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1	Atomization in Forensic Applications and Aerosolization in Dentistry	Alexander L. Yarin	ORAL	ayarin@uic.edu
2	Analysis of Axisymmetric Radially Expanding Free Liquid Films by Means of Lubrication Theory	Alexander Gyrkovich, Carsten Mehring	ORAL	Alexander.Gyrkovich@imvt.uni-stuttgart.de
3	Thermophysical Characterization of a Sessile Evaporating Droplet	Sidharth P. Raut, Michael J. Gibbons, Seamus M. O'Shaughnessy, Anthony J. Robinson, Sajad Alimohammadia	ORAL	Sidharth.Raut@TUDublin.ie
4	Macroscopic analysis of jet development with a spray-guided injector	Ireneusz Pielecha	POSTER	ireneusz.pielecha@put.poznan.pl
5	Heating and Evaporation of Spherical and Non-spherical Droplets: New Approaches to Modelling	Sergei S. Sazhin, Simona Tonini, Gianpietro Elvio Cossali, Dmitrii V. Antonov, Pavel A. Strizhak	ORAL	S.Sazhin@brighton.ac.uk
6	Nonlinear Droplet Dynamics Within Burgers Vortices Induced by Transport Phenomena	Orr Avni, Yuval Dagan	ORAL	yuvalda@technion.ac.il
7	A study of the coarse droplet formation from the liquid film in steam turbines	Ondřej Bartoš, Adam Huněk, Pavel Antoš	POSTER	ondrej.bartos@fs.cvut.cz
8	Parametric Investigation of Multi-pulsed Cryogen Spray Cooling for Skin Protection during Hyperthermal Laser Lipolysis	Hui Xin, Fangbo Yu, Chenggang Deng, Ming Chen, Dong Li and Bin Chen	POSTER	chenbin@mail.xjtu.edu.cn
9	Investigation of fuel temperature	Kyugwon Lee, Yonghyun Choi,	POSTER	hwang@me.msstate.edu1

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10	STUDYING THE INTERNAL FLOW AND SPRAY BEHAVIOR IN A SIMPLEX PRESSURE-SWIRL ATOMIZER THROUGH A SINGLE VOF-LES	R. Payri, P. Martí-Aldaraví, M. Carreres, A. Muñoz-Agulló	ORAL	marcarta@mot.upv.es
11	Understanding droplet formation in ultrasonic spray coating using phase doppler anemometry: Comparison with predictive models	Pieter Verding, Donato Fontanarosa, Maria Rosaria Vetrano, Wim Deferme	ORAL	pieter.verding@uhasselt.be
12	Computed adiabatic mixture temperatures vs experimentally measured temperatures during the transcritical injection of ethanol into a nitrogen atmosphere at diesel engine relevant conditions	Max Conrad, Grazia Lamanna, José Sierra-Pallares, Andreas S. Braeuer	ORAL	Max.Conrad@tun.tu-freiberg.de
13	Selected Results of the International Research Training Group GRK 2160 on "Droplet Interaction Technologies" (DROPIT)	B. Weigand, A. Geppert, G. Lamanna, S. Tonini, G.E. Cossali	POSTER	bernhard.weigand@itlr.uni-stuttgart.de
14	Experimental investigation of the height and	Patrick Palmetshofer, Johanna Heckel,	ORAL	patrick.palmetshofer@itlr.uni-stuttgart.de

