

**Zhipeng Liu, PhD, Professor**

25 June 1982, Nanjing; Chinese

College of Materials Science and Engineering

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**RESEARCH INTERESTS**

1. Molecular probes for in vivo bioimaging.
2. NIR-absorbing Boron dipyrromethane dyes for biophotonics.
3. Smart luminescent materials.

**RESEARCH and TEACHING EXPERIENCES**

2019–now     **Professor**, College of Materials Science and Engineering, NJFU  
2015–2019   **Associate Professor**, Institute of Advanced Materials, Nanjing Tech University  
2014–2015   **Research Associate**, Dept. Chemistry, The Chinese University of Hong Kong, China  
2013–2014   **Associate Professor**, Dept. Chemistry, Liaocheng University, China  
2010–2013   **Assistant Professor**, Dept. Chemistry, Liaocheng University, China

**EDUCATION**

2007–2010   **PhD** in Inorg. Chem. (*Prof. Zijian Guo*), Nanjing University, China  
2004–2007   **MS** in Org. Chem. (*Prof. Dianshun Guo*), Shandong Normal University, China.  
2000–2004   **BS** in Chem. Liaocheng University, China

**FUNDS**

2024–2028   Natural Science Foundation of China (No. 22377057; ¥ 500 000).  
2020–2023   Natural Science Foundation of China (No. 21971115; ¥ 650 000).  
2023–2026   Natural Science Foundation of Jiangsu Province (¥ 100 000)  
2022–2025   Nanjing Forestry University's Landmark Achievement project (¥ 250 000).  
2019–2022   Nanjing Forestry University's Landmark Achievement project (¥ 500 000).  
2017–2020   Key University Science Research Project of Jiangsu Province (No. 17KJA150004;  
¥ 300 000)  
2014–2016   Natural Science Foundation of China (No. 21301085; ¥ 280 000).  
2011–2014   Natural Science Foundation of Shandong Province, China (No. ZR2011BQ010; ¥ 50  
000).

**AWARDS and FELLOWSHIPS (Selected)**

2023–2024   Early Career Advisory Board (ECAB) of ACS: Chemical & Biomedical Imaging  
2022   "333 High-level Talent Training Project" of Jiangsu Province  
2022   Science and Technology Award of Shandong Society of Chemistry and Chemical

	Engineering
2009.11	Jiang Wenruo Scholarship, Nanjing University
2009.10	<i>Dalton Transactions Poster Prize</i> for the 1 <sup>st</sup> Dalton Transactions International Symposium.
2009.5	<i>Oral presentation prize</i> for the 2 <sup>nd</sup> Symposium of Postgraduate Research of School of Chemical and Chemistry Engineering, Nanjing University.

### **DISTINCTIONS & CONFERENCES**

2023.8	<b>Invited Speaker</b> , Chemical Biology Symposium on Diagnosis and Treatment of Complex Diseases (Xian, China).
2023.7	<b>Oral Speaker</b> , 16 <sup>th</sup> National Conference on Biological Inorganic Chemistry (Guangzhou, China).
2023.6	<b>Invited Speaker</b> , 33 <sup>th</sup> CCS Congress (Qingdao, China).
2023.4	<b>Invited Speaker</b> , 12 <sup>th</sup> National Conference on Chemical Biology (Dalian, China).
2021.10	<b>Invited Speaker</b> , 15 <sup>th</sup> National Conference on Biological Inorganic Chemistry (Taiyuan, China).
2019.4	<b>Invited Speaker</b> , Academic Symposium on Inorganic Chemistry and Chemical Engineering in the Central and Western Regions-2019 (Chongqing, China)
2018.10	<b>Invited Speaker</b> , 14 <sup>th</sup> National Conference on Biological Inorganic Chemistry (Nanjing, China).
2018.9	<b>Invited Speaker</b> , 1 <sup>st</sup> Chinese Conference on Aggregation-Induced Emission (Xi'an China).
2016.11	<b>Invited Speaker</b> , Taishan Academic Forum on Biological Inorganic Chemistry and Nano Materials.
2015.8	<b>Oral Speaker</b> , 9 <sup>th</sup> CCS National Organic Chemistry Conference (Changchun, China).
2015.7	<b>Invited Speaker</b> , 12 <sup>th</sup> National Conference on Biological Inorganic Chemistry (Beijing, China).
2015.7	<b>Poster</b> , 17 <sup>th</sup> International Conference on Biological Inorganic Chemistry (Beijing, China).
2011.9	<b>Poster</b> , 11 <sup>th</sup> National Conference on Biological Inorganic Chemistry (Baoding, China).
2009.11	<b>Poster</b> , 2 <sup>nd</sup> Asian Coordination Chemistry Conference (ACCC2) (Nanjing, China).
2009.10	<b>Poster</b> , 1 <sup>st</sup> Dalton Transactions International Symposium (Nanjing)
2009.5	<b>Oral Speaker</b> , the 2 <sup>nd</sup> Symposium of Postgraduate Research of School of Chemical and Chemistry Engineering, Nanjing University
2009.4	<b>Poster</b> , 10 <sup>th</sup> National Conference on Biological Inorganic Chemistry (Xinxiang, China).
2008.11	<b>Poster</b> : 4 <sup>th</sup> Asian Biological Inorganic Chemistry Conference (AsBIC 4) (Jeju, Korea).

