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12	Numerical study of ammonia-hydrogen premixed ball-like flame	Wai Siong Chai, Lei Zhou	18th May 16:00-16:20	304a
13	Numerical investigation and adjustment on the ignition delay mechanisms of ammonia-based fuels	Wai Siong Chai, Lei Zhou	18th May 13:20-13:40	303a
17	Partial oxidation of H ₂ S: a kinetic modeling study and characterization of important reactions with quantum chemistry calculations	Manuel Monge Palacios, Qi Wang, Amjad Shaarawi, Adrian Cavazos Sepulveda, S Mani Sarathy	15th May 13:40-14:00	303a
19	Effects of gas-phase diffusion transport on solid-state combustion synthesis	Chun-Liang Yeh, Kuan-Ting Liu	15th May 13:40-14:00	302e
20	Selective BTEX detection using laser absorption spectroscopy in the CH bending mode region	Ali Elkhazraji, Joury Aldhawyan, Mhanna Mhanna, Mohamed Sy, Mohammad Adil, Mohammad Khaled Shakfa, Aamir Farooq	15th May 15:40-16:00	302a
21	General correlation of laminar burning velocities for multicomponent syngas (H ₂ /CO/CH ₄)/air mixtures	Tien Minh Nguyen, Le Chau Thanh Nguyen, Tan Thong Ngo, Phu Nguu Do, Duy Quoc Tong, Phuoc Dinh Tran	18th May 15:20-15:40	304a
22	A pilot research of re-defining what is 'flashover'	Han Shun Hsu, Ricky Carvel, Chia Lung Wu	18th May 14:00-14:20	302b
23	Modified multiflame model for AP-HTPB composite propellant combustion	Neeraj Kumar Pradhan, Arindrajit Chowdhury, Debasis Chakraborty, Neeraj R Kumbhakarna	15th May 16:20-16:40	302e
24	Experimental study on non-reactive flow characteristics of a novel multi-swirl lean direct injection burner	Sarath Perikathra, T M Muruguanandam	17th May 10:40-11:00	303b
25	Combustion analysis of a micro gas turbine combustor with CH ₄ /NH ₃ fuel blends	Sz-Pei Ho, Cheng Cheng, Hsin-Yi Shih	16th May 10:20-10:40	304a
27	Reaction characteristics of coal/NH ₃ co-combustion affected by the highly preheated temperature under mild mode	Zewu Zhang, Zhenghong Zhao, Liqi Zhang, Xiaojian Zha	17th May 14:20-14:40	304a
28	Learning combustion state classification from very few IR images using Siamese networks and k nearest neighbors	Kang Ruiyuan, Panos Liatsis, Dimitrios C Kyritsis	18th May 16:00-16:20	302a

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29	Application of latent heat storage system in thermal power plants	Hyo Jae Jeong, Dongho Park, Jong Hyeon Peck, Jae-Hyun Song, Sung Il Kang	18th May 09:15-10:00	Poster Area
30	Evaluating the rings cleavage mechanism of polycyclic aromatic hydrocarbons in supercritical water: a ReaxFF molecular dynamics study	Hao Zhao, Yingjia Zhang, Zuohua Huang	15th May 14:20-14:40	302e
31	Nitrous oxide supported combustion and NO _x formation of counter-flow ethylene diffusion flames	Chun-Wei Huang, Dong Chen, Hsin-Yi Shih, Taro Hirasawa	16th May 11:00-11:20	304b
32	NO emission characteristics of turbulent premixed ammonia-methane flames in a swirl combustor	Yongqian Wang, Ping Wang, Cheng Kang, Weijia Qian, Zhengchun Yang, Wenfeng Liu, Mingmin Chen, Ferrante Antonio	18th May 11:40-12:00	304a
33	Skeletal oxidation mechanisms construction and derivation using reaction rate rules: a case study of C ₆ –C ₁₄ 1-alkenes	Shuai Huang, Yachao Chang, Ming Jia	17th May 14:00-14:20	303a
34	Large eddy simulation of ammonia-methane premixed turbulent flames with different wall temperature conditions	Cheng Kang, Ping Wang, Yongqian Wang, Qian jia, Yang Chun, Antonio Ferrante, Chen Min, Liu Feng, Roy Subhajt	18th May 11:20-11:40	304a
