

个人简历

个人信息

姓名：倪天军

民族：汉族

职称：教授

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出生年月：1980 年 10 月

所在学系：医用化学系

行政职务：科技发展部副主任

最后学历学位：博士研究生

毕业院校：河南师范大学



从事专业及研究方向

- 分子识别探针与化学生物传感
- 环境持久污染物的降解和评价

教育背景及工作经历（按时间倒叙排列）

- 2023/12-至今

新乡医学院

基础医学院

教授
- 2016.06-2023/11

新乡医学院

基础医学院

副教授
- 2014.09-2021.06

河南师范大学

环境科学

博士研究生
- 2010.06-2016.05

新乡医学院

基础医学院

讲师
- 2007.09-2010.06

上海大学

无机化学

硕士研究生
- 2003.06-2007.08

新乡医学院

基础医学院

助教
- 1999.09-2003.06

河南大学

化学专业

本科

参加项目

- 国家自然科学基金面上项目，52470199，生物炭基持久性自由基对氧化-还原协同去除 EfOM 的强化作用及机制研究，2025/01-2028/12，48 万元，在研，主持；
- 国家自然科学基金面上项目，22276159，基于 3D-COFs/M 光-热-金属协同增效活化 PMS 体系的构建及其降解抗生素的效能与机理研究，2023/01-2026/12，54 万元，在研，主持；
- 国家自然科学基金专项项目，J2224005，区域创新发展联合基金项目绩效评估及评估结果应用研究，2023/01-2023/12，28 万元，已结题，主持；
- 国家自然科学基金青年项目，81401470，以双核铜、锌配合物为靶向的多模式探针的设计合成及其对前列腺癌的成像检测研究，2015/01-2017/12，23 万元，已结题，主持；
- 省自然科学基金杰青项目，252300421014，光电协同介导多通道催化复合污染物深度净化及机理研究，2025/01-2027/12，50 万元，在研，主持；
- 省自然科学基金面上项目，202300410327，新型双模式成像/协同治疗的纳米载体构建及其对胰腺癌诊疗一体化研究，2020/01-2021/12，10 万元，已结题，主持；
- 省教育厅基础研究专项，24ZX009，新型气体传感器阵列的可控制备及其增敏检测肺癌呼出气体 VOCs 的研究，2024-01 至 2026-12，30 万，在研，主持。