### **Reviewing and Society Memberships**

Grant Rev	Natural Science Foundation of China (NSFC)
Pub Rev	JACS, Angewandte, Sci. Adv., Nat. Commun., Adv. Sci., Mater. Horiz., Anal. Chem., Chem. Commun., Dalton Trans., J. Org. Chem., Org. Lett., Chem. Eur. J.
Societies	Chinese Chemical Society (CCS); Jiangsu Materials Research Society (JSMRS)

**REPRESENT PUBLICATIONS** (\*: corresponding author; updated list [online](#))

1. Zhiyong Jiang, *et. al.*, Yuncong Chen\*, Weijiang He\*, **Zhipeng Liu\*** and Zijian Guo  
Blood-Brain Barrier Permeable Photoacoustic Probe for High-Resolution Imaging of Nitric Oxide in the Living Mouse Brain  
[\*Journal of the American Chemical Society\*, \*\*2023\*\*, \*145\*, 7952-7961.](#)
2. Yijing Cui, Xiaoqing Wang, *et. al.*, **Zhipeng Liu\*** and Zijian Guo  
A Photoacoustic Probe with Blood-Brain Barrier Crossing Ability for Imaging Oxidative Stress Dynamics in the Mouse Brain  
[\*Angewandte Chemie International Edition\*, \*\*2023\*\*, \*62\*, e202214505.](#)
3. Tianzhu Wang, Zhiyong Jiang, and **Zhipeng Liu\***  
1,4-Bisvinylbenzene-Bridged BODIPY Dimers for Fluorescence Imaging in the Second Near-Infrared Window  
[\*Organic Letters\*, \*\*2023\*\*, \*25\*, 1638-1642.](#)
4. Xiaoqing Wang, *et. al.*, and **Zhipeng Liu\***  
Discovery of BODIPY J-aggregates with Absorption Maxima Beyond 1200 nm for Biophotonics  
[\*Science Advances\*, \*\*2022\*\*, \*8\*, eadd5660.](#)
5. Zhiyong Jiang, *et. al.*, Xiaoqing Wang,\* Zongxin Ling,\* **Zhipeng Liu\***  
A Borondifluoride-Complex-Based Photothermal Agent with an 80% Photothermal Conversion Efficiency for Photothermal Therapy in the NIR-II Window  
[\*Angewandte Chemie International Edition\*, \*\*2021\*\*, \*60\*, 22376-22384.](#)
6. Kang Li, *et. al.*, Yuncong Chen,\* Guo-qiang Zhang\*, **Zhipeng Liu\***  
J-Aggregates of *meso*-[2.2] Paracyclophanyl-BODIPY Dye for NIR-II Imaging  
[\*Nature Communications\*, \*\*2021\*\*, \*12\*, 2376.](#)
7. **Zhipeng Liu\***, Qian Sun, Ming Yan, Changli Zhang,\* Hao Yuan, Weijiang He\*  
Dynamic Tracking of Mitophagy Induced by Peroxynitrite via A Fluorescent Molecular Logic Gate Probe  
[\*Analytical Chemistry\*, \*\*2021\*\*, \*93\*, 3502-3509.](#)
8. Qian Sun, *et. al.*, Chengwu Zhang,\* Lin Li\*, **Zhipeng Liu\***  
Ultrafast Detection of Peroxynitrite in Parkinson's Disease Models Using a Near-Infrared Fluorescent Probe  
[\*Analytical Chemistry\*, \*\*2020\*\*, \*92\*, 4038-4045.](#)
9. Zhiyong Jiang, Xiaoqing Wang,\* Jianping Ma and **Zhipeng Liu\***  
Aggregation-Amplified Circularly Polarized Luminescence from Axial Chiral Boron Difluoride Complexes  
[\*Science China Chemistry\*, \*\*2019\*\*, \*62\*, 355–362.](#)
10. Dan Tian, *et. al.*, Zhen Shen,\* **Zhipeng Liu\*** Ling Huang\*  
Domino-like Multi-emissions Across Red and Near Infrared from Solid-State 2-/2,6-Aryl Substituted BODIPY Dyes  
[\*Nature Communications\*, \*\*2018\*\*, \*9\*, 2688.](#)