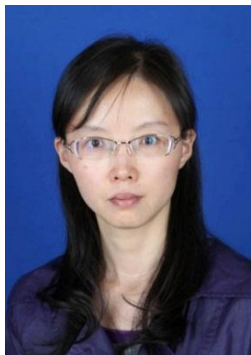

柴卉



职称/职务：教授

专 业：无机化学，材料物理化学

研究方向：材料电化学，纳米功能材料

联系方式:

邮 箱：hchchh@sina.com

办公室：新疆大学逸夫楼 219 室

电 话：+86 09918588209

个人经历:

2011.10-至今，新疆大学，应用化学研究所（化学学院），硕士研究生导师

2008.7-2011.10，新疆大学，化学化工学院，硕士研究生导师

2005.9-2008.6，华南理工大学，材料科学与工程学院，博士研究生/工学博士

2002.9-2005.6，新疆大学，化学系，硕士研究生/理学硕士

研究内容:

主要从事纳米功能材料的研究，特别是能源环境、电化学相关材料（超级电容器材料、新型碳材料、二次电池材/燃料电池电催化材料等）的设计合成及其应用研究

主持项目:

1. 国家自然科学基金，21461024，多孔结构镍（氢）氧化物纳微米材料的调控合成及电容性能，主持；
2. 国家自然科学基金，21346012，基于新疆煤基多孔碳材料的制备及其电化学性能研究元，主持；
3. 教育部重点项目，210245，特殊结构电化学材料的控制合成及其性能研究，主持；
4. 自治区杰出青年人才计划，2017Q001，多元过渡金属氧化物的结构调控及其电化学性能，主持；
5. 自治区高校科研计划重点项目，XJEDU2019I008，碳/过渡金属化合物材料的构筑及其电化学性能，主持
6. 自治区优秀创新青年人才计划，2014721006，多孔碳基材料的制备及超电容性能研究，主持；
7. 自治区自然科学基金，2015211c250，石墨烯类微纳米复合材料的制备及电化学性能，主持。

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8. 自治区科技计划重点实验室课题，XJDX0902-2009-02，新疆煤基活性炭的制备及活化过程研究，主持

奖励情况:

1. 2019 年获新疆维吾尔自治区教学成果奖一等奖
2. 2018 年获 2017 级新疆维吾尔自治区优秀硕士学位论文奖（指导老师）
2. 2017 年获新疆大学青年科研奖
3. 2018 年获新疆维吾尔自治区第十五届自然科学优秀论文三等奖
4. 2016 年获新疆维吾尔自治区第十四届自然科学优秀论文二等奖
5. 2014 年获新疆维吾尔自治区第十三届自然科学优秀论文二等奖
6. 2011 年获新疆维吾尔自治区科技进步一等奖
7. 2010 年获新疆维吾尔自治区乌鲁木齐市科技进步一等奖

研究成果:

部分代表成果:

1. Xin Chen, **Hui. Chai**, Yali Cao, Wanyong Zhou, Yuanyuan Li, Yaxiu Yang, Hierarchical CoGa layered double hydroxides grown on nickel foam as high energy density hybrid supercapacitor, *Chem. Eng. J.* 2020, 381, 122620.
2. Yaxiu Yang , Xin Chen , Yali Cao , Wanyong Zhou , He Sun , **Hui Chai** , Synthesis of homogeneous hollow Co₃O₄ microspheres for enhanced cycle life and electrochemical energy storage performance, *ChemElectroChem*, 2020, 7, 723-729.
3. Yuanyuan Li, He Sun, Yaxiu Yang, Yali Cao, Wanyong Zhou, **Hui Chai**, Controllable fabrication of NiV₂O₆ nanosphere as a high-performance flexible all-solid-state electrode material for supercapacitors. *J. Colloid Interf. Sci.* 2020, 580, 298-307
4. Yuanyuan Li , Xin Chen , Yali Cao , Wanyong Zhou , **Hui Chai** , The ultralong cycle life of solid flexible asymmetric supercapacitors based on nickel vanadium sulfide nanospheres, *CrystEngComm*, 2020, 22, 5226-5236
5. He Sun, Xin Chen, **Hui Chai**, Yucheng Wang, Dianzeng Jia, Yali Cao, Anjie Liu. 3D porous hydrated cobalt pyrovanadate microflowers with excellent cycling stability as cathode materials for asymmetric supercapacitor. *Appl. Surf. Sci.*, 2019, 469, 118-124.

