



所属学院 资源与环境工程学院

学科领域 环境分析

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个人简介

教育背景

2012.09–2016.10: 博士，英国伦敦大学学院，化学系

2010.09–2012.07: 本科，英国东英吉利大学，环境学院

2008.09–2012.07: 本科，复旦大学，环境科学与工程系

工作经历

2019.08–至今: 特聘副研究员，华东理工大学，资源与环境工程学院

2018.03–2019.07: 特聘副研究员，华东理工大学，化学与分子工程学院

2016.11–2017.12: Research Fellow，英国埃克塞特大学，可再生能源系

教学情况

本科生课程：《工程热力学》（专业必修）、《能源与环境》（专业选修）

研究方向

单体环境分析化学

研究成果及主要发表文章

荣誉及获奖

(1) 上海市青年科技英才扬帆计划，2019 年

承担项目

(1) 国家自然科学基金面上项目，65 万，2019 年，主持

(2) 上海市青年科技英才扬帆计划项目，20 万，2019 年，主持

(3) 校特聘系列配套项目，50 万，2018 年，主持

学术成果

近五年累计在国际学术刊物上发表 SCI 论文 21 篇，其中以第一作者或通讯作者在 Energy Environ. Sci., ACS Catal., Small 等期刊发表论文 11 篇 (IF>8: 5 篇; IF>4: 8 篇)，他引 1000 余次。具体如下：

入职华东理工大学后发表论文（第一或通讯作者 SCI 期刊论文 8 篇、会议论文 2 篇）：

(21) Kaipei Qiu, Tano Patrice Fato, Bo Yuan, Yi-Tao Long*. “Toward Precision Measurement and Manipulation of Single-Molecule Reactions by a Confined Space.” Small 2019, 15, 1805426.

(20) Tano Patrice Fato, Kaipei Qiu*, Yi-Lun Ying, Yi-Tao Long*. “Single Nanoparticle Electrochemistry.” Annual Review of Analytical Chemistry 2019, 12, 347-370

(19) Tano Patrice Fato, Kaipei Qiu*, Li-Jun Zhao, Essy Kouadio Fodjo, Da-Wei Li, Yi-Tao Long*. “Electrocatalytic Oxidation of Tris(2-carboxyethyl)phosphine at Pyrroloquinoline Quinone Modified Carbon Nanotube through Single Nanoparticle Collision.” Analytical Chemistry 2018, 90, 6059-6063.

(18) Tano Patrice Fato, Li-Jun Zhao, Essy Kouadio Fodjo, Da-Wei Li, Kaipei Qiu*, Yi-Tao Long. “Highly Sensitive and Selective Electrochemical Detection of Dopamine using Hybrid Bilayer Membranes.” ChemElectroChem 2019, 6, 634-637.

(17) Kaipei Qiu*, Tano Patrice Fato, Pei-Yao Wang, Yi-Tao Long, “Real-Time Monitoring of Electrochemical Reactions on Single Nanoparticles by Dark-Field and Raman Microscopy.” Dalton Transactions 2019, 48, 3809-3814.

(16) Tano Patrice Fato, Da-Wei Li, Li-Jun Zhao, Kaipei Qiu*, Yi-Tao Long. “Simultaneous Removal of Multiple Heavy Metal Ions from River Water Using Ultrafine Mesoporous Magnetite Nanoparticles.” ACS Omega 2019, 4, 7543-7549.

(15) Tano Patrice Fato, Kaipei Qiu*, Li-Jun Zhao, Essy Kouadio Fodjo, Da-Wei Li, Yi-Tao Long*. “Individual Modified Carbon Nanotube Collision for Electrocatalytic Oxidation of Hydrazine in Aqueous Solution.” ACS Applied Nano Materials 2018, 1, 2069-2075.

(14) Kaipei Qiu, Xue-Yuan Wu, Jie Yang, Yi-Lun Ying, Yi-Tao Long*. “Pore-Forming Confined Space for the Innovative Electrochemical Methods.” Current Opinion in Electrochemistry 2018, 10, 46-53.

(13) Kaipei Qiu*, Bo Yuan, Yi-Tao Long. “Revealing the Dynamics of Single-Molecule Reactions in a Single-Molecule Nanoreactor”. Biophysical Journal 2019, 116, 33a-34a.

(12) Kaipei Qiu*, Bo Yuan, Wei-Wei Zhang, Pei-Yao Wang, Yi-Tao Long. “Revealing the Dynamics of Single-Molecule Reactions in a Single-Molecule Nanoreactor”. ECS Meeting Abstracts 2019, 47, 2257-2257.