	angle of an uprising sheet occurring in near-simultaneous double droplet impacts onto smooth surfaces of varying wettability	Anne Geppert, Bernhard Weigand		
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16	PIV measurements in the inner crown wall resulting from droplet impact on a thin liquid film	Stefan Schubert, Moritz Stein, Anne Geppert, Bernhard Weigand, Grazia Lamanna	ORAL	Stefan.schubert@itlr.uni-stuttgart.de
17	Combining VOF with an Eulerian-Lagrangian CFD platform to simulate the multi-scale problem of a reacting flow after a liquid jet in cross-flow injector	Corine Kieffer-Roth, Georg Eckel, Patrick Le Clercq	ORAL	Corine.Kieffer-Roth@dlr.de
18	Experimental study of liquid injection under supercritical conditions	T. Chazelle, F. Lespinasse, S. Idlahcen, J.-B. Blaisot, B. Barviau, G. Ribert	ORAL	guillaume.ribert@insa-rouen.fr
19	Air assist pressure swirl atomizer droplet size distribution	Baraya E.A., Ibrahim I.A., Gad H.M., Farag T.M.	POSTER	eslam.ahmad@eng.psu.edu.eg
20	Experimental Investigation of an Oblique Droplet Impact onto a Quiescent Wall Film with Two-Perspective High-Speed Imaging	Jonathan Lukas Stober, Maurizio Santini, Anne Geppert, Kathrin Schulte	ORAL	jonathan.stober@itlr.uni-stuttgart.de
21	Numerical Simulation of Precursor	Zhaoping Ying, Eva Gutheil	ORAL	gutheil@iwr.uni-heidelberg.de

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22	Application of Machine Learning Approaches to Model the Temporal Evolution of Fuel Sprays	Thangaraja Jeyaseelan, Min Son, Lars Zigan	ORAL	min.son@unibw.de
23	Towards spatial and time-resolved film thickness measurements during droplet impact on thin liquid films	A. K. Geppert, G. Lamanna	ORAL	anne.geppert@itlr.uni-stuttgart.de
24	Optical identification of flame distribution in a rapid compression machine in a controlled non-flammable gas injection system	Wojciech Cieřlik	POSTER	wojciech.cieslik@put.poznan.pl
25	Understanding droplet penetration from an ultrasonic spray coated polymer on a porous substrate	T. Corthouts, W. Deferme	ORAL	tobias.corthouts@uhasselt.be
26	Influence of bubble growth and liquid film instabilities on droplet impact phenomena under saturated boiling regimes	Daniel Vasconcelos, André Silva, Jorge Barata	ORAL	daniel.vasconcelos.rodrigues@ubi.pt
27	Modelling the evaporation of sessile and pendant drops deformed by the effect of gravity	S.Tonini, G.E. Cossali	ORAL	simona.tonini@unibg.it
28	Modelling the time-dependent evaporation of sessile drops under the effect of gravity	S.Tonini, G.E. Cossali	ORAL	simona.tonini@unibg.it

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30	The Generalised Fully Lagrangian Approach for Polydisperse Sprays. Implementation of a two-way coupling model in OpenFOAM	Chris Stafford, Oyuna Rybdylova	ORAL	o.rybdylova@brighton.ac.uk
31	Spray dynamics of conventional and alternative jet fuel	Inês A. S. Ferrão, Miguel A. A. Mendes, Ana. S. O. H. Moita, André R. R. Silva	ORAL	ines.ferrao@ubi.pt
32	Binary Droplet Collisions of Supercooled Water Droplets	Verena Kunberger, Bernhard Weigand	ORAL	verena.kunberger@itlr.uni-stuttgart.de
33	Explorative direct numerical simulations of primary breakup of generic thixotropic liquid jets	Gianluca Caruso, Jonas Steigerwald, Matthias Ibach, Bernhard Weigand	ORAL	gianluca.caruso@itlr.uni-stuttgart.de
34	Cavitation Dynamics and Surface Erosion in fuel injectors considering the composition of fuel mixtures	R. Bellinia, C. Rodriguez, M. Gavaises	ORAL	raffaele.bellini.2@city.ac.uk
35	Non-Destructive Quantification of Fuel Injector Deposits using X-ray Micro-Tomography	Chi Young Moon, Yi Xu, Brandon A. Sforzo, Alan L. Kastengren, Christopher F. Powell	ORAL	cmoon@anl.gov
36	CFD Analysis of Spray Formation Process with Multi-hole Nozzle for Port Fuel Injection SI Engine	Kanako Nishimura, Dai Matsuda, Eriko Matsumura, Jiro Senda	ORAL	cyjh1503@mail4.doshisha.ac.jp
38	Experimental and Numerical Investigation of Cyclopentane Sprays under Sub- and	Min Son, Tobias Sander, Michael Pfitzner, Lars Zigan, Alexander Doehring, and Markus Klein	ORAL	min.son@unibw.de