35	Computed NO _x emission and flammability of opposed-jet CH ₄ /NH ₃ and H ₂ /NH ₃ diffusion flames	Yong-Yi Zhuang, Yu-Hung Lin, Hsin-Yi Shih	15th May 13:40-14:00	304b
36	Predicting hybrid vehicle state of charge using time-series based deep learning models	Juan C Giraldo Delgado, Inna Gorbatenko, S Mani Sarathy	17th May 13:40-14:00	302b
37	A reduced reaction mechanism for an isoparaffinic alcohol-to-jet synthetic paraffinic kerosene (AtJ-SPK)	Jiangkuan Xing, Zhenhua An, Yanqi Zhang, RyoichiKurose	15th May 16:40-17:00	303b
38	Effects of Miller cycle combined with supercharging on the performance of a kerosene-fueled pre-chamber jet ignition engine	Fengnian Liu, Lei Zhou, Zongkuan Liu, Changwen Liu, Haiqiao Wei	18th May 16:20-16:40	302b
39	Lewis number effect for lean premixed H ₂ -air and CH ₄ -air flames during combustion instability in a low-swirl combustor	Judai Masugi, Takeshi Shoji, Yoshihiro Nakazumi, Ryota Fujii, Takuya Tomidokoro, Shigeru Tachibana, Takeshi Yokomori	17th May 13:40-14:00	303b

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41	Simulation and experimental study on refuse derived fuel gasification in a downdraft gasifier	Tung Minh Phung, Tien Minh Nguyen	18th May 09:15-10:00	Poster Area
42	Co-oxidation of carbon monoxide and methane under high temperature with monolithic catalyst	Chung-Wei Fu, Yi-Hsing Lin, Yu-Lun Lai	18th May 09:15-10:00	Poster Area
43	A preliminary study on thermal - mechanical stress of a piston in a heavy-duty diesel engine operating under warming-up conditions.	Nguyen Van Duong, Phuong X Pham	18th May 15:20-15:40	302b
44	Effect of initial temperature and initial pressure on upper flammability limit of ethylene/air mixtures	Chang Qi, Ye Ning, Yalei Wang, Xingqing Yan, Jianliang Yu	18th May 09:15-10:00	Poster Area
45	Simultaneous imaging of nitric oxide and hydroxyl radical with a single laser dye laser in hydrogen jet flames	Karl P Chatelain, Guoqing Wang, Thibault Guiberti	17th May 15:40-16:00	302a
46	Analysis of dominant reaction mechanism of unstable combustion behavior of ammonia/hydrogen blending system	Mengze Ai, Shengyao Liang, Lin Ji, Dan Zhao	18th May 14:00-14:20	303a
47	The hydrogen generation analysis from dimethyl ether in a novel partial oxidation catalytic fluidized bed reactor using the Kriging surrogate model	Chih-Yung Wu, Bo-Wei Wang, Tung-Han Wu, Shih-Peng Chang, Shang-Chih Lin	18th May 09:15-10:00	Poster Area
48	Experimental study on thermoacoustic instability excitation of hydrogen-enriched premixed flame under different swirl numbers	Longjuan Ji, Weijie Zhang, Jinhua Wang, Guangya Hu, Zuohua Huang	17th May 14:00-14:20	303b
49	Experimental and modeling study of sewage sludge smoldering combustion at different airflow rates	Wei Zhang, Xiaowei Wang, Haowen Li, Zixin Yang, Qianshi Song, Xiaohan Wang	15th May 14:00-14:20	302a
50	Overview of shuttling transverse combustion: continuous detonation in a linear wall-bounded channel	Xin Huang, Po-Hsiung Chang, Zhen Wei Teo, Jiun-Ming Li, Chiang Juay Teo, BC Khoo	17th May 10:40-11:00	303e
51	Effect of copper chromite on ammonium perchlorate decomposition - a TGA-FTIR-MS study	Shani Saha, Arindrajit Chowdhury, Neeraj R Kumbhakarna	18th May 13:40-14:00	303e
52	Combustion of biomedical waste in an oxygen-enriched environment	Abdul Kadir M Poonawala, Shyamal Bhunia, Neeraj R Kumbhakarna, Arindrajit Chowdhury	17th May 13:20-13:40	302a