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6. He Sun, Yuanyuan Li, **Hui Chai**, Yali Cao, Wanyong Zhou, Facile synthesis of cobalt doped nickel vanadate microspheres as battery-type electrode material for hybrid supercapacitor. *J. Alloy. Compd.*, 2019, 805, 388-395.
 7. Xin Chen, Jiayu Xu, **Hui Chai**, Yucheng Wang, Dianzeng Jia, Wanyong Zhou. One-step synthesis of hollow chain-like nitrogen doped carbon nanotubes/iron carbide as highly efficient bifunctional oxygen electrocatalyst. *J. Electroanal. Chem.*, 2019, 838, 16-22.
 8. Xin Chen, **Hui Chai**, Yali Cao, Dianzeng Jia, Anjie Liu, Wanyong Zhou, Excellent cycle life of electrode materials based on hierarchical mesoporous CoGa_2O_4 microspheres, *Chem. Eng. J.*, 2018, 354, 932-940.
 9. Maoping Wei, **Hui Chai**, Yali Cao, Dianzeng Jia, Sulfonated graphene oxide as an adsorbent for removal of Pb^{2+} and methylene blue, *J. Colloid. Interf. Sci.*, 2018, 524, 297-305.
 10. Xuejia Ma , **Hui Chai**, Yali Cao, Jiayu Xu ,Yucheng Wang, Hong Dong, Dianzeng Jia , Wanyong Zhou, An effective bifunctional electrocatalysts: controlled growth of CoFe alloy nanoparticles supported on N-doped carbon nanotubes, *J. Colloid. Interf. Sci.*, 2018, 514, 656-663.
 11. Hui Chai, Maoping Wei, Ying Su, Yucheng Wang, Dianzeng Jia, Zhipeng Sun, Wanyong Zhou, Facile controlled growth of podetium-like MnO_2 crystals and the catalytic effect of MnO_2/N -doped graphene on the oxygen reduction reaction, *Eur. J. Inorg. Chem.*, 2018, 11, 1315-1321.
 12. Xiao Peng, **Hui Chai**, Yali Cao, Yucheng Wang , Hong Dong, Dianzeng Jia, Wanyong Zhou, Facile synthesis of cost-effective $\text{Ni}_3(\text{PO}_4)_2 \cdot 8\text{H}_2\text{O}$ microstructures as a supercapattery electrode material, *Mater. Today Energy*, 2018,7,129-135.
 13. Hui Chai, Yucheng Wang, Yingchun Fang, Yan Lv, Hong Dong, Dianzeng Jia, Wanyong Zhou, Low-cost synthesis of hierarchical $\text{Co}_3\text{V}_2\text{O}_8$ microspheres as high-performance anode materials for lithium-ion batteries, *Chem. Eng. J.*, 2017,326,587-593.
 14. Hui Chai, Hong Dong, Yucheng Wang, Jiayu Xu, Dianzeng Jia, Porous NiCo_2S_4 -halloysite hybrid self-assembled from nanosheets for high-performance asymmetric supercapacitor applications, *Appl. Surf. Sci.*, 2017, 401, 399-407.
 15. Hui Chai, Jiayu Xu, Jingli Han, Ying Su, Zhipeng Sun, Dianzeng Jia, Wanyong Zhou, Facile synthesis of Mn_3O_4 -rGO hybrid materials for the high-performance electrocatalytic reduction of oxygen, *J. Colloid. Interf. Sci.*, 2017, 488, 251-257.

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16. Hui Chai, Xiao Peng, Ting Liu, Xiaohui Su, Dianzeng Jia, Wanyong Zhou , High-performance supercapacitors based on conductive graphene combined with Ni(OH)₂ nanoflakes, *RSC Adv.*, 2017,7,36617-36622
 17. Ting Liu, **Hui Chai**, Dianzeng Jia, Ying Su, Tao Wang, Wanyong Zhou, Rapid microwave-assisted synthesis of mesoporous NiMoO₄ nanorod/reduced graphene oxide composites for high-performance supercapacitors, *Electrochim. Acta*, 2015, 180, 998-1006.
 18. Ying Su, **Hui Chai**, Zhipeng Sun , Ting Liu , Dianzeng Jia , Wanyong Zhou, High-performance manganese nanoparticles on reduced graphene oxide for oxygen reduction reaction. *Catal. Lett.*, 2016, 146, 1019-1026.
 19. Yucheng Wang, **Hui Chai**, Hong Dong, Jjiayu Xu, Dianzeng Jia, Wanyong Zhou, Superior cycle stability performance of quasi-cuboidal CoV₂O₆ microstructures as electrode material for supercapacitors, *ACS Appl. Mater. Inter.*, 2016, 8 (40), 27291-27297.

20. 授权的中国发明专利:

柴卉、周美玲、刘婷、贾殿赠, 一种氢氧化钙部分取代氢氧化钾制备活性炭的方法, 2014.12, 中国发明专利, 专利号 ZL201410837854.5。