	Transcritical Conditions			
39	On the role of transcritical evaporation in controlling the transition from two-phase to single-phase mixing	Grazia Lamanna, Christoph Steinhausen, Bernhard Weigand	ORAL	grazia.lamanna@itlr.uni-stuttgart.de
40	Langevin ultrasonic-based atomisation of machining lubricants: correlations between droplet sizes and operating parameters	Agostino Maurotto, Guillaume De Sercey, Xuan Li, Cyril Crua	ORAL	agostino.maurotto@leicester.ac.uk
41	Methanol spray tomography under standard and flash boiling Spray G operating conditions of ECN	Rafael Clemente, Zachary Buen, Meghnaa Pares, Julien Manin, Lyle Picket, Sebastian Rieß, Michael Wensing	POSTER	rafa.clemente@fau.de
42	Investigation on charging and breakup of paint liquids using high-speed rotary bell with internal charging	Q. Ye, B. Shen, O. Tiedje, P. Knee, J. Domnick	ORAL	Qiaoyan.ye@ipa.fraunhofer.de
43	Experimental investigation of ammonia spray performance in a constant volume chamber	Hao Wu, Moez Ben Houidi, Bassam S. Aljohani, William L. Roberts	ORAL	wu.hao@kaust.edu.sa
44	Prediction of the Outcome From Drop-Particle Collisions	C. Planchette, G. Brenn, D. Khojasteh, M.K. Dehghan Manshadi, A. Shamsipour, M. Marengo	ORAL	guenter.brenn@tugraz.at
45	Effects of Jet Velocity and Impingement Angle on Spray Characteristics of Like-Doublet Injectors	Tolga Yıldız, Senem Gülmez, Aykut Sever, İskender Gökalg	ORAL	yildiz.tolga@metu.edu.tr
46	Effect of TiO <sub>2</sub> -water nanofluids on spray cooling	Y. T. Aksoy, H. Cornelissen, P. Eneren, M. R. Vetrano	POSTER	yunus.aksoy@kuleuven.be

47	An Experimental and Numerical Investigation on Spray Characterization of Pressure-Swirl Atomizers	Salih Toker, Mahmut Murat Gocmen, Senem Gulmez, Burak Cenik, Baran Iper, Sitki Uslu	POSTER	salih.toker@roketsan.com.tr
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49	Influence of liquid properties on the spray characteristics of an air-assisted impinging jet atomizer	Vignesh Kumar D, Anand TNC, Madan Mohan Avulapati	POSTER	me19d509@iittp.ac.in
50	Experimental and numerical investigation of the aerosol generation mechanisms at the human vocal folds	Lisa Fritzschea, Martin Heinricha, Kartik Guptaa, Rüdiger Schwarzea, Katrin Bauera	ORAL	lisa.fritzsche@imfd.tu-freiberg.de
51	Large-Eddy Simulation of Waste Cooking Oil Biodiesel Spray formation under Diesel Engine Conditions	O.A. Kuti, S. Bahmanisangesari	ORAL	o.kuti@mmu.ac.uk
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53	An Experimental Investigation of the Subsequent Events after a Drop Impacts a Small Target	Merav Arogeti, Eran Sher, Tali Bar-Kohany	ORAL	meravar@sce.ac.il
54	Drop on a small target with a polygon cross-section	Merav Arogeti	ORAL	meravar@sce.ac.il
55	Spray-wall Interactions: a	Meghnaa Dhanji, Zach Buen,	ORAL	mpdhanj@sandia.gov

