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教育经历:

2015.9~2019.6 山东大学物理学院 凝聚态物理, 获理学博士学位;

2012.9~2015.6 吉林大学超硬材料国家重点实验室 凝聚态物理, 获理学硕士学位;

2008.9~2012.6 济宁学院物理与信息工程系 物理学, 获理学学士学位。

工作经历:

2019.07~至今 鲁东大学物理与光电工程学院

研究领域:

二维半导体材料光催化水解性质理论研究

二维半导体材料自旋极化和新奇量子特性的理论研究

主持或参加的国家或省自然科学基金项目:

(1) 国家自然科学基金委, 青年科学基金项目, 12004151, 内建电场对极性二维As、Sb硫族化合物光催化水解特性影响的理论研究, 2021-01-01 至 2023-12-31, 在研, 主持。

(2) 山东省自然科学基金委, 青年基金, ZR2020QA065, 基于二维多孔B₂S₃纳米材料光催化水解特性的理论研究, 2021-01 至 2023-12, 在研, 主持。

(3) 国家自然科学基金委员会, 面上项目, 12374232, 二维异质结关键位点原子调控全光解水析氢及其光生载流子转移机理研究, 2024-01-01至2027-12-31, 在研, 参与。

代表性论著:

(1) [Xiaoteng Li*](#), Chuanlu Yang*, Yuliang Liu, Endao Han, Wenkai Zhao, Xinxin Jiang, Dongqing Zou

and Yuqing Xu, Multiple strategies of improving photocatalytic water splitting efficiency in 2D arsenic sesquichalcogenides, *Physical chemistry chemical physics*, 2023, 25: 25458

(2) [Xiaoteng Li*](#), Xi Zuo, Bin Cui, Wenkai Zhao, Yuqing Xu, Dongqing Zou and Chuanlu Yang*, Tunable Dirac states in doped B₂S₃ monolayers, *Physical chemistry chemical physics*, 2022, 24: 10095

(3) [Xiaoteng Li*](#), Bin Cui, Wenkai Zhao, Yuqing Xu, Dongqing Zou, Chuanlu Yang*, Novel 2D B₂S₃ as a metal-free photocatalyst for water splitting, *Nanotechnology*, 2021, 32: 225401

(4) [Xiaoteng Li](#), Xi Zuo, Heming Li, Li Han, Quan Gao, Dongmei Li, Bin Cui*, Desheng Liu* and Fanyao Qu, Exotic magnetism in As-doped a/b-In₂Se₃ monolayers with tunable anisotropic carrier mobility, *Physical chemistry chemical physics*, 2019, 21: 19234

(5) [Xiaoteng Li](#), Xi Zuo, Xinxin Jiang, Dongmei Li, Bin Cui* and Desheng Liu*, Enhanced photocatalysis for water splitting in layered tin chalcogenides with high carrier mobility, *Physical chemistry chemical physics*, 2019, 21: 7559

(6) [Xiaoteng Li](#), Heming Li, Xi Zuo, Lei Kang, Dongmei Li, Bin Cui*, and Desheng Liu*, Chemically Functionalized Penta-stanene Monolayers for Light Harvesting with High Carrier Mobility, *The Journal of Physical Chemistry C*, 2018, 122, 21763-21769

(7) Yingnan Wang*, [Xiaoteng Li](#) (共同一作), Manzhang Xu, Kai Wang, Hongyang Zhu, Wu Zhao, Junfeng Yana and Zhiyong Zhang, Pressure induced photoluminescence modulation in a wide range and synthesis of monodispersed ternary AgCuS nanocrystal based on Ag₂S nanocrystals, *Nanoscale*, 2018, 10, 2577

(8) [Xiaoteng Li](#), Dongqing Zou, Bin Cui, Yuan Li, Mei Wang, Dongmei Li, Desheng Liu*, Tuning spin-filtering, rectifying, and negative differential resistance by hydrogenation on topological edge defects of zigzag silicene nanoribbons, *Physics Letters A*, 2018, 382: 2475-2483

(9) [Xiaoteng Li](#), Dongqing Zou, Bin Cui, Changfeng Fang, Jingfen Zhao, Dongmei Li* and Desheng Liu*, Edge hydrogenation-induced spin-filtering and negative differential resistance effects in zigzag silicene nanoribbons with line defects, *RSC Advanced*, 2017, 7: 25244