

基本信息

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教育背景

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|-----------------|---------------------|
| 1989.08-1992.07 | 吉林大学, 理论化学研究所, 理学博士 |
| 1982.08-1985.07 | 吉林大学, 理论化学研究所, 理学硕士 |
| 1978.08-1982.06 | 吉林大学, 化学专业, 理学学士 |

工作履历

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|-----------------|-----------------------------|
| 1997.01-今 | 北京理工大学, 化学与化工学院, 教授 |
| 1995.09-1996.09 | 中国科学院长春应用化学研究所, 博士后 |
| 1985.07-1996.07 | 吉林大学化学院, 教师, 1992.07 被评为副教授 |

研究方向

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| 1. | 纳米材料 |
| 2 | 理论计算 |
| 3. | 超级电容器 |
| 4. | 超疏水材料 |

荣誉奖励

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|----|---|
| 1. | 李前树; 徐文国; 张秀辉, 氮原子簇的结构、稳定性和反应的理论研究, 国防部, 国防科学技术奖, 二等奖, 2006. |
| 2. | 李前树; 徐文国; 张秀辉, 氮原子簇的结构、稳定性和反应的理论研究, 中国兵器集团公司, 科学技术奖, 二等奖, 2006. |
| 3. | 李前树; 徐文国; 张秀辉, 氮原子簇的结构和性质的理论研究, 教育部, |

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| | 科学自然科学奖, 二等奖, 2007. |
| <u>承担项目</u> | |
| 1. | 硝酸铀酰微波脱硝工艺研究, 中央原子能科学研究院, 194 万, 2019.07-2020.12 |
| 2. | 孙家钟成长资料采集, 中国科协创新战略研究院, 2017.05-2019.06, 30 万, 主持 |
| 3. | 不引入低表面能有机物修饰的金属基底超疏水性微纳米表面的可控生长, 国家自然科学基金面上项目(21271027), 75 万, 2013.01-2016.12, 参加 |
| 4 | 气溶胶表面动力学过程的原位谱学观测和理论计算模拟, 国家自然科学基金重大项目(20933001), 200 万, 2009.01-2012.12, 参加 |
| 5. | 十溴联二苯醚阻燃剂替代品的研究, 863(2014AA065103), 408 万, 主持 |
| 6. | XXX-3 结构星管路胶接试验, 中国空间技术研究院通信卫星事业部, 2012.06-2012.12, 19 万, 参加 |
| 7. | 金属和非金属原子簇芳香性的理论研究, 国家自然科学基金面上项目(20773014), 25 万元, 2008.01-2010.12, 主持 |
| 8. | TiO ₂ 光催化降解偏二甲肼废水研究, 总装备部后勤部防疫大队, 2008.03-2009.03, 5 万, 主持 |
| 9. | 黄河泥沙污染状况研究, 内蒙电力科技服务开发公司, 2007.06-2008.06, 2 万, 主持 |
| <u>研究成果</u> | |
| 主持中央原子能科学研究院 1 项, 主持 863 课题 1 项, 主持国家自然科学基金 1 项, 主要参加国家自然科学基金项目 2 项、承担企业合作项目 3 项, 等等。迄今在国内外学术刊物及会议上发表学术论文 300 余篇, 其中 SCI 收录 180 余篇, 他引 2380 次以上, EI 收录 20 余篇, 获授权专利 4 项。 | |
| 1. | 卢士香, 侯晓敏, 徐文国, 一种高导热铝基石墨烯复合材料的制备方法, 2017, 05, 17, 中国, ZL201610064204.0 |
| 2. | 卢士香, 杨小婵, 崔海龙, 徐文国, 在金属锌基底上制造超疏水表面的方法, 2015, 06, 03, 中国, ZL201310245904.6 |
| 3. | 卢士香, 段雅琼, 崔海龙, 徐文国, 在金属铝基底上制造超疏水表面的方法, 2015, 06, 03, ZL201310240442.4 |
| 4. | 康苏媛, 卢士香, 崔海龙, 徐文国等, 海泡石负载纳米氧化锌光催化材料及其制备方法, 2011, 8, 31, 中国, ZL200810222209.7 |
| <u>代表性论文</u> | |
| 1. | Tianlong Yu, Shixiang Lu*, Wenguo Xu*, Boukherroub Rabah, Preparation of superhydrophobic/superoleophilic copper coated titanium mesh with excellent |

