



所属学院 资源与环境工程学院

学科领域

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## 个人简介

王兴军，副研，硕导。2005 年于华东理工大学获博士学位，2007 年遴选为副研。2015 年赴美国怀俄明大学开展访问学者研究。主要研究方向为合成气深加工和催化气化，开展费托合成、甲烷化、催化气化等催化剂及工艺开发及反应机理研究。已发表 SCI 论文 40 余篇，获授权发明专利 20 项。

## 研究方向

合成气深加工，催化气化

## 研究成果及主要发表文章

- (1) Xingjun Wang, Maohong Fan, Xin Huang, Mingchen Tang, Guangso Yu, Haifeng Liu, Fuchen Wang, Hertanto Adidharma, Khaled A.M. Gasem, Maciej Radosz. High-performance nano-structured Ni based catalysts for high-temperature CO<sub>2</sub>-CH<sub>4</sub> reforming—Greenhouse gases to syngas. *Catalysis Today*. 2020, 339:344–351
- (2) Wang Xingjun, Kui Yao, Xin Huang, Xueli Chen, Guangso Yu, Haifeng Liu, Fuchen Wang, Fan Maohong. Effect of CaO and biomass ash on catalytic hydrogasification behavior of coal char. *Fuel*. 2019, 249: 103–111
- (3) Xin Huang, Maohong Fan, Xingjun Wang, Yonggang Wang, Morris D. Argyle, Yufei Zhu. A cost-effective approach to realization of the efficient methane chemical-looping combustion by using coal fly ash as a support for oxygen carrier. *Applied Energy*. 2018, 230:393–402
- (4) Zhu Huaili, Wang Xingjun, Wang Fuchen, Yu Guangso. In situ study on k<sub>2</sub>co<sub>3</sub> catalyzed co<sub>2</sub> gasification of coal char: interactions and char structure evolution. *Energy & Fuel*. 2018, 32: 1320–1327
- (5) Zhu Huaili, Yu Guangso, Guo Qinghua, Wang Xingjun. In situ Raman spectroscopy study on catalytic pyrolysis of a bituminous coal. *Energy & Fuel*. 2017, 31: 5817–5827
- (6) Xin Huang, Xingjun Wang, Maohong Fan, Yonggang Wang, Hertanto Adidharma, Khaled A.M. Gasem, Maciej Radosz. A cost-effective approach to reducing carbon deposition and resulting deactivation of oxygen carriers for improvement of energy efficiency and CO<sub>2</sub> capture during methane chemical-looping combustion. *Applied Energy*. 2017, 193: 381–392
- (7) Zhu Huaili, Wang Xingjun, Chen Xueli, Yu Guangso. Effect of biomass char additives on the hydrogasification behavior of a bituminous coal. *Bioresources*. 2016, 11: 9002–9016
- (8) Ye Sun, Xingjun Wang, Zhenghua Dai, Guangso Yu, Fuchen Wang. Physicochemical properties and slurry ability of lignite upgraded by a solvent-extraction approach. *Energy Technology*. 2015, 3: 968–975
- (9) Huaili Zhu, Ximing Wang, Jingang Zhang, Kui Yao, Guangso Yu, Xingjun Wang. Investigation of k<sub>2</sub>co<sub>3</sub>-catalyzed pyrolysis and steam gasification of coal char. *Energy Technology*. 2015.9.1, 3(9): 961–967
- (10) Xingjun Wang, Huaili Zhu, Ximin Wang, Haifeng Liu, Fuchen Wang, Guangso Yu. Transformation and reactivity of a potassium catalyst during coal steam catalytic pyrolysis and gasification. *Energy Technology*. 2014, 2: 598–603.
- (11) Ye Sun, Xingjun Wang, Tingting Feng, Guangso Yu, Fuchen Wang. Evaluation of coal extraction with supercritical carbon dioxide/1-methyl-2-pyrrolidone mixed solvent. *Energy & Fuels*. 2014, 28: 816–824.
- (12) Jie Zhang, Xingjun Wang, Fuchen Wang, Jie Wang. Investigation of hydrogasification of low-rank coals to produce methane and light aromatics in a fixed-bed reactor. *Fuel Processing Technology*. 2014, 127: 124–132.