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53	Temperature and multi-species measurements during CH ₄ /H ₂ /NH ₃ oxidation behind reflected shock waves	Dao Zheng, Dong He, Yanjun Du, Yanjun Ding, Zhimin Peng	15th May 16:20-16:40	302a
55	Pilot power ratio effect on the structure of turbulent NH ₃ -CH ₄ -air swirl flames at atmospheric pressure	Cristian D Avila Jimenez, Thibault Guiberti, William Roberts	16th May 11:20-11:40	304a
56	Structure of formic acid and n-decane blended counterflow flames	Adamu Alfazazi, Et-touhami Es-sebbar, Jiajun Li, S Xiayuan Zhang, Marwan Abdullah, Mourad Younes, Mani Sarathy, Bassam Dally	16th May 11:40-12:00	304b
57	Numerical simulation of upward bending of horizontal subsonic jet spray flame under sub-atmospheric pressure	Kai Xie, Yunjing Cui, Xiufeng Tan	16th May 11:00-11:20	303b
59	Numerical simulation of solid fuel ramjet combustion with regression model	Wen-Hsuan Liang	18th May 09:15-10:00	Poster Area
61	Simulation of ignition process in a solid rocket motor with jettisoned ignitor	Wen Jing Wu	17th May 16:40-17:00	303e
62	Dynamic response of lean premixed swirl flames to nanosecond repetitively pulsed discharges at pressures up to 2 bar	Liang Yu, Aravind Balakrishnan, Deanna Lacoste	17th May 11:00-11:20	303b
63	Experimental investigation of the global characteristics of ammonia spray	Santiago Cardona Vargas, Felipe Campuzano Diosa, William Roberts, Thibault Guiberti	18th May 15:20-15:40	303b
64	Experimental study of 2-methylbutanol autoignition	Ruozhou Fang, Chih-Jen Sung	17th May 10:20-10:40	303a
65	Experimental investigation on plasma-assisted spray combustion of methanol/water mixtures	Hai-Hua Chen, Xiang-Xin Chen, Chih-Yung Wu	18th May 09:15-10:00	Poster Area
66	Investigation on Pd/C catalyzed hydrogenolysis of lignin and its model compound via flow-through reactor coupling ultra-high resolution mass spectrometry	Linyu Zhu, Cunhao Cui, Jing Zhang, Xintong Xiao, Haoran Liu, Zhongyue Zhou, Fei Qi	18th May 11:00-11:20	302a
67	Effect of metal-modified ZSM-5 catalysts on lignin pyrolysis properties and aromatic selectivity	Yang Shen, Haoran Liu, Zhongyue Zhou, Fei Qi	17th May 11:40-12:00	302a
68	Study of powder-CH ₄ -air "hybrid" flames in a stagnation-point flow	Ryoki Okada, Haruya Yata, Daiki Matsugi, Takuya Yamazaki, Yuji Nakamura	17th May 10:20-10:40	302a
69	Experimental study of the flame propagation in the porous media for hydrogen-ammonia premixed fuels	Chien-Ru Yu, Juan Cerverka, Tien-Chiu Hsu, Chih-Yung Wu	18th May 09:15-10:00	Poster Area

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70	A study of co-gasification of shiitake substrate and PE using ASPEN Plus	Yun-Ting Hsu, Guan-Bang Chen, Fang-Hsien Wu, Ta-Hui Lin	18th May 10:20-10:40	302a
72	Effect of ammonia enriched gaseous co-flow on soot formation in droplet combustion	Atul Kumar, Shouyin Yang	18th May 10:40-11:00	303e
74	A study of waste shiitake substrate co-gasification with waste polyethylene	Chung yu Chang, Guan-Bang Chen, Fang-Hsien Wu, Fu-Yuan Yuan	18th May 10:40-11:00	302a
75	Experimental study on ignition of the liquid hydrocarbon fuel in a supersonic flow	Po-Kai Chuang	18th May 09:15-10:00	Poster Area
77	Propagation of nonpremixed methane-air lifted flame in the parallel electric field	Jinwoo Son, Min Suk Cha, Sunho Park	18th May 15:40-16:00	303a