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| | ice-phobic and water-oil separation performance, Applied Surface Science, 2019, 476, 353-362. |
| 2. | Hassan Noor, Shixiang Lu*, Wenguo Xu*, Fabrication of a Pt nanoparticle surface on an aluminum substrate to achieve excellent superhydrophobicity and catalytic activity, New Journal of Chemistry, 2019, 43(15), 6069-6079. |
| 3. | Ge He, Shixiang Lu*, Wenguo Xu*, Tianlong Yu, Jingyan Li, Tanlong Dai, Durable superhydrophobic Zn/ZnO/TiO ₂ surfaces on Ti6Al4V substrate with self-cleaning property and switchable wettability, Ceramics International, 2018, 44, 638-647. |
| 4. | Yuanyuan Cheng, Shixiang Lu*, Wenguo Xu*, Kaibo Cao, Jingyan Li, Yu Zheng, Controllable fabrication of superhydrophobic alloys surface on copper substrate for self-cleaning, anti-icing, anti-corrosion and anti-wear performance, Surface & Coatings Technology, 2018, 333, 61-70. |
| 5. | Jingyan Li, Shixiang Lu*, Wenguo Xu, Ge He, Tianlong Yu, Yuanyuan Cheng, and Bei Wu, Fabrication of stable Ni-Al4Ni3-Al2O ₃ superhydrophobic surface on aluminum substrate for self-cleaning, anti-corrosive and catalytic performance, Journal of Material Science, 2018, 53, 1097-1109. |
| 6. | Tianlong Yu, Shixiang Lu*, Wenguo Xu*, A reliable filter for oil-water separation: Bismuth coated superhydrophobic/superoleophilic iron mesh, Journal of Alloys And Compounds, 2018, 769, 576-587. |
| 7. | Hassan Noor, Shixiang Lu*, Wenguo Xu*, Tianlong Yu, Ge He, Hongtao Wang, Guoxiao, Bei Wu, Shuo Cui, Yuanyuan Cheng, Fabrication of Ag-Fe ₃ O ₄ /Fe superhydrophobic surface on galvanic sheet for its application, Journal of Solid State Chemistry, 2018, 266, 121-132. |
| 8. | Tianlong Yu, Shixiang Lu*, Xu, Wenguo Xu*, Ge He, Fabrication of bismuth superhydrophobic surface on zinc substrate, Journal of Solid State Chemistry, 2018, 262, 26-37. |
| 9. | Shuo Cui, Shixiang Lu*, Wenguo Xu*, Bei Wu, Fabrication of superhydrophobic Pt ₃ Fe/Fe surface for its application, Journal of Solid State Chemistry 2017, 254, 14-24. |
| 10. | Yuanyuan Cheng, Shixiang Lu*, Wenguo Xu*, Rabah Boukherroub, Sabine Szunerits, Wei Liang, Controlled fabrication of NiO/ZnO superhydrophobic substrate with corrosion and abrasion resistance, Journal of Alloys and Compounds, 2017, 723, 225-236. |
| 11. | Shixiang Lu*, Jianying Yu, Yuanyuan Cheng, Qian Wang, Alexandre Barras, Wenguo Xu, Sabine Szunerits, David Cornu, Rabah Boukherroub, Preparation of silver nanoparticles/polydopamine functionalized polyacrylonitrile fiber paper and its catalytic activity for the reduction 4-nitrophenol, Applied Surface Science, 2017, 411, 163-169. |
| 12. | Ge He, Shixiang Lu*, Wenguo Xu*, Jianying Yu, Bei Wu, Shuo Cui, Fabrication of durable superhydrophobic electrodeposited tin surfaces with tremella-like structure on copper substrate, Surface & Coatings Technology, 2017, 309, 590-599. |

