**1 项目名称：**面向大气低浓度氮氧化物深度净化的催化剂定向设计及机制研究

**2 代表性论文专著目录：**

1. [Shuning Xiao](https://www.nature.com/articles/s41467-019-09509-y" \l "auth-Shuning-Xiao-Aff1), [Dieqing Zhang](https://www.nature.com/articles/s41467-019-09509-y" \l "auth-Dieqing-Zhang-Aff1), [Donglai Pan](https://www.nature.com/articles/s41467-019-09509-y" \l "auth-Donglai-Pan-Aff1), [Wei Zhu](https://www.nature.com/articles/s41467-019-09509-y" \l "auth-Wei-Zhu-Aff1), [Peijue Liu](https://www.nature.com/articles/s41467-019-09509-y" \l "auth-Peijue-Liu-Aff1), [Yong Cai](https://www.nature.com/articles/s41467-019-09509-y" \l "auth-Yong-Cai-Aff1), [Guisheng Li](https://www.nature.com/articles/s41467-019-09509-y" \l "auth-Guisheng-Li-Aff1)，[Hexing Li](https://www.nature.com/articles/s41467-019-09509-y" \l "auth-Hexing-Li-Aff1)，A chloroplast structured photocatalyst enabled by microwave synthesis, *[Nat. Commun.](https://www.x-mol.com/paper/journal/49?r_detail=5630884)*, 2019, 10, 1570.
2. Xiaolang Chen, Shuning Xiao, Hao Wang, Wenchao Wang, Yong Cai, Guisheng Li, Minghua Qiao, Jian Zhu, Hexing Li, Dieqing Zhang, Yunfeng Lu, MOFs conferred with transient metal centers for enhanced photocatalytic activity, *[Angew. Chem. Int. Ed.](https://www.x-mol.com/paper/journal/5?r_detail=1266477868055044096)*, 2020, 59, 17182-17186.

# Shuning Xiao, Wenrui Dai, Xiaoyan Liu, Donglai Pan, Hangjun Zou, Guisheng Li, Guoqiang Zhang, Chenliang Su, Dieqing Zhang, Wei Chen, Hexing Li, Photocatalysis: Microwave-induced metal dissolution synthesis of core–shell copper nanowires/ZnS for visible light photocatalytic H2 evolution, *[Adv. Energy Mater.](https://www.x-mol.com/paper/journal/84?r_detail=5723590)*, 2019, 9 (22), 1900775.

1. [Xiaolang Chen](https://www.sciencedirect.com/author/15070354400/xiaolang-chen), Yong Cai, Rui Liang, Ying Tao, Wenchao Wang, Jingjing Zhao, Xiaofeng Chen, [Hexing Li](https://www.sciencedirect.com/author/8866049900/hexing-li), [Dieqing Zhang](https://www.sciencedirect.com/author/57215130931/dieqing-zhang), [NH](https://www.x-mol.com/paperRedirect/1221574495415848960" \t "https://www.x-mol.com/paper/_blank)[2](https://www.x-mol.com/paperRedirect/1221574495415848960" \t "https://www.x-mol.com/paper/_blank)[-UiO-66 (Zr) with fast electron transfer routes for breaking down nitric oxide via photocatalysis](https://www.x-mol.com/paperRedirect/1221574495415848960" \t "https://www.x-mol.com/paper/_blank), *[Appl. Catal. B: Environ. Energy](https://www.x-mol.com/paper/journal/81?r_detail=1221574495415848960)*, 2020, 267, 118687.
2. Shuning Xiao, Zhe Wan, Jiachen Zhou, Han Li, Huiqiang Zhang, Chenliang Su, Wei Chen, Guisheng Li, Dieqing Zhang, Hexing Li, [Gas-Phase photoelectrocatalysis for breaking down nitric oxide](https://www.x-mol.com/paperRedirect/5676842" \t "https://www.x-mol.com/paper/_blank), *[Environ. Sci. Technol](https://www.x-mol.com/paper/journal/60?r_detail=5676842).*, 2019, 53, 7145-7154

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