78	Nanothermite assembly on copper wire mesh blanketed with CuO nanowires via electrophoretic deposition of aluminum nanoparticles	Wan-Lien Hsu, Ming-Hsun Wu, Chia-Ting Lin	15th May 16:00-16:20	302e
79	A volume of fluid approach to model vacuum residue injection in an entrained flow gasifier	Alberto Ceschin, Francisco Hernandez Pérez, Hong G Im	18th May 10:40-11:00	303b
80	Study of "inverse" droplet combustion using 90 wt. % H ₂ O ₂	Daiki Matsugi, Takuya Yamazaki, Tsuneyoshi Matsuoka, Yuji Nakamura	17th May 16:00-16:20	303e
81	Design and test to a high temperature reheater by hydrogen combustion	Fu-Chou Hsiao, Fu-Chou Hsiao, Jing-Yuan Zhou, Jing-Yuan Zhou	18th May 09:15-10:00	Poster Area
82	CFD evaluation of NH ₃ cofiring with pulverized coal in a commercial tangential-firing boiler	Yunha Koo, Hyunbin Jo, Seonkyo Ha, Woosuk Kang, Jongmin Park, Sangbin Park, Jongmin Lee, Sehyun Baek, Changkook Ryu	17th May 13:20-13:40	304a
83	Numerical study on chemical behavior of thermal decomposition of methane under high temperature condition	Sojeong An, Jinje Park, Youn-sang Bae, Youngjae Lee	17th May 13:20-13:40	303a
85	The flame height measurements of inverse diffusion methane flames under various conditions: reactant flowrates and oxygen concentration	Carson Chu, Ibrahim Alsheikh, Peng Liu, William Roberts	16th May 10:20-10:40	304b
86	Towards accurate simulation on a three-dimensional turbulent partially premixed flame with detailed chemistry and radiative heat transfer	Yang Yinan, Bai Zhiren, Hori Tsukasa, Sawada Shinya, Akamatsu Fumiteru	17th May 16:20-16:40	303b

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87	A study of building fire safety performance under smoldering	Wai Kit Cheung, Xinyan Huang, Yanfu Zeng, Shaorun Lin	17th May 10:20-10:40	302b
88	A computational study of a laminar methane-air flame assisted by nanosecond repetitively pulsed discharges	Xiao Shao, Narjisse Kabbaj, Deanna Lacoste, Hong G Im	18th May 16:00-16:20	303a
89	Numerical modeling of afterburner combustion at two operating conditions	Ching-Chi Wu	18th May 09:15-10:00	Poster Area
90	Elucidating the mechanism for the oxidative coupling of methane catalyzed by La_2O_3 : experimental and microkinetic modeling studies	Zaili Xiong, Jijun Guo, Yuwen Deng, Bingzhi Liu, Hao Lou, Meirong Zeng, Zhandong Wang, Zhongyue Zhou, Wenhao Yuan, Fei Qi	18th May 16:20-16:40	303a
92	Exploration of the optimal ignition position in a model gas turbine combustor	Xiaoyang Guo, Bowen Liu, Yunyang Liu, Erjiang Hu, Zuohua Huang	17th May 14:40-15:00	303b
93	Highlights on the mechanism of jet development, flame propagation, and combustion regime in a pre-chamber engine	Mickael Silva	18th May 15:40-16:00	302b
94	Exploring the influence of no addition to the oxidation of n-butanol at low to intermediate temperature: experimental and kinetic modeling	Yuwen Deng, Jijun Guo, Zaili Xiong, Wenhao Yuan, Meirong Zeng, Zhongyue Zhou, Jiuzhong Yang, Fei Qi	17th May 11:00-11:20	303a
95	Influence of a coaxial plasma actuator on the flame stabilization of non-premixed jet flames	Jun-Lin Chen, Chiang Fu, Ying-Hao Liao	15th May 13:20-13:40	304a
96	Combustion enhancers for ammonia fuelled compression ignition engine	Gabriel J Gotama, Yi Yang, Xingcai Lu	15th May 15:20-15:40	302b
97	Semi-empirical models of density jump position and temperature attenuation of smoke layer in horseshoe tunnel fire	Aoi Tanno, Yasushi Oka	17th May 10:40-11:00	302b