(11) Hassan Alzahrani, Christophe Antoine, Koichi Aoki, ... Kaipei Qiu, ... Yanfang Wu, Zhugen Yang, Yi-Lun Ying. “Processes at Nanoelectrodes: General Discussion.” Faraday Discussions 2018, 210, 235-265.

入职华东理工大学前发表论文：

(10) Guo-Liang Chai#*, Kaipei Qiu#, Mo Qiao, Maria-Magdalena Titirici, Congxiao Shang, Zheng Xiao Guo*. “Active Sites Engineering Leads to Exceptional ORR and OER Bifunctionality in P, N Co-Doped Graphene Frameworks.” Energy & Environmental Science 2017, 10, 1186-1195. (Energy & Environmental Science Readers’ Choice Lectureship Paper, ESI Highly Cited Paper)

(9) Kaipei Qiu*, Guo-Liang Chai, Chaoran Jiang, Min Ling, Junwang Tang, Zheng Xiao Guo*. “Highly Efficient Oxygen Reduction Catalysts by Rational Synthesis of Nanoconfined Maghemite in a Nitrogen-Doped Graphene Framework.” ACS Catalysis 2016, 6, 3558-3568.

(8) Kaipei Qiu*, Zheng Xiao Guo. “Hierarchically Porous Graphene Sheets and Graphitic Carbon Nitride Intercalated Composites for Enhanced Oxygen Reduction Reaction.” J. Mater. Chem. A 2014, 2, 3209-3215.

(7) David James Martin, Kaipei Qiu, Stephen Andrew Shevlin, Albertus Denny Handoko, Xiaowei Chen, Zheng Xiao Guo, and Junwang Tang*. “Highly Efficient Photocatalytic H2 Evolution from Water using Visible Light and Structure-Controlled Graphitic Carbon Nitride.” Angew. Chem. Int. Ed. 2014, 53, 9240-9245. (ESI Highly Cited Paper)

(6) David P. Trudgeon, Kaipei Qiu, Xiaohong Li,* Tapas Mallick, Oluwadamilola O. Taiwo, Barun Chakrabarti, Yufit Vladimir, Nigel P. Brandon, David Crevillen-Garcia, Akeel Shah. “Screening of Effective Electrolyte Additives for Zinc-based Redox Flow Battery Systems.” Journal of Power Sources 2019, 412, 44-54.

(5) Sara-Maaria Alatalo*, Kaipei Qiu, Kathrin Preuss, Adam Marinovic, Marta Sevilla, Mika Sillanpää, Zheng Xiao Guo and Maria-Magdalena Titirici*. “Soy Protein Directed Hydrothermal Synthesis of Porous Carbon Aerogels for Electrocatalytic Oxygen Reduction.” Carbon 2016, 96, 622-630.

(4) Bingjun Zhu, Kaipei Qiu, Congxiao Shang and Zheng Xiao Guo*. “Naturally Derived Porous Carbon with Selective Metal- and/or Nitrogen-Doping for Efficient CO2 Capture and Oxygen Reduction.” J. Mater. Chem. A 2015, 3, 5212-5222.

(3) Xiaoxue Zhang, Kaipei Qiu, Erkki Levänen and Zheng Xiao Guo*. “Selective Morphologies of MgO via Nanoconfinement on γ-Al2O3 and Reduced Graphite Oxide (rGO): Improved CO2 Capture Capacity at Elevated Temperatures.” CrystEngComm, 2014, 16, 8825-8831.

(2) Mo Qiao, Cheng Tang, Guanjian He, Kaipei Qiu, Russel Binions, Ivan Parkin, Qiang Zhang, Zheng Xiao Guo and Maria-Magdalena Titirici*. “Graphene/Nitrogen-Doped Porous Carbon Sandwiches for the Metal-Free Oxygen Reduction Reaction: Conductivity versus Active Sites.” J. Mater. Chem. A 2016, 4, 12658-12666.

(1) Wenjun Luo*, Chaoran Jiang, Yaomin Li, Stephen A Shevlin, Xiaoyu Han, Kaipei Qiu, Yingchun Chen, Zheng Xiao Guo, Wei Huang* and Junwang Tang*. “Highly-Crystallized α-FeOOH for Stable and Efficient Oxygen Evolution Reaction.” J. Mater. Chem. A 2017, 5, 2021-2028.