



简介: 王崇明现任英国考文垂大学汽车学院讲师和研究员, 同时也是 European Commission 资助的玛丽居里学者 (Marie Curie Research Fellow)。除高校科研工作外, 王崇明曾于 2015-2016 在德国壳牌研发中心 (Shell) 担任燃油科学家岗位, 主要从事低碳、环保、高效汽油的研发工作。王崇明还帮助建立英国高校、Shell、欧洲高校的国际学习交流平台。更多信息详见: www.genfuel.eu

王崇明本科就读浙江大学能源与工程学院, 于 2010 年以专业第二毕业后获得英国伯明翰大学 (University of Birmingham) “精英奖学金”全额资助, 攻读车辆发动机方向博士学位 (主攻低碳、高效、清洁燃烧技术)。博士期间与清华大学, 壳牌以及捷豹路虎合作, 参与由英国政府资助的两个重大科研项目。与世界顶尖的生物质燃料研究团队合作共同出版书籍《Biofuels from Lignocellulosic Biomass - Innovations beyond Bioethanol》(出版社: Wiley)。自 2012 年至今, SCI 收录 20+ (第一作 10 篇, 通信作者 4 篇): 包括 1 篇 Progress in Energy and Combustion Science (能源领域最高权威杂志, 影响因子: 25); 7 篇 Applied Energy; 11 篇 Fuel; 4 篇 Energy & Fuels; SCI 收录总影响因子 150+; 其中两篇文章被 ESI 评为高被引 (领域前 1%)。王崇明被 Elsevier 评为 2016 年《Applied Energy》最佳审稿人。

教育背景

2010-2014 University of Birmingham 博士 (机械学院)

研究领域: 发动机 PM2.5 颗粒物排放; 高性能汽油发动机; 新型代用燃料

博士导师: 徐宏明教授 — 英国伯明翰大学教授, 清华大学首批千人计划教授

毕业论文: Combustion and Emissions of a Direct Injection Gasoline Engine Using Biofuels

2006-2010 浙江大学 本科 (机械与能源工程学院)

工作经历

时间: 2017 年 12 月 — 今

岗位/头衔: 讲师

工作地点: 考文垂大学 (英国)

授课: Automotive Engines and Vehicle Aerodynamics Thermofluid Systems

研究: 未来清洁能源, 高级燃烧方式, 多目标多参数优化

时间: 2015 年 1 月 — 2017 年 12 月

岗位/头衔: Fuel scientist/玛丽居里学者

工作地点: 壳牌石油研发中心 (德国, 汉堡)

期刊论文

1. Xu CS, Wang CM*, et al. Laminar Burning Characteristics of Two Rice Husk Derived Biofuels, Energy & Fuels, accepted. (通讯作者)
2. Wang ZM, Wang CM*, Microscopic study on the mechanisms for formation of the initial spray morphology, Fuel,

accepted, (通讯作者)