98	The effect of the addition of ammonia on the oxidation of dimethyl ether: an experimental and modeling study	Wang Qiao, Liao Wanxiong, Haodong Chen, Bin Yang	16th May 11:40-12:00	303a
100	Flame dynamics in a pressurised annular combustor with simultaneous longitudinal-azimuthal thermoacoustic modes	Byeonguk Ahn, Håkon Nygård, Larry Li, Nicholas A Worth	15th May 13:20-13:40	303b
101	Evaluation of the effects of ammonia co-firing of supercritical pulverized coal boilers on plant efficiency and	Minseob Lim, Jaewook Lee, Won Yang, Jiseon Park, Ohchae Kwon, Sehyun	17th May 10:40-11:00	304a

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102	Uncertainty analysis of soot formation in a burner stabilized stagnation flame	Xingyu Su, Matthew Cleary, Hua Zhou, Zhuyin Ren, Assaad Masri	18th May 11:20-11:40	303e
103	Tube size effects on diffusion flame extinction in O ₂ +CO ₂ coflow at elevated pressure	Hun Young Kim, Nam Il Kim	16th May 11:20-11:40	304b
104	A study of characteristics of NH ₃ /n-heptane dual fuel using optical diagnostic	Haifeng Liu, Tengda Song, Mingfa Yao	16th May 11:40-12:00	302a
105	Stabilization mechanism for non-premixed lifted flames in a methane-hydrogen blended jet through the laminar to turbulent transition	Dong Seok Jeon, Nam Il Kim	15th May 15:20-15:40	304a
107	Stabilized laminar lifted flame of pure ethane in a non-premixed jet	Gyu Jin Hwang, Nam Il Kim	16th May 10:40-11:00	304b
108	Bilger's zero release combustion technology as energy storage	Alex Klimenko	18th May 15:20-15:40	303e
109	Head-on quenching of an n-heptane/air premixed flame in a stagnation flow	Hibiki Sakuma, Takuya Tomidokoro, Takeshi Yokomori, Hong G Im	15th May 15:40-16:00	304b
110	Effects of hydrogen addition to CH ₄ /C ₃ H ₈ on premixed flame propagation in a narrow-gap disk burner	Nam Il Kim, Sang Min Lee	18th May 15:40-16:00	304a
111	Modelling of a turbulent premixed flame series using an MMC-LES model with a shadow position reference variable with locally adjusted model parameters	Yashar Shoraka, Sebastian Galindo Lopez, Matthew Cleary, Assaad Masri, Alex Klimenko	15th May 13:40-14:00	304a
112	Bubble nucleation and bursting in the heated molten polymers	En Nagatsu, Takuya Yamazaki, Tsuneyoshi Matsuoka, Yuji Nakamura	17th May 11:00-11:20	302b
113	Characteristics of laser-induced breakdown plasma as a combustion diagnostic tool and an ignition source under various density conditions	Jieun Kang, Seongkyun Im	18th May 13:20-13:40	302a
114	Effects of the coaxial air on flame stabilization of methane/hydrogen non-premixed flames under elevated pressures	Jiseop Lee, Nam Il Kim	18th May 13:40-14:00	304a
115	A tungsten oxide thin film carbon monoxide gas sensor by RF sputtering	Hao Yuan Cheng, Ting-Jen Hsueh	18th May 09:15-10:00	Poster Area

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116	Experimental and numerical study on stratified combustion with hydrogen enrichment	Ruihan Ge, Erjiang Hu, Xin Lv, Chenglong Tang, Zuohua Huang	18th May 14:40-15:00	304a
117	Experimental and kinetic studies of N ₂ O in elevated pressure ammonia oxidation	Haochen Zhan, Shuming Li, Geyuan Yin, Erjiang Hu, ZuohuaHuan	18th May 14:20-14:40	303a
118	Numerical simulation of a non-reacting air-blast ethanol spray using explicit volume diffusion method	Jiayue Yu, Sebastian Galindo-Lopez, Matthew Cleary, Agisilaos Kourmatzis, Bosen Wang	18th May 11:00-11:20	303b
119	Study of ion current characteristics in premixed ammonia-air flames	Dhaminda N Hewavitarane, Sadami Yoshiyama, Jotaro Arishima, Mitsuhiro Izumi, Tustomu Kusuhara, Shigeki Hasegawa	17th May 15:20-15:40	302a
