



Department: School of Resources and Environmental Engineering

Professional field: Thermal Power Engineering

E-mail: cxl@ecust.edu.cn

Profile

She is a professor and doctoral supervisor of East China University of Science and Technology, a member of New Century Outstanding Talents of Ministry of Education of China, deputy dean of School of Resources and Environmental Engineering. She has been engaged in the research and development of gasification process and gasification technology for a long time and has accumulated rich theoretical knowledge and practical experience in the field of gasification. She has undertaken more than 20 national, provincial and ministerial level and enterprise commissioned projects. More than 100 papers in Fuel, Bioresource Technology, AIChE J, Chemical Engineering Science and other prestigious international academic journal in the field of energy and chemical industry have been published, SCI indexed more than 50 papers. More than 50 invention patents (more than 20 authorized) have been filed.

Research Field

- (1) biomass pyrolysis and gasification
- (2) heterogeneous separation

Research results and selected published papers

- (1) Tian Wang, Dexi Meng, Jianxin Zhu, Xueli Chen*. Effects of pelletizing conditions on the structure of rice straw-pellet pyrolysis char. Fuel, 2020, 264: 116909
- (2) Dexi Meng, Tian Wang, Jianliang Xu, Xueli Chen*. Diffusion effect and evolution of kinetic parameters during coal char-CO₂ gasification. Fuel, 2019, 255: 115819.
- (3) Dexi Meng, Tian Wang, Jianliang Xu, Xueli Chen*. A numerical study on the pyrolysis of large coal particles: Heat transfer and volatile evolution. Fuel, 2019, 254: 115668
- (4) Shijie Zhu, Runzhe Liu, Tian Wang, Yongjian Niu, Haifeng Lu, Xueli Chen*. Impact behavior of hydrophilic micron particles on a planar gas-liquid interface. Langmuir, 2019, 35: 15017-15028
- (5) Shijie Zhu, Runzhe Liu, Tian Wang, Yongjian Niu, Haifeng Lu, Xueli Chen*. Penetration time of hydrophilic micron particles impacting into an unconfined planar gas-liquid interface. Chemical Engineering Science, 2019, 193: 282-297
- (6) Xueli Chen*, Yang Xu, Haifeng Lu, Xiaolei Guo. Effect of the moisture content of straw on the internal friction angle of a granular biomass-coal system. Fuel, 2018, 215: 266-271
- (7) Handing Chen, Xueli Chen*, Yueqiang Qin, Juntao Wei, Haifeng Liu. Effect of torrefaction on the properties of rice straw high temperature pyrolysis char: Pore structure, aromaticity and gasification activity. Bioresource Technology, 2017, 228:241-249
- (8) Handing Chen, Xueli Chen*, Zhi Qiao, Haifeng Liu*. Release and transformation behavior of Cl during pyrolysis of torrefied rice straw. Fuel, 2016,183:145-154
- (9) Handing Chen, Xueli Chen* , Zhi Qiao, Haifeng Liu*. Release and transformation characteristics of K and Cl during straw torrefaction and mild pyrolysis. Fuel, 2016, 167: 31-39
- (10) Xueli Chen, Jianye Tang, Xiaojun Tian, Li Wang. Influence of biomass addition on Jincheng coal ash fusion temperatures. Fuel, 2015, 160: 614-620
- (11) Qingli Wang, Xueli Chen*, Zhiguo Guo, Xin Gong. An experiment investigation of particle collection efficiency in a fixed valve tray washing column. Powder Technology, 2014, 256: 52-60
- (12) Qingli Wang, Xueli Chen*, Xin Gong. Theoretical and experimental investigation on the characteristics of fly-ash scrubbing in a fixed valve tray column. AIChE Journal, 2013, 59(6): 2168-2178
- (13) Qingli Wang, Xueli Chen*, Xin Gong. The particle removing characteristics in a fixed valve tray column. Industrial & Engineering Chemistry Research. 2013, 52(9): 3441-3452