Zhao Hui

Department: School of Resources and Environmental Engineering

Professional field: Thermal Energy Engineering

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Profile

Employment

2019-Present Associate Professor, Shanghai Engineering Research Center of Coal Gasification / Institute of Clean Coal Technology, East China University of Science and Technology

2017-2018 Visiting scholar, Mechanical and Aerospace Engineering, Monash University

2014-2019 Lecturer, Shanghai Engineering Research Center of Coal Gasification / Institute of Clean Coal Technology, East China University of Science and Technology

2012-2014 Post-doctor, State Environmental Protection Key Laboratory of Environmental Risk Assessment and Control on Chemical Process, East China University of Science and Technology

Education

2007-2012 Doctor, Chemical Technology, East China University of Science and Technology

2003-2007 Bachelor, Chemical Engineering and Technology, East China University of Science and Technology

Research Field

Coal gasification and fluid mechanics

Research results and selected published papers

1. Zhao H, Nguyen D, Duke D J, et al. Effect of turbulence on drop breakup in counter air flow. International Journal of Multiphase Flow, 2019, 120: 103-108.

2. Zhao H, Wu Z W, Li W F, et al. Interaction of two drops in the bag breakup regime by a continuous air jet. Fuel, 2019, 236: 843-850.

3. Zhao H, Wu Z W, Li W F, et al. Nonmonotonic Effects of Aerodynamic Force on Droplet Size of Prefilming Air-Blast Atomization. Industrial & Engineering Chemistry Research, 2018, 57(5): 1726-1732.

4. Zhao H, Wu Z W, Li W F, et al. Transition Weber number between surfactant-laden drop bag breakup and shear breakup of secondary atomization. Fuel, 2018, 221: 138-143.

5. Zhao H , Zhang W B , Xu J L , et al. Surfactant-laden drop jellyfish-breakup mode induced by the Marangoni effect. Experiments in Fluids, 2017, 58(3):13.

6. Hui Zhao, Wen-Bin Zhang, Jian-Liang Xu, Wei-Feng Li, Hai-Feng Liu, Influence of surfactant on the drop bag breakup in a continuous air jet stream, Physics of Fluids, 2016, 28, 54102

7. Hui Zhao, Jian-Liang Xu, Ju-Hui Wu, Wei-Feng Li, Hai-Feng Liu, Breakup morphology of annular liquid sheet with an inner round air stream, Chemical Engineering Science, 2015, 137, 412-422

8. Hui Zhao, Hai-Feng Liu, Jian-Liang Xu, Wei-Feng Li, Kuang-Fei Lin, Inhomogeneity in breakup of suspensions, Physics of Fluids, 2015, 27, 063303.

9. Hui Zhao, Haifeng Liu, Xiushan Tian, Jianliang Xu, Weifeng Li, Kuangfei Lin, Influence of atomizer exit area ratio on the breakup morphology of coaxial air and round water jets, AIChE Journal, 2014, 60, 2335-2345

10. Hui Zhao, Yan-Bing Hou, Hai-Feng Liu, Xiu-Shan Tian, Jian-Liang Xu, Wei-Feng Li, Yi Liu, Fu-Yu Wu, Jie Zhang, Kuang-Fei Lin, Influence of rheological properties on air-blast atomization of coal water slurry, Journal of Non-Newtonian Fluid Mechanics, 2014, 211, 1-15

11. Hui Zhao, Hai-Feng Liu, Xiu-Shan Tian, Jian-Liang Xu, Wei-Feng Li, Kuang-Fei Lin, Outer ligament-mediated spray formation of annular liquid sheet by an inner round air stream, Experiments in Fluids, 2014, 55, 1793

12. Hui Zhao, Haifeng Liu, Jianliang Xu, Weifeng Li, Kuangfei Lin, Temporal properties of secondary drop breakup in the bag-stamen breakup regime, Physics of Fluids, 2013, 25, 054102

13. Hui Zhao, Haifeng Liu, Jianliang Xu, Weifeng Li, Wei Cheng, Breakup and atomization of a round coal water slurry jet by an annular air jet, Chemical Engineering Science, 78, 63-74, 2012

14. Hui Zhao, Hai-Feng Liu, Xian-Kui Cao, Wei-Feng Li, Jian-Liang Xu, Breakup characteristics of liquid drops in bag regime by a continuous and uniform air jet flow, International Journal of Multiphase Flow, 37, 530-534, 2011

15. Hui Zhao, Hai-Feng Liu, Jian-Liang Xu, Wei-Feng Li, Experimental study of drop size distribution in the bag breakup regime, Industrial & Engineering Chemistry Research, 50, 9767-9773, 2011

16. Hui Zhao, Hai-Feng Liu, Jian-Liang Xu, Wei-Feng Li, Secondary breakup of coal water slurry drops, Physics of Fluids, 23, 113101, 2011

17. Hui Zhao, Hai-Feng Liu, Wei-Feng Li, Jian-Liang Xu, Morphological classification of low viscosity drop bag breakup in a continuous air jet stream, Physics of Fluids, 22, 114103, 2010