

照片

个人简介:

姓名:初园园

最高学历:博士研究生

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获奖与社会兼职:

- (1) 入选 2012 年度天津市"131"创新型人才培养工程第三层次人选
- (2) 入选 天津市第二批"用三年时间引进千名以上高层次人才"
- (3) 2012 年荣获第十一届天津市高校青年教师教学竞赛工科组一等奖
- (4) 2014 年荣获第二届全国高校青年教师教学竞赛天津赛区选拔赛工科组二等奖
- (5) 2015 年度“优秀教学质量奖”二等奖
- (6) 黑龙江省高校科学技术奖一等奖(排名第三)
- (7) 荣获 2010 年度教育部首届博士研究生学术新人奖

主持及参加的科研项目:

- (1) 直接二甲醚燃料电池研制(国家 863 计划探索项目, No.2009AA05Z111, 2009.6~2011.5, 已完成)
- (2) 基于 CeO_2 纳米管的氮掺杂原位碳化对担载型 Pt 催化剂的稳定性影响及机理研究(国家自然科学基金, 25 万, No.21206124, 2011.6~2015.12, 已结题)
- (3) 优先透有机物氧化石墨烯-聚合物杂化膜自组装制备与功能化修饰(省部共建分离膜与膜过程国家重点实验室开放课题, 3 万, 2015.8~2017.8, 在研)
- (4) 基于微电子机械系统的微型直接乙醇燃料电池的研究(天津市自然科学基金重点项目, 20 万, No.12JCZDJC28400, 2012.1~2015.4, 第二参与人, 已结题)

- (5) 稀土氧化物-碳复合物的制备及作为 Pt 基催化（黑龙江省留学归国人员科学基金，7.5 万元，No. 2008.10~2011.6，第二参与者，已结题）
- (6) 动力电池用磷酸铁锂材料的研发（企业委托，21 万元，2014.1~2014.9，主持人，已结题）
- (7) 用于钙钛矿陶瓷透氧膜组件的高温密封材料研发（企业委托，9.8 万元，主持人，2014.5~2014.9，已结题）

代表性学术论文：

- (1) Long Li, Jingjing Yang, Yongxiang Jin, Xiaoyao Tan, Zhao Dai, Yu Qian, Haitao Wang, Weili Qu, **Yuanyuan Chu***. A novel structural design of hybrid nanotube with CNTs and CeO₂ supported Pt nanoparticles with improved performance for methanol electro-oxidation. International Journal of Hydrogen Energy. 2016(Accept). (SCI 二区)
- (2) Jingjing Yang, **Yuan Yuan Chu***, Long Li, Haitao Wang, Zhao Dai, Xiao-Yao Tan. Effects of calcination temperature and CeO₂ contents on the performance of Pt/CeO₂/CNTs hybrid nanotube catalysts for methanol oxidation. Journal of Applied Electrochemistry. 2016, 46:369-377. (SCI 二区)
- (3) Long Li, **Yuan-Yuan Chu***, Jun Cao, Zhao Dai, Shi Huai Zhao, Xiao-Yao Tan. Preparation of Pt/XC-72@C-N electrocatalysts by the in-situ carbonization of ionic liquid for methanol oxidation. International Journal of Hydrogen Energy. 2015, 40: 3900-3908. (SCI 二区)
- (4) **Yuan Yuan Chu***, Jun Cao, Zhao Dai, and Xiao Yao Tan. A novel Pt/CeO₂ catalyst coated with nitrogen-doped carbon with excellent performance for DMFCs. Journal of Materials Chemistry A. 2014, 2: 4038-4044. (SCI 一区)
- (5) Jun Cao, **Yuan-Yuan Chu**, Xiao-Yao Tan*. Pt/XC-72 catalysts coated with nitrogen-doped carbon (Pt/XC-72@C-N) for methanol electro-oxidation. Materials Chemistry and Physics 2014, 144: 17-24. (SCI 二区)
- (6) **Yuan Yuan Chu***, Zhen Bo Wang*, Da Ming Gu, Ge Ping Yin. Synthesis of Truncated-Octahedral Pt-Pd Nanocrystals Supported on Carbon Black as a Highly Efficient Catalyst for Methanol Oxidation. Fuel Cells. 2014, 1: 49-55. (SCI 二区)
- (7) **Yuan Yuan Chu***, Zhen Bo Wang*, Jun Cao, Da Ming Gu, Ge Ping Yin. Ultrahigh Durable PtPd/CNanowire Networks Catalyst Synthesized by Modified Phase Transfer Method for Methanol Oxidation. Fuel Cells. 2013, 13: 380-386. (SCI 二区)
- (8) **Yuan Yuan Chu**, Zhen Bo Wang*, Da Ming Gu, Ge Ping Yin. A novel structural electro-oxidation by β -cyclodextrin carbonization. Advanced Materials. 2011, 23: 3100-3104. (SCI 一区)
- (9) Da Ming Gu, **Yuan Yuan Chu**, Zhen-Bo Wang*, Zheng Zhi Jiang, Ge Ping Yin. Methanol oxidation on Pt/CeO₂-C electrocatalysts prepared by microwave-assisted ethylene glycol process. Applied Catalysis B: Environmental. 2011, 102: 9-18. (SCI 一区)

- (10) **Yuan Yuan Chu**, Zhen Bo Wang*, Da Ming Gu, Ge-Ping Yin. Performance of Pt/C catalysts prepared by microwave-assisted polyol process for methanol electrooxidation. *Journal of Power Sources*. 2010, 195: 1799-1804. (SCI 一区)
- (11) **Yuan Yuan Chu**, Zhen Bo Wang*, Zheng Zhi Jiang, Da Ming Gu, Ge Ping Yin. Facile synthesis of hollow spherical sandwich PtPd/C catalyst by electrostatic self-assembly in polyol solution for methanol electrooxidation. *Journal of Power Sources*. 2012, 203:17-25. (SCI 一区)
- (12) **Yuan Yuan Chu**, Zhen-Bo Wang*, Zheng Zhi Jiang, Da Ming Gu, Ge Ping Yin. Effect of pH value on performance of PtRu/C catalyst prepared by microwave-assisted polyol process for methanol electrooxidation. *Fuel Cells*. 2010, 10: 914-919. (SCI 二区)
- (13) Zhen Bo Wang*, **Yuan Yuan Chu**, Ai Fen Shao, Peng Jian Zuo, Ge Ping Yin. Electrochemical impedance studies of electrooxidation of methanol and formic acid on Pt/C catalyst in acid medium. *Journal of Power Sources*. 2009, 190: 336-340. (SCI 一区)
- (14) **Yuan Yuan Chu**, Zhao Hui Teng, Bing Wu, Ya Wen Tang, Tian Hong Lu, Ying Gao*. The effect of mixed support of carbon black and nanographite on catalytic activity of Pt catalyst for methanol electrooxidation. *Journal of Applied Electrochemistry*. 2008, 38: 357-1362. (SCI 二区)

发明专利:

- (1) 王振波、初园园、顾大明、姜政志、尹鸽平、左朋建。二元合金担载型多孔空心球结构直接醇类燃料电池催化剂的制备方法。(已授权,专利号: 201010276961.7)
- (2) 王振波、姜政志、邵爱芬、顾大明、初园园、尹鸽平。提高直接醇类燃料电池催化剂稳定性的方法。(已授权,专利号: 201010300889)