

Curriculum Vitae

Prof. Dr. Yongfa Zhu is currently a full professor of Tsinghua University. He received his BA degree in 1985 from Nanjing University and obtained his master degree in 1988 from Peking University. had studied and worked at Tsinghua University since 1992 to now and received a PhD degree at 1995. His current research is focused on photocatalysis and application on environmental, energy conversion and anti-tumor. Research work have been published in *Nature Energy*, *Nature Catalysis*, *Nature Comm.*(6), *Energy Environ. Sci.* (2), *Angew. Chem.* (10), *Adv. Mater.* (10) etc. He is the author and co-author of 539 original research papers published in SCI journals. The total cited numbers reached about 49300 and the H-index arrived at 125. About 50 papers was selected as High-Cited Papers by Essential Science Indicators. Elsevier highly cited scholar from 2014 to now, and Clarivate highly cited scientist from 2018 to now. Besides, he has written about 5 books and applied about 24 patents. The creative editor of *Science for Energy and Environment (SEE)*, the Associate editor of *Applied Catalysis B*, the Associate editor of *Green Carbon*. The vice chairman of China Photosensitive Society, and the president of Beijing Indoor and Indoor Environmental Purification Industry Association.

Education:

1981-1985	Nanjing University Chemistry	B.Sc.
1985-1988	Pekin University Chemistry	M.Sc.
1992-1995	Tsinghua University Chemistry	Ph.D.

Academic and Professional Experience:

1988-1992	Assistant Professor, Tsinghua University
1992-1997	Lecturer, Tsinghua University.
1995-1997	Post doctor, Ehime University, Japan
1997-2001	Associate Professor, Tsinghua University
2001-now	Professor, Tsinghua University



Selected publications:

1. Qixin Zhou¹, Yan Guo^{1,*} and **Yongfa Zhu^{1,*}**, Photocatalytic Sacrificial H₂ Evolution Dominated by Micropore-confined Exciton Transfer in Hydrogen-Bonded Organic Framework, *Nature Catalysis*, 2023,6(7) 574-584
2. Yaning Zhang^{1,2,5}, Chengsi Pan^{1,2,5*}, Gaoming Bian^{1,2}, Jing Xu³, Yuming Dong^{1,2}, Ying Zhang^{1,2}, Yang Lou^{1,2}, Weixu Liu⁴ & **Yongfa Zhu^{2,4*}**, H₂O₂ generation from O₂ and H₂O on a near-infrared absorbing porphyrin supramolecular photocatalyst, *Nature Energy*, 2023,8,361-371
3. Yan Guo^{1,2}, Bowen Zhu³, Chuyang Y. Tang^{2*}, Qixin Zhou¹ & **Yongfa Zhu^{1*}**, Photogenerated outer electric field induced electrophoresis of organic nanocrystals for effective solid-solid photocatalysis, *Nature Communications*, (2024)15:428

