



所属学院 资源与环境工程学院

学科领域 化学工艺；能源与动力工程

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个人简介

于广锁，男，1970年2月生于安徽肥西。教授，博士生导师。教育部长江学者特聘教授、中国青年科技奖获得者、教育部新世纪优秀人才、上海市曙光学者、上海市科技启明星、上海市育才奖。

长期从事煤气化技术的应用基础研究和工程开发，负责进行多喷嘴对置式水煤浆气化技术的推广应用和工程化实施。现已在国内外应用58家企业，设计、建设和运行的气化炉159台，单炉最大设计能力达到4000吨/天。

学术兼职：先进耐火材料国家重点实验室学术委员会委员；中国石油和化学工业联合会煤化工专业委员会专家；《Fuel》Special Issue Guest Editor(VSI: 9th IFC)，《煤化工》、《煤炭转化》、《氮肥与合成气》、《化肥工业》、《中国煤化工》编委等。

研究方向

煤炭气化、催化与反应工程、火焰可视化

研究成果及主要发表文章

主持国家自然科学基金项目、国家重点研发计划课题、863计划课题和宁夏回族自治区重点研发计划重大项目；荣获国家科技进步二等奖(2016年、2007年)2项、省部级科技进步特等奖2项、一等奖6项、二等奖4项；申请发明专利100余项，授权80余项，授权实用新型专利60余项，申请美国专利4项，授权3项；在AICHE J.、Chem. Eng. Sci.、Chem. Eng. J.、Fuel、Appl. Energ.、Energ. Fuel等期刊发表论文300余篇，其中SCI收录150余篇、EI收录240余篇。

主要发表论文：

- [1] XiaoxiangWu, Yan Gong, Qinghua Guo, Zhicun Xue, Guangsuo Yu*. Experimental study on the atomization and particle evolution characteristics in an impinging entrained-flow gasifier. Chemical Engineering Science, 2019, 207: 542-555.
- [2] Wei JT, Gong Y, Guo QH, Chen XL, Ding L, Yu GS*. A mechanism investigation of synergy behaviour variations during blended char co-gasification of biomass and different rank coals. Renew Energ, 2019, 131: 597-605.
- [3] He L, Guo QH, Gong Y, Wang FC, Yu GS*. Investigation of OH*chemiluminescence and heat release in laminar methane-oxygen co-flow diffusion flames. Combust Flame, 2019, 201: 12-22.
- [4] He Q, Guo QH, Ding L, Gong Y, Wei JT, Yu GS*. Co-pyrolysis behavior and char structure evolution of raw/torrefied rice straw and coal blends. Energy Fuels, 2018, 32: 12469-12476.
- [5] Xue ZC, Guo QH, Gong Y, Wang YF, Yu GS*. In-situ atomization and flame characteristics of coal water slurry in an impinging entrained-flow gasifier. Chem Eng Sci, 2018, 190: 248-259.
- [6] Ding L, Gong Y, Wang YF, Wang FC, Yu GS*. Characterisation of the morphological changes and interactions in char, slag and ash during CO2 gasification of rice straw and lignite. Appl Energ, 2017, 195: 713-724.
- [7] Wei JT, Guo QH, He Q, Ding L, Yoshikawa K, Yu GS*. Co-gasification of bituminous coal and hydrochar derived from municipal solid waste: Reactivity and synergy. Bioresour Technol, 2017, 239: 482-489.
- [8] Zhang Q, Gong Y, Guo QH, Xue ZC, Wang FC, Yu GS*. Experimental study of particle evolution characteristics in an opposed multi-burner gasifier. Chem Eng Sci, 2017, 162: 104-119.
- [9] Zhang Q, Gong Y, Guo QH, Song XD, Yu GS*. Experimental study on CH* chemiluminescence characteristics of impinging flames in an Opposed Multi-Burner gasifier. AICHE J, 2017, 63(6): 2007-2018.
- [10] Lu Ding, Zhijie Zhou, Qinghua Guo, Wei Huo, Guangsuo Yu*. Catalytic effects of Na2CO3 additive on coal pyrolysis and gasification. Fuel, 2015, 142(2): 134-144.