish. *Chemical Communications*, **2016**, 52, 4636-4639.
6. **Fei Liu**, Juan Du, Meiyong Xu,\* and Guoping Sun. A Highly Sensitive Fluorescent Sensor for Palladium and Direct Imaging of its Ecotoxicity in Living Model Organisms , *Chemistry-An Asian Journal* , **2016**, 11, 43-48.
7. **Fei Liu**, Meiyong Xu,\* Xingjuan Chen, Yonggang Yang, Haiji Wang, and Guoping Sun. Novel Strategy for Tracking the Microbial Degradation of Azo Dyes with Different Polarities in Living Cells , *Environ. Sci. Technol.* **2015**, 49, 11356–11362.
8. **Fei Liu**, Tong Wu, Jianfang Cao, Zhigang Yang, Xiaojun Peng\*. Ratiometric Detection of Viscosity Using a Two-photon Fluorescent Sensor. *Chem. Eur. J.* **2013**, 19, 1548-1553.

9. **Fei Liu**, Tong Wu, Xiaojun Peng\*, et al. A novel fluorescent sensor for detection of highly reactive oxygen species, and for imaging such endogenous hROS in the mitochondria of living cells, *Analyst*, **2013**, 138, 775–778.
10. **Fei Liu**, Tong Wu, Mingming Hu, Xiaojun Peng\*, Jiangli Fan. A Novel Carbazole-based Cyanine as a Fluorescent Probe for Viscosity Detection. *Chemical Journal of Chinese Universities*, **2012**, 33(10), 2239-2243. (In Chinese)
11. Liu H, Wei L, **Fei Liu**, et al. Homogeneous, Heterogeneous, and Biological Catalysts for Electrochemical N<sub>2</sub> Reduction toward NH<sub>3</sub> under Ambient Conditions. *ACS Catalysis*, **2019**, 9(6): 5245-5267.
12. Wang, L., Yuan, Z., Karahan, H. E., Wang, Y., Sui, X., **Liu, Fei**, & Chen, Y. (2019). Nanocarbon materials in water disinfection: state-of-the-art and future directions. *Nanoscale*, **2019**,11, 9819-9839.
13. Karahan, H. E., Wiraja, C., Xu, C., Wei, J., Wang, Y., Wang, **Liu Fei**, Chen, Y. (2018). Graphene materials in antimicrobial nanomedicine: current status and future perspectives. *Advanced healthcare materials*, **2018**, 7, 1701406.
14. Karahan, H. E., Wang, Y., Li, W., **Liu, Fei**, Wang, L., Sui, X., Chen, Y. Antimicrobial graphene materials: The interplay of complex materials characteristics and competing mechanisms. *Biomaterials science*, **2018**, 6(4), 766-773.
15. Jianfang Cao, Chong Hu, **Fei Liu**, Wen Sun, Jiangli Fan, Fengling Song, Xiaojun Peng\*. Mechanism and Nature of the Different Viscosity Sensitivities of Hemicyanine Dyes with Various Heterocycles. *Chemphyschem*. **2013**. **14(8)**, 1601-1608.
16. Tong Wu, Xiaojun Peng, Mingming Hu, **Fei Liu**, Jiangli Fan. Synthesis and Application of an Efficient and Sensitive DNA Fluorescent Probe, *Chemical Journal of Chinese Universities*, **2012**, **33 (07)**, 1407-1412. (In Chinese)