

导师简介

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| 姓名      | 左希                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 籍贯   | 湖北黄石       |  |
| 性别      | 男                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 出生年月 | 1992 年 8 月 |                                                                                     |
| 学历学位    | 博士研究生/博士                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 职称   | 讲师         |                                                                                     |
| 毕业院校    | 山东大学                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 指导专业 | 凝聚态物理      |                                                                                     |
| 研究方向    | 低维材料和拓扑材料电子结构及其输运性质的理论研究                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |            |                                                                                     |
| 教学成果    | 1.获批国家自然科学基金青年项目 1 项（2023 年）。<br>2.获批湖北省自然科学基金青年项目和省教育厅项目各 1 项（2023 年）。<br>3.指导本科生获批 2 项大学生创新创业项目（2023 年）。<br>4.指导本科生获得 1 项优秀毕业论文（2024 年）。                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |            |                                                                                     |
| 主要社会兼职  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |            |                                                                                     |
| 个人荣誉    | 1.2023、2024 年优秀班主任<br>2.2023 年年度考核综合优秀和师德优秀                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |            |                                                                                     |
| 主要代表性成果 | 1.Yanhui Chen, Xingwen Zheng, Fengyuan Ren, Shusheng Xu, Bin Cui, <u>Xi Zuo</u> *（通讯作者）, Desheng Liu*, Negative differential resistance and tunable spin-filtering effects in metalloporphyrin/graphene hybrids. J. Magn. Magn. Mater. 614, 172713 (2025).<br>2.Mei Wang*, Xingwen Zheng, Bin Cui, Li Han, Shusheng Xu, <u>Xi Zuo</u> *（通讯作者）, Desheng Liu. Perfect spin filtering effect and spin negative differential resistance in TM@C6N7 monolayer with graphene nanoribbon electrodes. J. Magn. Magn. Mater. 614, 172771 (2025).<br>3. Xi Zuo（第一位）, Yulin Feng, Na Liu, Bing Huang, Meifeng Liu, Desheng Liu*, and Bin Cui*. Layer number dependent spin Hall effects in transition metal monocarbides M2C (M = V, Nb, Ta). Phys. Rev. B., 108, 195129 (2023).<br>4. Xi Zuo（第一位）, Quan Gao, Xuelel Sui, Xuhui Xu, Xinxin Jiang, Li Han, Heming Li, Dongmei Li, Desheng Liu*, Bing Huang*, and Bin Cui*. Giant and robust intrinsic spin Hall effects in metal dihydrides: A first-principles prediction. Phys. Rev. B., 103, 125159 (2021).<br>5.Xi Zuo（第一位）, A. C. Dias, Fujun Liu, Li Han, Heming Li, Quan Gao, Xinxin Jiang, Dongmei Li, Bin Cui*, Desheng Liu*, and Fanyao Qu. Fully spin-polarized open and closed nodal lines in $\beta$ -borophene by magnetic proximity effect. Phys. Rev. B., 100, 115423 (2019).<br>6. Xiaoteng Li‡, Xi Zuo‡(共同第一), Bin Cui, Wenkai Zhao, Yuqing Xu, Dongqing Zou, and Chuanlu Yang. Tunable Dirac states in doped B2S3 monolayers. Phys. Chem. Chem. Phys., 24, 10095 (2022).<br>7. Wenjie Hou, Jian Liu, Xi Zuo（第三位）, Jian Xu, Xueying Zhang, Desheng Liu, Mingwen Zhao, Zhen-Gang Zhu*, Hong-Gang Luo*, Weisheng Zhao*. Prediction of |      |            |                                                                                     |

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|                 | crossing-nodal-lines and large intrinsic spin Hall conductivity in topological Dirac semimetal Ta <sub>3</sub> As family. NPJ Comput. Mater. 7, 1-5 (2021). |
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