代表性成果

代表性论文：

- [1] Facile in situ synthesis of three-dimensional hollow porous carbon doped polymeric carbon nitride with highly efficient photocatalytic performance and mechanism insight, Dong Liu, Chunling Li, Jiayu Ge, Congyue Zhao, Likun Pan*, Fengquan Zhang, **Tianjun Ni***, Chemical Engineering Journal, 2022, 438, 135623. (IF=13.6)
- [2] Three-dimensional crosslinked structure assembled by novel elemental iodine doped Nb₂O₅ ultrathin nanosheets for exceptional visible-light photocatalytic performance, Dong Liu*, Minghui Chen, Tianqi Niu, Roujie Ma, Congyue Zhao, Jianing Qian, Xiaozhou Xie, Likun Pan*, Weidong Wu, **Tianjun Ni***, Chemical Engineering Journal, 2024, 493, 152625. (IF=13.6)
- [3] Visible light-driven C/O-g-C₃N₄ activating peroxydisulfate to effectively inactivate antibiotic resistant bacteria and inhibit the transformation of antibiotic resistance genes: Insights on the mechanism, Jinge Du, Na Zhang, Shuanglong Ma*, Guansong Wang, Chang Ma, Guangyong Liu, Yan Wang*, Jingzhen Wang, **Tianjun Ni***, Zhen An, Weidong Wu, Journal of Hazardous Materials, 2024, 464, 132972. (IF=12.1)
- [4] Enhanced visible light photocatalytic performance of carbon and oxygen co-doped carbon nitride with a three-dimensional structure: Performance and mechanism study, Dong Liu*, Congyue Zhao, Minghui Chen, Yawen Yang, Jianing Qian, Xiaozhou Xie, Likun Pan*, Fengquan Zhang, Ling Tao, Weidong Wu, **Tianjun Ni***, Journal of Colloid and Interface Science, 2024, 665, 452-464. (IF=9.9)
- [5] Facile fabrication of 3D hollow porous aminopyridine rings decorated polymeric carbon nitride, for enhanced photocatalytic hydrogen evolution and dye elimination, Dong Liu*, Congyue Zhao, Chunling Li, Jiaojiao Jia, Minghui Chen, Likun Pan*, Yichun Bai, Weidong Wu, **Tianjun Ni***, Journal of Colloid and Interface Science 2023, 649, 334-343. (IF=9.9)
- [6] Peroxymonosulfate activation by Co₃O₄/SnO₂ for efficient degradation of ofloxacin under visible light, **Tianjun Ni***, Zhibin Yang, Hui Zhang, Liping Zhou, Wei Guo, Likun Pan*, Zhijun Yang, Kaiwen Chang, Chunpo Ge, Dong Liu*, Journal of Colloid and Interface Science, 2022, 615, 650-662. (IF=9.9)
- [7] Enhanced adsorption and catalytic degradation of antibiotics by porous 0D/3D Co₃O₄/g-C₃N₄ activated peroxymonosulfate: An experimental and mechanistic study, **Tianjun Ni**, Hui Zhang, Zhibin Yang, Liping Zhou, Likun Pan*, Chunling Li, Zhijun Yang*, Dong Liu*, Journal of Colloid and Interface Science, 2022, 625, 466-478. (IF=9.9)
- [8] Nitrogen-Doped Carbon Quantum Dots Activated Dandelion-Like Hierarchical WO₃ for Highly Sensitive and Selective MEMS Sensors in Diabetes Detection, **Tianjun Ni**, Zhonghu Dong, Kejie Xi, Yijia Lu, Kaiwen Chang, Chunpo Ge, Dong Liu, Zhijun Yang*, Haijie Cai*, Yongheng Zhu*, ACS Sens. 2025, 10, 699-708.
- [9] Atomic cobalt catalysts on 3D interconnected g-C₃N₄ support for activation of peroxymonosulfate: The importance of Co-N coordination effect, **Tianjun Ni**, Hui Zhang, Liping Zhou, Roujie Ma, Yanyu Wang, Zhijun Yang, Dan Luo, Nithima Khaorapapong, Xingtao Xu, Yusuke Yamauchi, Dong Liu, Chinese Chemical Letters, 2024, 110659. (IF=9.1)