3. Xu CS, Zhong AH, Wang HY, Jiang CZ, Sahu A, Zhou WH, Wang CM*, Laminar burning velocity of 2-methylfuran-air mixtures at elevated pressures and temperatures: Experimental and modeling studies, *Fuel*, 2018; 231: 215-C223. (通讯作者)
4. Wang CM, Jose H; Jiang C Sahu, A; Xu, HM, Engine Thermal Efficiency Gain and WTW GHG Savings when using Bioethanol as a Gasoline-Blending Component in Future SI engine: A China Case Study, *Energy & Fuels*, 2018, 32 (2), pp 1724–1732.
5. Xu CS, Wang CM*, et al., Laminar burning characteristics of upgraded biomass pyrolysis fuel derived from rice husk at elevated pressures and temperatures, *Fuel*, 2017;210:249-261. (通讯作者)
6. Wang CM, A, Prakash A, Cracknell R, Xu H. Significant of RON and MON to a modern DISI engine, *Fuel*, 2017;209: 172-183.
7. Wang CM, Zeraati-Rezaei S, Xiang L, Xu H. Ethanol blends in spark ignition engines: RON, octane-added value, cooling effect, compression ratio, and potential engine efficiency gain. *Applied Energy*. 2017;191:603-19.
8. Wang CM, Chahal J, Janssen A, Cracknell R, Xu H. Investigation of gasoline containing GTL naphtha in a spark ignition engine at full load conditions. *Fuel*. 2017;194:436-47.
9. Wang CM, Janssen A, Prakash A, Cracknell R, Xu H. Splash blended ethanol in a spark ignition engine – Effect of RON, octane sensitivity and charge cooling. *Fuel*. 2017;196:21-31.
10. Wang ZM, Li YY, Guo HJ, Wang CM, Xu HM, Microscopic and macroscopic characterization of spray impingement under flash boiling conditions with the application of split injection strategy, *Fuel*. 2017;212:315-325.
11. Prakash, A., Wang C., Janssen, A., Aradi, A. et al., "Impact of fuel sensitivity (RON-MON) on engine efficiency," *SAE Int. J. Fuels Lubr.* 10(1):2017, doi:10.4271/2017-01-0799.
12. Bao X, Jiang Y, Xu H, Wang C, Lattimore T, Tang L. Laminar flame characteristics of cyclopentanone at elevated temperatures. *Applied Energy*. 2017;195:671-80.
13. Wang Z, Guo H, Wang C, Xu H, Li Y. Microscopic level study on the spray impingement process and characteristics. *Applied Energy*. 2017;197:114-23.
14. Wang Z, Li Y, Wang C, Xu H, Wyszynski ML. Experimental study on primary breakup of diesel spray under cold start conditions. *Fuel*. 2016;183:617-26.
15. Wang Z, Li Y, Wang C, Xu H, Wyszynski ML. Near-nozzle microscopic characterization of diesel spray under cold start conditions with split injection strategy. *Fuel*. 2016;181:366-75.
16. Wang CM, Wei L, Cheng Z, Xu H, Daniel R, Shuai S. Hydrocarbon and Aldehyde Emissions from Combustion of 2-Methylfuran. *Combustion Science and Technology*. 2015.
17. Lattimore T, Wang CM, Xu H, Wyszynski ML, Shuai S. Investigation of EGR Effect on Combustion and PM Emissions in a DISI Engine. *Applied Energy*. 2016;161:256-67.
18. Xu H, Wang CM, Ma X, Sarangi AK, Weall A, Krueger-Venus J. Fuel injector deposits in direct-injection spark-ignition engines. *Progress in Energy and Combustion Science*. 2015;50:63-80. (导师一作, 学生二作)
19. Wang CM, Xu H, Herreros JM, Wang J, Cracknell R. Impact of Fuel and Injection System on PM Emissions from a DISI Engine. *Applied Energy*. 2014;132:178-91.
20. Wang CM, Xu HM, Herreros JM, Lattimore T, Shuai SJ. Fuel Effect on Particulate Matter Composition and Soot Oxidation in a Direct-Injection Spark Ignition (DISI) Engine. *Energy & Fuels*. 2014;28:2003-12.
21. Wang CM, Xu HM, Daniel R, Ghafourian A, Herreros JM, Shuai SJ, et al. Combustion characteristics and emissions of 2-methylfuran compared to 2,5-dimethylfuran, gasoline and ethanol in a DISI engine. *Fuel*. 2013;103:200-11.
22. Daniel R, Wang CM, Xu H, Tian G. Effects of Combustion Phasing, Injection Timing, Relative Air-Fuel Ratio and Variable Valve Timing on SI Engine Performance and Emissions using 2,5-Dimethylfuran. *SAE Int J Fuels Lubr.* 2012;5:855-66.
23. Daniel R, Xu H, Wang CM, Richardson D, Shuai S. Combustion performance of 2,5-dimethylfuran blends using dual-injection compared to direct-injection in a SI engine. *Applied Energy*. 2012;98:59-68.
24. Daniel R, Xu H, Wang CM, Richardson D, Shuai S. Gaseous and particulate matter emissions of biofuel blends in

dual-injection compared to direct-injection and port injection. Applied Energy. 2013;105:252-61.

25. Daniel R, Wei LX, Xu HM, Wang CM et al. Speciation of Hydrocarbon and Carbonyl Emissions of 2,5-Dimethylfuran Combustion in a DISI Engine. Energy & Fuels. 2012;26:6661-8.
26. Wei L, Li Z, Tong L, Wang Z, Jin H, Yao M, Wang CM et al. Primary combustion intermediates in lean and rich low-pressure premixed laminar 2-methylfuran/oxygen/argon flames. Energy & Fuels. 2012;26:6651-60.

出版书籍

书名: Biofuels from Lignocellulosic Biomass - Innovations beyond Bioethanol (ISBN: 978-3-527-33813-9)

作者: Michael Boot, Hongming Xu, Wang C. et al.

出版社: Wiley (约翰威立)

备注: 负责撰写第六章—Application of 2,5-dimethylfuran (DMF) on direct injection SI engines

书名: Knocking in Gasoline Engines (ISBN: 978-3-319-69759-8)

作者: Cracknell R.F., Prakash A., Somers K.P., Wang C. et al.

出版社: Springer

备注: 参与撰写第六章—Impact of Detailed Fuel Chemistry on Knocking Behaviour in Engines