120	Effect of H ₂ addition on laminar burning velocity of NH ₃ /DME blends by experiments and a reduced mechanism	Huizhen Li , Huahua Xiao	18th May 16:20-16:40	304a
122	Unsteady extinction of ammonia premixed flames against an isothermal wall	Takuya Tomidokoro, Takeshi Yokomori, Hong G Im	15th May 13:20-13:40	304b
123	Flame spread over thin hollow cylindrical fuels and its comparison with thin planar fuels	Vipin Kumar, Amit Kumar, Manu B V, Yusuke Konno, Osamu Fujita	17th May 11:20-11:40	302a
124	Numerical analysis of hydrogen peroxide addition and oxygen-enhancement for methane combustion	Annas Fauzy, Guan-Bang Chen, Fang-Hsien Wu, Tai-Hui Lin	17th May 16:20-16:40	303e
124	Numerical analysis of hydrogen peroxide addition and oxygen-enhancement for methane combustion	Annas Fauzy, Guan-Bang Chen, Fang-Hsien Wu, Tai-Hui Lin	17th May 16:20-16:40	303e
125	Non-thermal plasma catalytic NH ₃ dehydrogenation over ceria-based catalysts	Yibo Gao, Erjiang Hu, Geyuan Yin, Zuohua Huang	16th May 11:40-12:00	303e
126	Kinetic study on ammonia oxidation at fuel-rich conditions with H ₂ O addition using a micro flow reactor with a controlled temperature profile	Kenta Tamaoki, Yuki Murakami, Keisuke Kanayama, Takuya Tezuka, Hisashi Nakamura	18th May 13:40-14:00	303a
127	Effect of louvre hole size on the combustor efficiency	Liang-Chun Liu, Chi Chien Wu, Yu-En Wu, Chun-Hua Kuo	18th May 09:15-10:00	Poster Area
128	Numerical prediction of the central recirculation zone in a v-shaped swirling flame	Qiuxiao Wang, Yongzhi Ren, Xi Xia, Fei Qi	15th May 14:40-15:00	303b

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129	Equivalence ratio measurement by LIBS in double hydrogen jets at gasoline engine-like conditions	Jungho Justin Kim, Seong-Young Lee, Sang Uk Lee, Choongsik Bae	18th May 14:00-14:20	302a
131	Prediction of fire-induced ceiling jet characteristics based on artificial intelligence	Yanfu Zeng, Tianhang Zhang, Xinyan Huang	17th May 11:40-12:00	302b
132	Linear burn rate of gelled hydroxylammonium nitrate aqueous solutions	Yu-Jia Chen, I-You Tsai, Yan-Ze Song, Ming-Hsun Wu	15th May 15:40-16:00	303e
134	Raman/Rayleigh measurements in NH ₃ /H ₂ flames at atmospheric pressure: comparison between 1-component and 2-component approach	Hao Tang, Diana Ezendeeva, Gaetano Magnotti	17th May 16:00-16:20	302a
135	Emission characteristics of polycyclic aromatic hydrocarbons from five scale of heavy fuel oil fire	Chi-Fu Yeh, Ming-Jen Chen, Kuang-Chung Tsai	18th May 09:15-10:00	Poster Area
137	Spray characteristics of hydro-processed renewable diesel on constant volume combustion chamber	Warit Abi Nurazaq, Wei-Cheng Wang, Cho-Yu Lee, Manida Tongroon	18th May 13:40-14:00	303b
138	Assessing the performance of multi-component surrogates in replicating combustion characteristics of gasoline fuel.	Inna Gorbatenko, Abdullah S AlRamadan, Yohan Chi, Donghee Han, Junseok Chang, S Mani Sarathy	18th May 10:20-10:40	303a
139	Effect of a shear flow on the stability of premixed and non-premixed flames	Joel Daou, P Rajamanickam, A Kelly, J Lande	15th May 16:00-16:20	304b
140	Effects of ethylene penetration height and equivalence ratio on combustion instabilities in a scramjet model combustor with a cavity flame holder	Shoya Yasunaga, Shota Nishimoto, Jeonghoon Lee, Shinji Nakaya, Mitsuhiro Tsue	15th May 13:20-13:40	303e
