



能源学院  
College of Energy



首页 学院概况 学院资讯 师资队伍 人才培养 科学研究 党群工作 学生园地 合作交流 SIEMIS

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1987年毕业于北京大学化学系, 获理学学士学位。1994年毕业于加拿大渥太华大学化学系, 获理学博士学位。在加拿大学习8年, 在美国工作8年。从事电化学新能源与新材料研究, 包括超级电容、锂/钠离子电池和电催化等领域。2005年任南昌大学化学系特聘教授。2010年任职苏州大学能源学院特聘教授。发表学术论文80余篇, 申请专利40余项。有锂电池企业生产经验。

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### 获奖荣誉

2013 盐城领军人才奖

2012 苏州姑苏人才奖

1994-1995加拿大国家科学与工程研究委员会(NSERC) 博士后

1992 美国电化学会 Joseph Richards Fellowship 奖励

### 研究领域

1. 超级电容(赝电容材料, 混合超级电容器)
2. 锂/钠离子电池(正极材料、负极材料、器件)
3. 电催化(氢析出、氮气电催化, 非贵金属催化剂)

### 科研项目

1. 国家自然科学基金20663005, “高比能量电化学超级电容研究”, 主持
2. 国家863节能与新能源汽车重点项目子课题, 2007-2009, “车用动力电池模块测试方法研究” 2007AA11A102, 主持
3. 国家863电动汽车关键技术及系统集成重大项目子课题, 2011-2013, “动力电池及关键材料共性技术及评价体系研究” 2011AA11A235, 主持
4. 苏州大学-阿特斯公司联合项目, 2013-2015, 光伏储能系统开发
5. 苏州大学-加拿大滑铁卢大学联合项目, 2014-2016, 钠离子电池成果转化
6. 国家自然科学基金广东联合基金, U1401248, “超级电容材料与器件的基础研究”, 2015-2018, 主持
7. 苏州大学-万润公司联合项目, 2018-2019, 高比能量锂电池正极材料开发

### 代表性论著、研究成果

1. H. Wang, X. Xiao, S.Y. Liu, C.L. Chiang, X.X. Kuai, C.K. Peng, Y.C. Lin, X. Meng, J.Q. Zhao, J. Choi,\* Y.G. Lin, J.M. Lee,\* and Lijun Gao\*, Structural and Electronic Optimization of MoS<sub>2</sub> Edges for Hydrogen Evolution, *J. Am. Chem. Soc.*, 141, 18578-18584, 2019.
2. X. Dong, J. Yao, W.C. Zhu, X. Huang, X.X. Kuai, J. Tang, X.L. Li, S.Y. Dai, L.W. Shen, R.Z. Yang, L. Gao\*, J.Q. Zhao\*, Enhanced high-voltage cycling stability of Ni-rich cathode materials via the self-assembly of Mn-rich shells, *J. Mater. Chem. A*, 7, 20262-20273, 2019.
3. S.Y. Li, X.S. Song, X.X. Kuai, W.C. Zhu, K. Tian, X.F. Li\*, M.Z. Chen, S.L. Chou, J.Q. Zhao\*, Lijun Gao\*, A nanoarchitected Na<sub>6</sub>Fe<sub>5</sub>(SO<sub>4</sub>)<sub>8</sub>/CNTs cathode for building a low-cost 3.6 V sodium-ion full battery with superior sodium storage, *J. Mater. Chem. A*, 7, 14656-14669, 2019.
4. H. Wang, L. Ouyang, G. Zou,\* C. Sun, J. Hu,\* X. Xiao, L. Gao\*, Optimizing MoS<sub>2</sub> Edges by Alloying Isovalent W for Robust Hydrogen Evolution Activity, *ACS Catalysis*, 8, 9529-9536, 2018.
5. H. Wang, L. Gao\*, Recent developments in electrochemical hydrogen evolution reaction, *Current Opinion in Electrochemistry*, 7, 7-14, 2018.

6. H. Jia, W. Zhu, Z. Xu, X. Nie, T. Liu, L. Gao\*, J. Zhao\*, Precursor Effects on Structural Ordering and Electrochemical Performances of Ni-rich Layered LiNi<sub>0.8</sub>Co<sub>0.2</sub>O<sub>2</sub> Cathode Materials for High-rate Lithium Ion Batteries, *Electrochim. Acta*, 266, 7-16, 2018.
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