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58	Numerical Study of Oscillating Droplets and their Relevance to Grouping in Streams	Matthias Ibach, Visakh Vaikuntanathan, Alumah Arad, David Katoshevski, J. Barry Greenberg, Bernhard Weigand	ORAL	matthias.ibach@itlr.uni-stuttgart.de
59	3D optical tomography of Spray G after effective reduction and correction of light scattering detection	Bastian Lehnert, Mehdi Stiti, Michael Wensing, Edouard Berrocal	ORAL	bastian.lehnert@fau.de
60	Investigating the droplet evaporation in a forced convective environment	Faraz Salimnezhad, Hasret Turkeri, Iskender Gökalp, Metin Muradoglu	ORAL	
61	Influence of the Wetting Behaviour on Binary Droplet Collisions of Immiscible Liquids	Johanna Potyka, Kathrin Schulte	ORAL	johanna.potyka@itlr.uni-stuttgart.de
62	Heat transfer during droplet	Ophélie Caballina,	ORAL	ophelie.caballina@univ-lorraine.fr



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63	The effect of Brownian motion on particle scavenging by spray droplets	Nan Wang, David Katoshevski, Yuval Dagan	ORAL	yuvalda@technion.ac.il
64	Interplay of hydro- and thermodynamic parameters in multiphase cavitating flows during high-pressure fuel injection	Qing Zhang, Ya Gao, Miaoqi Chu, Pice Chen, Qingteng Zhang, Jin Wang	ORAL	wangj@aps.anl.gov
65	Numerical modelling of multiscale-multiphase flows by coupling of Volume of Fluid (VOF), Discrete Phase Model (DPM) and Eulerian Thin Film Model (ETFM)	Sandeep Mouvanal, Kuldeep Singh, Loizos Christodoulou, Richard Jefferson Loveday, Stephen Ambrose, Carol Eastwick	ORAL	stephen.ambrose3@nottingham.ac.uk
66	Ultra-high-speed nozzle internal investigation of cavitation phenomena	Mathias Grunewald, Manuel Reddemann, Reinhold Kneer	ORAL	grunewald@wsa.rwth-aachen.de
67	Machine Learning to predict dual-fuel combustion images	Alexander Lauterkorn, Marilia G. Justino Vaz, Xinyan Wang, Hua Zhao	ORAL	alexander-lauterkorn@web.de
68	Influence of needle geometry on in-nozzle flow characteristics for pilot Diesel injection of Dual-fuel marine application	Marilia G. Justino Vaz, Ioannis Karathanasis, Manolis Gavaises, Gerard Moukoue	ORAL	Marilia.Justino-Vaz@city.ac.uk
69	Parametric study of the heat and mass transfer	Luis Eduardo de Albuquerque Paixao e Freire de	ORAL	luis.eduardo.carvalho@usp.br

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70	Experimental spray cooling study using micro-structured surfaces for high-heat flux and quenching application	J. D. Benthler, P. Lappas, G. Rosengarten	ORAL	s3731642@student.rmit.edu.au
71	Droplet impact onto heated mesh surfaces: influence of temperature and droplet velocity on penetration dynamics and thermal break-up	Martin Trgovec-Greif, Marija Gajević Joksimović, Bastian Stumpf, Ilia Roisman, Jakov Baleta	ORAL	mtgreif@simet.hr
72	Atomization Modeling of Carbon Dioxide Capture and Storage Technology for Installation in Internal Combustion Engines	Hiroki Onou, Tetsuo Nohara, Masayuki Ochiai	ORAL	1memm003@mail.u-tokai.ac.jp
73	Digital Thread Concept in Metal Powder Atomisation for AM Industry	Joseph Oluleke	POSTER	joluleke@carpenteradditive.com
74	Proper Orthogonal Decomposition (POD) as a tool to correlate internal two phase flow regimes and spray unsteadiness in effervescent sprays	Vignesh Kumar D, Anand TNC, Madan Mohan Avulapati	ORAL	me19d509@iittp.ac.in
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78	Nonlinear shape oscillations of viscoelastic drops	D. Zrníc, G. Brenn	ORAL	guenter.brenn@tugraz.at
79	Numerical study of internal flow and near nozzle region of ECN Spray G injector using ammonia as fuel	Jacopo Zempi, Alessio Miliuzzi, Faniry N.Z. Rahantamialisoa, Adrian Pandal, Michele Battistoni	ORAL	jacopo.zempi@unipg.it
80	Spatio-tempORAL characterization of the spray produced by Y-jet nozzles using steam as dispersing medium	Matheus Rover Barbieri, Lydia Achelis, Udo Fritsching	ORAL	m.barbieri@iwt.uni-bremen.de
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84	On the atomization of binary mixtures of miscible fluids at heated conditions	Yilong Zhang, Rongying Tian, Agisilaos Kourmatzis, Assaad R. Masri, Kozo Aoki,	ORAL	yilong.zhang@sydney.edu.au

