

Sample relevant publications of the UKCTRF members (Maximum 5 representative publications are listed for any given investigator)

University of Brighton

- S. Straub, A. De, Kronenburg, K. Vogiatzaki, “The effect of a minor dissipation time scale on predicted local extinction and re-ignition in the Sandia flame series (D-F)”, *Combust. Theor. Model.*, <http://dx.doi.org/10.1080/13647830.2016.1191677>, 2016.
- S. Taamallah, K. Vogiatzaki, A. F. Ghoniem, F. M. Alzahrani, E. Mokheimer, M. A. Habib, “Fuel Flexibility, Stability and Emissions in Premixed Hydrogen-Rich Combustion: Technology, Fundamentals, and Numerical Simulations”, *Applied energy*, Vol.154, Pages 1020–1047, doi:10.1016/j.apenergy.2015.04.044, 2015.

Brunel University

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- J. Shinjo, J. Xia, L.C. Ganippa, A. Megaritis, “Puffing-enhanced fuel/air mixing of a single diesel/bioethanol emulsion droplet and a droplet group under convective heating”, *Journal of Fluid Mechanics* 793, 444–476, 2016.

University of Cambridge

- A. Giusti, E. Mastorakos, “Detailed chemistry LES/CMC simulation of a swirling ethanol spray flame approaching blow-off”, *Proc. Combust. Inst.*, 36, 2652-2633, 2017.
- H. Zhang, E. Mastorakos, “Modelling local extinction in Sydney swirling non-premixed flames with LES/CMC”, *Proc. Combust. Inst.*, 36, 1669-1676, 2017
- H. Zhang, E. Mastorakos, “Prediction of global extinction conditions and dynamics in swirling non-premixed flames using LES/CMC modelling”, *Flow Turb. Combust.*, 96, 863-889, 2016.
- E. Demosthenous, E. Mastorakos, R.S. Cant, “Direct Numerical Simulations of dual-fuel non-premixed autoignition”, *Combust. Sci. Technol.*, 188, 542-555, 2016.
- E. Demosthenous, G. Borghesi, E. Mastorakos, R.S. Cant, “Direct Numerical Simulations of premixed methane flame initiation by pilot n-heptane spray autoignition”, *Combust. Flame*, 163, 122-137, 2016.
- Z. Chen, S. Ruan, N. Swaminathan, “Large Eddy Simulation of flame edge evolution in a spark-ignited methane-air jet”, *Proc. Combust. Inst.*, 36, 1645-1652, 2017.
- Z. Chen, V. M. Reddy, S. Ruan, N. A. K. Doan, W. L. Roberts, N. Swaminathan, “Simulation of MILD combustion using Perfectly Stirred Reactor model”, *Proc. Combust. Inst.*, 36, 4279-4286, 2017.
- I. Langella, N. Swaminathan, Y. Gao and N. Chakraborty, “LES of premixed combustion: Sensitivity to SGS velocity modelling”, *Combust. Sci. Technol.*, 189(1), 43-78, 2017.
- I. Langella, N. Swaminathan and R. W. Pitz, “Application of unstrained flamelet SGS closure for multi-regime premixed combustion”, *Combust. Flame*, 173, pp. 161-178, 2016.
- I. Langella, N. Swaminathan, Y. Gao and N. Chakraborty, “Assessment of dynamic closure for premixed combustion LES”, *Combust. Theor. Model.*, 19(5), 628-656, 2015.
- G. V. Nivarti and R. S. Cant, “Direct Numerical Simulation of the Bending Effect in Turbulent Premixed Flames”, *Proc. Combust. Inst.* 36, 1903-1910, 2017.
- C. Bilger, M. Aboukhedr, K. Vogiatzaki, R. S. Cant, “Evaluation of two-phase flow solvers using Level Set and Volume of Fluid methods”. *J. Comput. Phys.*, 345, 665-686, 2017.

- Y. Lee, & R. S. Cant, "Large-eddy simulation of a bluff-body stabilised turbulent premixed flame using the transported flame surface density approach". *Combust. Theor. Model.*, 21, 722-748, 2017.
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University of Central Lancashire

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Cranfield University

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Durham University

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Daresbury Laboratory, STFC

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University of Edinburgh

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- H. Farahani, W.U. Rojas Alva, A.S. Rangwala, G. Jomas, "Convection-driven melting in an n-octane pool fire bounded by an ice wall", *Combust. Flame* (in press).
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Newcastle University

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Northumbria University

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