141	Autoignition in a premixed jet flame in a crossflow	Harikrishna Tummalapalli, Evatt Hawkes, Dominic Ma	15th May 14:00-14:20	304a
142	Investigation of pressure effects on cool flame ignition temperature through the gas temperature-compensated HCHO-TDLAS measurement	Minhyeok Lee, Gengyu Li, Yuji Suzuki	15th May 16:00-16:20	302a
143	In situ measurement of NO and NH ₃ in combustion emissions using mid-infrared laser absorption sensor	Kun Duan, Yongbin Ji, Zhimin Lu, Shunchun Yao, Ke Xu, Xiang Zhang, Zhiming Huang, Wei Ren	17th May 16:20-16:40	302a
144	An experimental and modeling study on the combustion characteristics of nitrates/nitrites in an RCM	Zhaohan Chu, Wanxiong Liao, Zhongkai Liu, Bin Yang	17th May 11:20-11:40	303a

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145	Exemplar-based clustering algorithms for experimental datasets based on affinity propagation and global sensitivity analysis	Yiru Wang, Zijun Zhou, Keli Lin, Chenyue Tao, Chung K Law, Bin Yang	18th May 11:40-12:00	303a
146	Characteristics of fuel vaporization, combustion and flows of air, fuel vapor and liquid during ethanol-pool fire	Kenshin Kobayashi	18th May 13:40-14:00	302b
147	Characteristics of a blue whirl influenced by different formation conditions	Yifan Yang, Haodong Zhang, Xi Xia, Fei Qi	16th May 11:40-12:00	302b
148	Numerical investigation on binary droplet bouncing in gaseous crossflow	Yongjie Chen, Ying Zhang, Yai Bai, Chunchun Chu, Fei Qi, Xi Xia	18th May 14:40-15:00	303b
149	Biomedical waste combustion in a small-scale packed bed reactor: an Euler-Euler modelling approach	Shyamal Bhunia, Abdul Kadir Poonawala, Arindrajit Chowdhury, Neeraj R Kumbhakarna	17th May 14:20-14:40	302a
150	Effect of ultrafine oxygen bubbles on spray combustion	Naoki Hayashi, Yusei Akai, Kazuhiro Yamamoto	18th May 13:20-13:40	303b
151	Prediction of ignition modes in shock tubes	Minh Bau Luong, Jiabo Zhang, Miguel Figueroa-Labastida, Aamir Farooq, Hong G Im	17th May 15:20-15:40	302b
152	Effect of boundary material and fuel pan size on flashover occurrence and energy distribution in compartment fires	Ting Xia, Hongli Ruan, Yu Wang	15th May 14:40-15:00	302b
153	Comparison of effects of H ₂ and CH ₄ on NH ₃ combustion in air: a reactive molecular dynamics study	Jing Wang, Xi Zhuo Jiang	16th May 11:00-11:20	303a
155	Speed of a flame spreading over a methane hydrate surface	Otabek Nigmatov, Tishihisa Ueda, Shinnosuke Nishiki, Oksana Ismailova	15th May 15:40-16:00	302e
156	Effect of ammonia co-firing in 550 MWe USC CFB boiler using CPFD simulation	Yoon-Ho Bae, Byoung-Hwa Lee, Min-Woo Kim, Chung-Hwan Jeon	17th May 11:00-11:20	304a
157	Comprehensive review on combustion and NO _x emission for NH ₃ co-firing technology in coal fired power generation	Byoung-Hwa Lee, Yoon-Ho Bae, Si-Hyun Cho, Chung-Hwan Jeon	17th May 13:40-14:00	304a
158	Chemical structure effect on agglomeration and combustion characteristic of high volatile coals in blast furnace	Min-Woo Kim, Jang-Ho Jo, Dae-Gyun Lee, Byoung-Hwa Lee, Chung-Hwan Jeon	15th May 13:40-14:00	302a

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160	Enhancement of ammonia auto-ignition with low-carbon fuels: multi-species time history measurements and kinetics modeling	Jiabiao Zou, Mohammad Adil, Ali Elkhazraji, Aamir Farooq	16th May 11:20-11:40	302a
161	An experimental study of direct iron ore reduction using ammonia	Zhezi Zhang, Chiemeka Okoye, Darren Matthews, Dongke Zhang	17th May 14:00-14:20	304a