- [10] Ultra-thin CoAl layered double hydroxide nanosheets for the construction of highly sensitive and selective QCM humidity sensor, Yongheng Zhu, Xuhua Dong, Jinsheng Cheng, Lumin Wang, Cheng Zhao, Yonghui Deng, Siqi Xie, Yingjie Pan, Yong Zhao*, Gengzhi Sun*, **Tianjun Ni***, Chinese Chemical Letters, 2022, 34, 107930. (IF=9.1)
- [11] Controlled synthesis of α -Fe₂O₃ nanocubes for gas-sensing applications: Feasibility of assessing crucian carp (*Carassius auratus*) freshness via trimethylamine levels, Keheng Zhu, Zhenhua Zhu, Shanshan Xu, Cheng Zhao*, **Tianjun Ni***, Food Chemistry, 2024, 441, 138361. (IF=8.8)
- [12] Integrating bimetallic nanoclusters onto a porous g-C₃N₄ support for efficient degradation of metronidazole: Performance and mechanism study, Hui Zhang, Liping Zhou, Zhonghu Dong, Yanyu Wang, Zhijun Yang, Kaiwen Chang, Chunpo Ge, Dong Liu*, Haijin Liu, Likun Pan*, **Tianjun Ni***, Separation and Purification Technology, 2024, 330, Part A, 125239. (IF=8.6)
- [13] Xun Liu, Jingting Han, Xiaopeng Qiao, Haijie Cai, Yong Zhao, Zhaohuan Zhang, Baiqiang Zhai, **Tianjun Ni***, Cheng Zhao*, Yongheng Zhu*. Bimetallic Au and Pd Nanoparticles Modified WO₃ Nanosheets for Enhancing the Sensitivity and Selectivity of Formaldehyde Assessment in Aquatic Products. ACS Appl Mater Interfaces. (IF=8.5)
- [14] Design of flavonol-loaded cationic gold nanoparticles with enhanced antioxidant and antibacterial activities and their interaction with proteins, Xiangrong Li*, Ruonan Xu, Li Shi, **Tianjun Ni***, International Journal of Biological Macromolecules, 2023, 253, Part 4, 127074. (IF=8.2)
- [15] Effective removal of antineoplastic doxorubicin by 0D Nb₂O₅ quantum dots embed 3D porous C-doped g-C₃N₄: Degradation mechanism, pathway and toxicity assessment, Congyue Zhao, Chunling Li, Minghui Chen, Tianqi Niu, Qian Zhao, **Tianjun Ni***, Dong Yan, Weidong Wu, Dong Liu*, Applied Surface Science, 2023, 612, 155861. (IF=7.4)
- [16] Visible light assisted peroxymonosulfate activation by NiO/SnO₂ composite, **Tianjun Ni**, Zhibin Yang, Hui Zhang, Liping Zhou, Wei Guo, Dong Liu*, Kaiwen Chang, Chunpo Ge, Zhijun Yang*, Applied Surface Science, 2022, 604, 154537. (IF=7.4)
- [17] 3D interconnected g-C₃N₄ hybridized with 2D Ti₃C₂ MXene nanosheets for enhancing visible light photocatalytic hydrogen evolution and dye contaminant elimination, Dong Liu, Chunling Li, Jiayu Ge, Congyue Zhao, Qian Zhao*, Fengquan Zhang, **Tianjun Ni***, Weidong Wu, Applied Surface Science, 2022, 579, 152180. (IF=7.4)
- [18] Enhanced activation performance of peroxymonosulfate by NiCo₂O₄/SnO₂ composite for metronidazole degradation under visible light, Zhibin Yang, Hui Zhang, Liping Zhou Zhonghu Dong, Yanyu Wang, Dong Liu* **Tianjun Ni***, Journal of Alloys and Compounds 2023. 949169879. (IF=6.3)
- [19] Efficient photocatalytic organic degradation and disinfection performance for Ag/AgFeO₂/g-C₃N₄ nanocomposites under visible-light: Insights into the photocatalysis mechanism, Jing Du, Shuanglong Ma*, Na Zhang, Wenjing Liu, Mengdi Lv, **Tianjun Ni***, Zhen An, Kai Li, Yichun Bai, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 654, 130094. (IF=5.5)

授权发明专利：

- [1] 一种钴酸镍/氧化锡复合催化剂及其制备方法和应用, 中国知识产权局, 发明专利, ZL 2023 1 0080146.0, 倪天军、刘海津、杨质斌、彭建彪、刘冬、袁鹏、闫云辉、杜锦阁、汪应灵。
- [2] 一种超分子配合物及其制备方法和应用, 中国知识产权局, 发明专利, ZL 2020 1 1314770.5, 倪天军、李钱生、齐巧芳、闫瑞芳、常开文、闫云辉、汪应灵、杨志军。
- [3] 一种 N,Cu-CDs/m-WO₃ 介孔复合材料及其制备方法和应用, 中国知识产权局, 发明专利, ZL 2020 1 1248169.0, 倪天军、李钱生、刘冬、齐巧芳、常开文、闫云辉、杨志军、汪应灵。

成果奖励：

- (1) 王天云; 贾岩龙; 倪天军; 郭潇; 王小引; 林艳; 王芳; 潘若文; 马超援; 蒋涛华, 重组蛋白含 MAR 高效载体分子组装优化及其应用, 河南省人民政府, 科技进步, 省部二等奖, 2019-J-108-R03/10。
- (2) 房立真; 倪天军; 武利强; 孙彭利; 户晓兢; 黄锋; 白素平; 梁会娟; 路趁娟, 炭球菌素等萜类天然产物全合成和结构修饰方法的建立应用及活性, 河南省人民政府, 科技进步, 省部二等奖, 2020-J-115-R02/09。
- (3) 武一帆等 (本科生), 获河南省大学生创新大赛暨中国国际大学生创新大赛河南赛区选拔赛一等奖 (2024 年)。
- (4) 武一帆等 (本科生), 获挑战杯河南省大学生创业计划竞赛金奖 (2024 年)。