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87	Experimental investigation of the effect of varying boundary conditions and the injection pressure on global characteristics of ammonia spray	Santiago Cardona, Thibault F. Guiberti, William L. Roberts	ORAL	santiago.vargas@kaust.edu.sa
88	Combustion and emissions characteristics of alternative diesel-fuel blends	I.K. Karathanassis, O. Baran, J. Manin, L. Pickett, D. Spivey, M. Gavaises	ORAL	ioannis.karathanassis@city.ac.uk
89	Turbulent Atomization Process of Liquid Jet under Diesel Spray Conditions	Dai Matsuda, Ippei Kimura, Eriko Matsumura, Jiro Senda	ORAL	cyjg1502@mail4.doshisha.ac.jp
90	Axisymmetric stationary toroidal droplets in viscous flow	A . Nir, O.M. Lavrenteva, S. Malik and M. Idan	ORAL	avinir@technion.ac.il
91	Collapsing of low-pressure sprays formed by a multi-hole injector with non-uniformly distributed holes operating at a low injection pressure	Łukasz Jan Kapusta	ORAL	lukasz.kapusta@pw.edu.pl
92	Modelling Internal Flow in Pressure Swirl Nozzles to Estimate Oil Droplet Breakup Parameters during Emulsion Atomization	Miguel Ballesteros, Volker Gaukel	ORAL	miguel.ballesteros@kit.edu
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95	Dynamics and Freezing of Water Droplets Impacting on Cold Textured Surfaces	Yuheng Shang, Navid Mostofi Sarkari, Yunus Tansu Aksoy, Sylvie Castagne, David Seveno, Maria Rosaria Vetrano	ORAL	yuheng.shang@kuleuven.be
96	Liquid Ammonia injection on single hole injector: effect of initial conditions on flash boiling process	A. Desclaux, C. Hespel, C. Mounaïm- Rousselle	ORAL	anthony.desclaux@univ-orleans.fr
97	Empirical Characterization of the Drop Formation Process of Metal Mesh Atomizers	Enrico M. A. Ercolin, Gerhard Schaldach, Markus Thommes	ORAL	enrico.ercolin@tu-dortmund.de
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99	Development of a multi-species real fluid modeling approach using a machine learning method	B. Delhom, T. Faney, P. McGinn, C. Habchi, J. Bohbot	ORAL	bruno.delhom@ifpen.fr
100	Visualization of transport phenomena during drug-delivery by laser-induced	Manuel A. Reddemann, Stefanie Gürzing	POSTER	reddemann@wsa.rwth-aachen.de

