郭庆华

所属学院 资源与环境工程学院

学科领域 热能工程

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个人简介

工作经历

2015.09- 至今：华东理工大学，副教授

2013.03-2014.04：美国 Kentucky 大学，访问学者

2012.01-2012.04：美国 Kentucky 大学，访问学者

2009.03-2015.08：华东理工大学，讲师

教育经历

2004.09-2009.03：博士，华东理工大学，化学工艺专业

2000.09-2004.07：学士，河北工业大学，过程装备与控制工程专业

荣誉及获奖

2017 中国石油和化学工业联合会科技进步一等奖 排名 7

2017 上海市科技进步二等奖 排名 3

2015 年入选上海市浦江人才计划

研究方向

(1) 气流床水煤浆气化基础研究与工程应用

(2) 气化与燃烧火焰光谱诊断

(3) 固体产物综合利用

研究成果及主要发表文章

科研项目及主要论文：

(1) 美国能源部 DOE-University of Kentucky 子课题，2017.11-2020.10. 主持，在研。

(2) 国家重点研发计划课题，2017.7-2021.6. 主持，在研。

(3) 国家自然科学基金青年基金，2011.01-2013.12，主持，已结题。

[1] Huiwen Zhu, Chonghe Hu, Qinghua Guo*, Yan Gong, Guangsuo Yu*. Investigation on chemiluminescence and structure characteristics in CH4/O2 diffusion flames. Experimental Thermal and Fluid Science, 2019, 102: 595-602.

[2] Jiabao Yang, Huiwen Zhu, Qinghua Guo*, Yan Gong, Guangsuo Yu*. Dilution effects of N2 and CO2 on flame structure and reaction characteristics in CH4/O2 flames. Experimental Thermal and Fluid Science, 2019, 108: 16-24.

[3] Qinghua Guo, Zhiqing Zhang, Zhicun Xue, Yan Gong, Guangsuo Yu*, Fuchen Wang. Coal char particle secondary fragmentation in an entrained-flow coal-water slurry gasifier. Journal of the Energy Institute, 2019, 92: 578-586.

[4] Zhicun Xue, Yan Gong, Qinghua Guo*, Fuchen Wang, Guangsuo Yu*. Visualization Study on Breakup Modes of Coal Water Slurry in an Impinging Entrained-Flow Gasifier. Fuel, 2019, 244: 40-47.

[5] Juntao Wei, Yan Gong, Qinghua Guo*, Xueli Chen, Lu Ding, Guangsuo Yu*. A mechanism investigation of synergy behaviour variations during blended char co-gasification of biomass and different rank coals. Renewable Energy, 2019, 131: 597-605.

[6] Chonghe Hu, Yan Gong, Qinghua Guo*, Lei He, Guangsuo Yu*. Investigations of CH* Chemiluminescence and Blackbody Radiation in Opposed Impinging Coal-Water Slurry Flames Based on an Entrained-Flow Gasifier. Fuel, 2018, 221: 688-696.

[7] Chonghe Hu, Yan Gong, Qinghua Guo*, Lei He, Guangsuo Yu*. Alkalis atomic emission spectroscopy and flame temperature measurement of diesel impinging flames in an opposed multi-burner gasifier. Experimental Thermal and Fluid Science, 2018, 98: 45-453.

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[10] Xudong Song, Qinghua Guo*, Chonghe Hu, Yan Gong, Guangsuo Yu*. Optical experimental study on the characteristics of impinging coal-water slurry flame in an opposed multi-burner gasifier. Fuel, 2017, 188: 132-139.

[11] Chonghe Hu, Yan Gong, Qinghua Guo*, Yifei Wang, Guangsuo Yu*. Experimental study on the spectroscopy of opposed impinging diesel flames based on a bench-Scale gasifier. Energy & Fuels, 2017, 31: 4469-4478.

[12] Xudong Song, Qinghua Guo,* Chonghe Hu, Yan Gong, and Guangsuo Yu*. OH* Chemiluminescence Characteristics and Structures of the Impinging Reaction Region in Opposed Impinging Diffusion Flames. Energy & Fuels, 2016, 30, 1428−1436.

[13] Chonghe Hu, Yan Gong, Qinghua Guo*, Xudong Song, Guangsuo Yu*. An experimental study on the spectroscopic characteristics in coal-water slurry diffusion flames based on hot-oxygen burner technology. Fuel Processing Technology, 2016, 154: 168-177.

[14] Qinghua Guo, Zhijie Zhou, Fuchen Wang, Guangsuo Yu*. Slag properties of blending coal in an industrial OMB coal water slurry entrained-flow gasifier. Energy Conversion and Management, 2014, 86: 683-688.

[15] Qinghua Guo, Yan Gong, Jianliang Xu, Guangsuo Yu*, Fuchen Wang. Particulate matter properties in a bench-scale entrained-flow coal water slurry gasifier. Powder Technology, 2014, 254: 125-130.

[16] Qinghua Guo, Yan Gong, Guangsuo Yu*, Tao Wang, Yi Ma, Zhuoyong Yan. Experimental study on a Hot Oxygen Burner in a bench-scale gasifier. Chemical Engineering & Technology, 2014, 37(3): 445-452.

[17] Qinghua Guo; Tao Wang; Zhenghua Dai; et. al. Hot Oxygen Nozzle and Uses Thereof in Gasifiers. 2016.11.1, the United States, US9481839B2 (Granted)