4. Yan Guo, 1,2,3 Weicong Ma, 4 MeiChi Chong, 1 Chuyang Y. Tang, 2 Qixin Zhou, 1, * Jun Nan, 3, * and **Yongfa Zhu**^{1,5, *}, Generation of holes from intra-valence band for enhanced oxidation potentials under visible light, *Chem* 10, 1–16, April 11, 2024
5. Xiaoming Xu, Lingjun Meng, Jian Zhang, Shaogui Yang, Cheng Sun, Hui Li, Junshan Li, and **Yongfa Zhu**^{*}, Full-Spectrum Responsive Naphthalimide/Perylene Diimide with a Giant Internal Electric Field for Photocatalytic Overall Water Splitting, *Angew. Chem. Int. Ed.* 2024, 63, e202308597
6. Liping Liu,^[a] Haibing Meng,^{+, [b]} Yongqiang Chai,^[c] Xianjie Chen,^[d] Jingyi Xu,^[a] Xiaolong Liu,^[e] Weixu Liu,^[a] Dirk M. Guldi,^[c] and **Yongfa Zhu**^{*[a]}, Enhancing Built-in Electric Fields for Efficient Photocatalytic Hydrogen Evolution by Encapsulating C₆₀ Fullerene into Zirconium-Based Metal-Organic Frameworks, *Angew. Chem. Int. Ed.* 2023, 62, e202217897
7. Weixu Liu⁺, Chang He⁺, Sijie Huang⁺, Kunfeng Zhang, Wei Zhu, Liping Liu, Zijian Zhang, Enwei Zhu, Yu Chen, Chen Chen,^{*} and **Yongfa Zhu**^{*}, Enhancing Carrier Transport via σ -Linkage Length Modulation in D- σ -A Semiconductors for Photocatalytic Oxidation, *Angew. Chem. Int. Ed.* 2023, e202304773
8. Xiaojie Wu⁺, Bochen Hu⁺, Di Li, Biyi Chen, Yuanyong Huang, Zhongkai Xie, Longhua Li, Nanjun Shen, Fuchen Yang, Weidong Shi,^{*} Ming Chen,^{*} and **Yongfa Zhu**^{*}, Polymer Photocatalysts Containing Segregated π -Conjugation Units with Electron-Trap Activity for Efficient Natural-light-driven Bacterial Inactivation, *Angew. Chem. Int. Ed.* 2023, 62, e202313787
9. Yuqiang Sheng, Wenlu Li, Liangliang Xu, and **Yongfa Zhu**^{*}, High Photocatalytic Oxygen Evolution via Strong Built-In Electric Field Induced by High Crystallinity of Perylene Imide Supramolecule, *Adv. Mater.* 2022, 2102354
10. Jianfang Jing, Jun Yang, Wenlu Li, Zhaohui Wu, and **Yongfa Zhu**^{*}, Construction of Interfacial Electric Field via Dual-Porphyrin Heterostructure Boosting Photocatalytic Hydrogen Evolution, *Advanced Materials*, 2022, 34, 2106807
11. Yan Guo^{1,2}, Qixin Zhou², Jun Nan¹, Wenxin Shi³, Fuyi Cui³ & **Yongfa Zhu**^{2*}, Perylenetetra-carboxylic acid nanosheets with internal electric fields and anisotropic charge migration for photocatalytic hydrogen evolution, *Nature Communications*, 2022, 13:2067
12. Jingyi Xu,^[a] Wenlu Li,^[a] Weixu Liu,^[a] Jianfang Jing,^[b] Kunfeng Zhang,^[c] Liping Liu,^[a] Jun Yang,^[a] Enwei Zhu,^[d] Junshan Li,^[e] and **Yongfa Zhu**^{*[a]}, Efficient Photocatalytic Hydrogen and Oxygen Evolution by Self-Assembled Side-Group-Engineered Benzodiimidazole Oligomers with Strong Built-in Electric Fields and Short-Range Crystallinity, *Angew. Chem. Int. Ed.*, 2022, e202212243
13. Jiawei Zhu,^{*} Yanying Wang, Aomiao Zhi, Zitao Chen, Lei Shi, Zhenbao Zhang, Yu Zhang, Yinlong Zhu, Xiaoyu Qiu, Xuezheng Tian, Xuedong Bai, Ying Zhang,^{*} and **Yongfa Zhu**^{*}, Cation-Deficiency-Dependent CO₂ Electroreduction over Copper-Based Ruddlesden–Popper Perovskite Oxides, *Angew. Chem. Int. Ed.* 2022, 61, e202111670
14. Xianjie Chen, Jun Wang, Yongqiang Chai, Zijian Zhang, **Yongfa Zhu**^{*}, Efficient Photocatalytic Overall Water Splitting Induced by a Giant Internal Electric Field of g-C₃N₄/rGO/PDIP Z-scheme Heterojunction, *Advanced Materials*, 2021, 33, 2007479
15. Jun Yang, Jiangfang Jin and **Yongfa Zhu**^{*}, A Full-Spectrum Porphyrin-Fullerene D-A Supramolecular Photocatalyst with the Giant Built-in Electric Field for Efficient Hydrogen Production, *Advanced Materials*, 2021, 2101026_
16. Guoxiang Zhu^{a,b} Wei Zhu,^{a,c} Yang Lou^{d*} Jun Ma,^{a,c} Wenqing Yao,^a Ruilong Zong,^a **Yongfa Zhu**^{**}, Encapsulate α -MnO₂ nanofiber within graphene layer to tune surface electronic structure for efficient ozone decomposition, *Nature Communication*, 2021, 12:4152
17. Zhen Wei, [a]‡ Wenchao Wang, [a]‡ Wenlu Li, [b] Xueqin Bai, [a] Jianfeng Zhao, [a] Edmund C. M. Tse,^{*}[a],[c],[d], David Lee Phillips^{*}[a] and **Yongfa Zhu**^{*[b]}, Steering electron-hole migration pathways using oxygen vacancies in tungsten oxides to enhance their photocatalytic oxygen evolution performance, *Angew. Chem. Int. Ed.* 2021, 60, 8236–8242
18. Zijian Zhang¹, Xianjie Chen¹, Hanjie Zhang¹, Weixu Liu¹, Wei Zhu², and **Yongfa Zhu**^{1*}, A Highly Crystalline Perylene Imide Polymer with the Robust Built-in Electric Field for Efficient Photocatalytic Water Oxidation, *Advanced Materials*, 2020, 1907746
19. Zijian Zhang **Yongfa Zhu**^{*} Xianjie Chen Hanjie Zhang Jun Wang, A Full-Spectrum Metal-Free Porphyrin Supramolecular Photocatalyst for Dual Functions of Highly Efficient Hydrogen and Oxygen Evolution, *Advanced Materials*, 2019, 31, 1806626
20. Zhen Wei, Meili Liu, Zijian Zhang, Wenqing Yao, Hongwei Tan and **Yongfa Zhu**^{*}, Efficient visible-light-driven selective oxygen reduction to hydrogen peroxide by oxygen-enriched graphitic carbon nitride polymers, *Energy Environ. Sci.*, 2018, 11, 2581–2589
21. Di Liu, Jun Wang, Xiaojuan Bai, Ruilong Zong, and **Yongfa Zhu**^{*}, Self-Assembled PDINH Supramolecular System for Photocatalysis under Visible Light, *Advanced Materials*, 2016, 28, 7284–7290