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102	Real-fluid simulation of ammonia cavitation in a tapered heavy-duty fuel injector	Hesham Gaballa, Chaouki Habchi, Jean-Charles De Hemptinne, Gerard Mouokue	ORAL	chawki.habchi@ifpen.fr
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104	Non-Equilibrium Particle Schemes to Simulate Liquid-Vapor Interfaces	C. Marianowski, S. Fasoulas, M. Pfeiffer	ORAL	marianowskic@irs.uni-stuttgart.de
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106	Effects of flash-boiling on spray carbon capture performance	Louis F. Dacanay, Kevin Wan, Julien Manin, Ian A. Gass, Cyril Crua	ORAL	e.dacanay2@uni.brighton.ac.uk
107	Experimental Study of Spray Pattern in Impinging Jets for Non-Newtonian Gel Fluid Containing Aluminum Nanoparticles	Seyedeh Maryam Jafari, Azadeh Kebriaee	POSTER	seyyedemaryam.jafari@gmail.com
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111	Application of a quasi-1D model for the prediction of combustion characteristics of OME <sub>x</sub> sprays	Jose M. García-Oliver, Ricardo Novella, José M. Pastor, Jiawei Cao	ORAL	jgarciao@mot.upv.es
112	3D CFD Modelling of Close-Coupled Gas Atomisation (CCGA) Process	Jo Samuel, Andrew Mullis, Duncan Borman	POSTER	pmjsjs@leeds.ac.uk
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114	Temperature-Dependent Viscosity Effect on Droplet-Droplet Collisional Interactions	P.M. Durubal, M.W. Baltussen, K.A. Buist, J.A.M. Kuipers	POSTER	p.m.durubal@tue.nl
115	Importance of the modified viscosity modeling in a bubble column with Euler-Lagrange simulations	Ricardo Tadeu Oliveira Catta Preta, Millena Martins Villar Vale, Joao Marcelo Vedovotto, Aristeu da Silveira Neto	ORAL	ricardocatta@gmail.com
116	Characterisation of Drug Delivery in a Pressurised Metered-dose Inhaler	Steven Begg, Zuhaib Nissar, Oyuna Rybdylova, Ananth Pannala	ORAL	s.m.begg@brighton.ac.uk

117	A Comparative Study of the Spray Cooling Performance Characteristics of Alumina Nanofluids	Steven Begg, Onur Tokkan, Nwabueze Emekwuru	ORAL	s.m.begg@brighton.ac.uk
118	Numerical Modelling the bubble dynamics with Phase Change Process	Ningegowda B. M., Francesco Mariani, Jacopo Zembi, Faniry N. Z. Rahantamialisoa, Nasrin Sahranavardfard, Adrian Pandal, Michele Battistoni	ORAL	michele.battistoni@unipg.it
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122	An Experimental Investigation of the Subsequent Events after a Drop Impacts a Small Target	Merav Arogeti, Eran Sher, Tali Bar-Kohany	ORAL	meravar@sce.ac.il
123	Application of an optimized mechanism of primary reference fuel to single hole sprays	Raúl Payri, José M. García-Oliver, Ricardo Novella, José M. Pastor, Dario López-Pintor, Weiwei Shang	ORAL	jgarciao@mot.upv.es
124	Role of shear layers on the primary atomization processes of gas turbine swirl injectors	Vivek Sahu, Shanmugasdas K.P.	POSTER	shanmugasdas.kp@iitjammu.ac.in
126	Numerical modeling of pressure swirl spray in gaseous cross-flow gas turbine spray characterization	Harshrajsinh Jadeja, Vivek Kumar, Pravin Nakod, Steven Xia	POSTER	harshrajsinh.jadeja@ansys.com