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| 13. | Bei Wu, Shixiang Lu*, Wenguo Xu*, Shuo Cui, Jingyan Li, PengFei Han, Study on corrosion resistance and photocatalysis of cobalt superhydrophobic coating on aluminum substrate, <i>Surface & Coatings Technology</i> , 2017, 330, 42-52. |
| 14. | Bei Wu, Shixiang Lu*, Wenguo Xu*, Shuo Cui, Na Zhao, Ge He, Fabrication of stable Ir-ZnO/Zn superhydrophobic surface on zinc substrate for its properties and application, <i>Journal of Alloys and Compounds</i> , 2017, 699, 489-497. |
| 15. | Shuo Cui, Shixiang Lu*, Wenguo Xu*, Baifeng An, Bei Wu, Fabrication of robust gold superhydrophobic surface on iron substrate with properties of corrosion resistance, self-cleaning and mechanical durability, <i>Journal of Alloys and Compounds</i> , 2017, 728, 271-281. |
| 16. | Yuanyuan Cheng, Shixiang Lu*, Wenguo Xu*, and Hong Tao, Fabrication of Cu-CuO-Fe ₂ O ₃ /Fe anti-sticky and superhydrophobic surfaces on an iron substrate with mechanical abrasion resistance and corrosion resistance, <i>New Journal of Chemistry</i> , 2017, 41, 5205-5214. |
| 17. | Shuo Cui, Shixiang Lu*, Wenguo Xu*, Bei Wu, Na Zhao, Ge He, Xiaomin Hou and Haifeng Zhang, Robust dendritic Ag-Fe ₂ O ₃ /Fe surfaces with exquisite catalytic properties, <i>New Journal of Chemistry</i> , 2016, 40, 8897-8904. |
| 18. | Shixiang Lu*, Haiyan Gao, Qian Wang, Wenguo Xu, Sabine Szuneritsb and Rabah Boukherroub, Fabrication of stable homogeneous superhydrophobic HDPE/graphene oxide surfaces on zinc substrates, <i>RSC Advances</i> , 2016, 6, 29823-29829. |
| 19. | Binyan Zhang, Shixiang Lu*, Wenguo Xu*, Yuanyuan Cheng, Controllable wettability and morphology of electrodeposited surfaces on zinc substrates, <i>Applied Surface Science</i> , 2016, 360, 904-914. |
| 20. | Yanyuan Cheng, Shixiang Lu*, Wenguo Xu*, Fabrication of superhydrophobic Au-Zn alloy surface on a zinc substrate for roll-down, self-cleaning and anti-corrosion properties, <i>Journal of Materials Chemistry A</i> , 2015, 3, 16774-16784. |
| 21. | Yanyuan Cheng, Shixiang Lu*, Wenguo Xu*, Controllable wettability of micro- and nano-dendritic structures formed on aluminum substrates, <i>New Journal of Chemistry</i> , 2015, 39(8), 6602-6610. |
| 22. | Yanyuan Cheng, Shixiang Lu*, Wenguo Xu*, Fabrication of Au-AlAu ₄ -Al ₂ O ₃ superhydrophobic surface and its corrosion resistance, <i>RSC Advances</i> , 2015, 5, 15387-15394. |
| 23. | Ge He, Shixiang Lu*, Wenguo Xu*, Controllable growth of durable superhydrophobic coatings on a copper substrate via electrodeposition, <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 10871-10880. |
| 24. | Haiyan Gao, Shixiang Lu*, Wenguo Xu, Controllable fabrication of stable superhydrophobic surfaces on iron substrates, <i>RSC Advances</i> , 2015, 5, |

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| 25 | Jinxia Wang, Shixiang Lu [*] , Wenguo Xu [*] , Fabrication of Tin Superhydrophobic Surfaces on Zinc Substrates via Chemical Deposition, RSC Advances, 2014, 4, 39197-39203. |