127	Experimental Assessment of Breakup Regimes of a PVP-VA Solution Using a Two-fluid Swirl Injector	Cooper Welch, Mobaris Khawar, Benjamin Böhm, Andreas Gryczke, Florian Ries	ORAL	welch@rsm.tu-darmstadt.de
128	Experimental study on the evaporation of iron(III) nitrate nonahydrate droplet	Mikhil Surendran, Agnimitra Ghosh, Shamit Bakshi, T.N.C. Anand	POSTER	me21s045@smail.iitm.ac.in
129	Machine learning based spray process quantification	J. Basil, F. Hampf	ORAL	fabian.hampf@ivlr.uni-stuttgart.de
130	Effects of asymmetrical orifice inlet on steady-state diesel spray and the near-field kinematics	Mohammad Nikouei, David Sedarsky	ORAL	mohnik@chalmers.se
131	Numerical investigation of the collision of non-Newtonian droplets	C. García Llamas, M.P. Durubal, A.H. Huijgen, J.A.M. Kuipers, K.A. Buist, M.W. Baltussen	ORAL	c.garcia.llamas@tue.nl
132	Overview of the development and advances in liquid atomization by flash boiling	Tali Bar-Kohany, Avihai Malka, Eran Sher	ORAL	talibk@tauex.tau.ac.il
133	Hydrogen Spray Simulation with a Hollow-Cone Injector	Abdullah Zaihi, Kevin Moreno-Cabezas, Xinlei Liu, Moez Ben Houidi, Bassam Aljohani, Hong Im, Bill Roberts	ORAL	Abdullah.zaihi@kaust.edu.sa
134	Effect of Liquid Properties on the Self-Pulsation Characteristics of a Gas-Centered Swirl Coaxial Injector	Santanu Kumar Sahoo, Hrishikesh Gadgil	ORAL	santanuksahoo1@gmail.com
135	A Numerical Study of Primary Atomization for a Sustainable Aviation Fuel	Marco Arienti, Everett Wenzel, Lyle Pickett, Joonsik Hwang	ORAL	marient@sandia.gov

136	Modelling Spray Deposition on Moving Tablets	M. Taborda, K. Nabbout, L. Pasternak, M. Sommerfeld	ORAL	martin.sommerfeld@ovgu.de
137	Assessment and validation of a phenomenological atomization model for airblast spray injection	Carlos Guillamón, Marcos Carreres, Carlos Moreno-Montagud, Ruud Eggels, Daniel Mira	POSTER	marcarta@mot.upv.es
138	Aerodynamic characteristics of a bi-Swirl Pintle Injector	Rachit Bundiwal, Sanjay Gupta, K.P. Shanmugas	POSTER	2020ume0225@iitjammu.ac.in
139	Suitability of Pressure Swirl Hollow-Cone and Full-Cone Atomizers for Mass-Transfer Applications	Ondrej Cejpek, Milan Maly, Jiri Hajek, Jan Jedelsky	ORAL	Ondrej.Cejpek@vutbr.cz
140	Particle-laden droplets impinging a wall at low particle concentrations	R. Tribess, K. Nabbout, M. Sommerfeld	ORAL	richard.tribess@ovgu.de
142	Influence of Primary and Secondary Breakup on the Interaction between Spray and In-Cylinder Flow in Direct Injection Engines	Andrea Pati, Hao-Pin Lien, Christian Hasse	ORAL	pati@stfs.tu-darmstadt.de
143	Effect of Fluid Rheology on Unsteady Sheet Formation from Droplet Impact	Katha Bhavsar, Hrishikesh Gadgil	POSTER	kathanbhavsar25@gmail.com
144	Experimental Characterisation of Pressure Swirl and Airblast Sprays in Multiscale Turbulence	Yeonse Kang, Fabian Hampf	POSTER	yeonse.kang@ivlr.uni-stuttgart.de
145	Experimental Investigating on Flame Mitigation in a Partially Unconfined Explosion with the Effect of Fine Water	Amir Nourian, Stephen. A. Johnson, Ghasem G Nasr	ORAL	a.nourian@salford.ac.uk

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147	Evaluation of Multicomponent Droplet Evaporation in Real Gases Mixtures	Jamille Kèssia Araújo Martinsa, Abgail Paula Pinheiroa, Fernando Luiz Sacomano Filhob, Joao Marcelo Vedovotto	POSTER	vedovotto@ufu.br
148	Eulerian-Lagrangian Modelling of Aviation Kerosene Spray Evaporation	Abgail Paula Pinheiro, Fernando Luiz Sacomano Filho, Joao Marcelo Vedovotto	POSTER	vedovotto@ufu.br
149	Transient Drop Size Measurements in Shock-Drop Interaction: Depth from Defocus Technique	Shubham Sharma, Saini Jatin Rao, Navin Kumar Chandra, Alope Kumar, Saptarshi Basu, Cameron Tropea	ORAL	shubhams12@iisc.ac.in
150	Comparative Analysis of Drop-size Measurement in Highly Dense Sprays using Shadowgraphy, PDA and SLIPI	V.V. Swami, K. A. Buist, M. W. Baltussen, J. Schröder, M. Arbon, K. van Dijke, J. A. M. Kuipers	ORAL	v.v.swami@tue.nl
151	Experimental investigation of flash boiling phenomena of high volatility e-fuels in a droplet chain	Peter Wilhelm Augustin, Manuel Armin Reddemann, Avijit Saha, Heinz Pitsch, Reinhold Kneer	ORAL	augustin@wsa.rwth-aachen.de
152	Aerodynamic characteristics of advanced lean burn fuel Injector	Ayush Divyansh, Preetam Jamod, Saket Singh, Shanmugadas K.P.	POSTER	shanmugadas.kp@iitjammu.ac.in
153	Aerodynamic characteristics of a fuel flexible injector for micro-gas turbine engines	Shivam Uniyal, Abhishek Verma, Prashant Singh, Shanmugadas KP	POSTER	2021ume0229@iitjammu.ac.in

154	Effect of swirl strength on the external aerodynamics of a lean-burn gas-turbine fuel injector	Preetam Jamod, Ayush Divyansh, Saket Singh, K. P. Shanmugadas	POSTER	shanmugadas.kp@iitjammu.ac.in
155	Evaluation of flame instabilities during flame spray pyrolysis by temporal and local tracking of jet and ligament breakup	Sophie M. L. Dupont, Fabian Fröde, Ricardo Tischendorf, Manuel A. Reddemann, Heinz Pitsch, Hans-Joachim Schmid, Reinhold Kneer	ORAL	dupont@wsa.rwth-aachen.de
156	Aerodynamic characteristics of a bi-Swirl Pintle Injector	Sanjay Kumar Gupta, Rachit Bundiwal, K.P.Shanmugadas	POSTER	shanmugadas.kp@iitjammu.ac.in
157	Application of Machine Learning Models for Fuel Spray Characterization of Gasoline Fuels in Compression Ignition Systems	Sadique Khan, Fahad Alzahrani, Mudassir Masood, Mario Medina	POSTER	sadiquesaleemkhan@gmail.com
158	Simultaneous Measure of Thickness and Temperature of an Infrared Semi-Transparent Layer	Lucio Araneo, Riccardo Clavenna	ORAL	lucio.araneo@polimi.it
159	Effect of bubble-breaker geometry on spray parameters of effervescent atomizer with a single-hole aerator	Milan Maly, Ondrej Cejpek, Jiri Hajek, Jan Jedelsky	ORAL	milan.maly@vutbr.cz
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161	Full nozzle flow, spray development and combustion simulations of	Charalambos Chasos	POSTER	eng.cca@frederick.ac.cy

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163	Studying droplets in microgravity	R. Calabria, F. Catapano, L. Cercone, G. Meccariello, T. Naudin, B. Sgammato, C. Tornatore, G. Barese, J. Bellettre, P. Capaldi, A. Di Meo, D. Tarlet, P. Massoli	ORAL	patrizio.massoli@stems.cnr.it
164	Puffing of a Miscible Multicomponent Droplet	J. Huang, J. Xi, Z.H. Wang, Y. He, K.F. Cen	POSTER	jun.xia@brunel.ac.uk
165	Acoustic characterization of drop impact regimes on a heated surface	Volfango Bertola	ORAL	Volfango.Bertola@liverpool.ac.uk