162	Hygrothermal aging of Magnesium particles and performance of metal-fluorocarbon pyrolants	Juyoung Oh, Yejun Lee, Jack J Yoh	18th May 14:00-14:20	303e
163	A reduced chemical kinetic mechanism for ammonia combustion targeted on multiple prediction objectives	Huaiyin Wang, Tianyou Wang, Ming Jia, Zhen Lu, Yachao Chang, Kai Sun	16th May 11:20-11:40	303a
164	Validation of a reactive flow solver based on OpenFOAM for detonation modeling	Vigneshwaran Sankar, Karl P Chatelain, Josue Melguizo-Gavilanes, Deanna Lacoste	17th May 13:20-13:40	303e
165	Large eddy simulations of hydrogen/ammonia bluff-body flames	Suliman Abdelwahid, FranciscoE Hernández-Pérez, Adamu Alfazazi, Ayman Elbaz, Jiajun Li, BassamDally, Hong G Im	18th May 10:20-10:40	304a
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187	Numerical study of the unsteady drag on a droplet accelerated by a uniform gas flow	Ying Zhang, Yongjie Chen, Yai Bai, Chunchun Chu, Fei Qi, Xi Xia	18th May 11:20-11:40	303b
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190	Reactive inception model for soot modeling in laminar inverse diffusion flames	Junjun Guo, Peng Liu, Erica Quadarella, William Roberts, Hong G Im	18th May 11:40-12:00	303e
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195	A unified definition of the mixture fraction in nonpremixed ammonia-hydrogen flames	Lorenzo Angelilli, Pietro Paolo Ciottoli, Francisco Hernandez-Perez, Mauro Valorani, Hong G Im	15th May 14:00-14:20	304b
196	Spray and flow field characterizations of a two-stage counter-swirl injector	Tao Chen, Liangliang Xu, Bowen Yu, Xiaoxing Feng, Fei Qi, Xi Xia	15th May 16:20-16:40	303b
197	Experimental research on turbulent flame propagation of solid particle cloud-gaseous fuel two-phase hybrid mixture co-combustion	Yu Xia, SeungMin Song, Nozomu Hashimoto, Osamu Fujita	17th May 11:00-11:20	302a
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223	Mild combustion characteristics of a premixed ammonia jet flame in hot coflow: effects of coflow temperature and oxygen-level	Guochang Wang, Xiangtao Liu, Pengfei Li, Zhaohui Liu, Jianchun Mi	15th May 16:40-17:00	303a
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328	Analysis of the borderline of no-ignition and mild combustion regimes of methane, propane, and syngas fuels based on ignition delay time	Srinivasarao Muddada, V Mahendra Reddy	15th May 16:00-16:20	303a

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333	Multi-species laser sensing in shock tube kinetics using CEAS and DDAE	Mhanna Mhanna, Mohamed Sy, Ali Abualsaud, Jiabiao Zou, Ali Elkhazraji, Aamir Farooq	15th May 15:20-15:40	302a
334	Combustion modeling of multi-grains in closed bomb using volume of fluid and fluid structure interaction methods	Jonggeun Park, Jeongseok Kang, Hong-Gye Sung	17th May 10:40-11:00	302a
336	PIV measurement and numerical simulation of flow field in a novel burner with a cap	Ching-Huan Tseng, Pei-Hsun Huang, Kuo-Long Pan	17th May 10:20-10:40	303b
337	Profiles of flow parameters of supercritical n-heptane flows inside a convergent nozzle	Guigui Liu, Yuzhen Lin, Xin Xue, Xin Hui, Chih-Jen Sung	15th May 16:00-16:20	303b
338	Influence of wall roughness size and fuel non-equidiffusivity on laminar boundary layer flashback	Louis Benteux, Damir Valiev	17th May 15:40-16:00	303a
339	Investigation of non-reaction field turbulent flow in hybrid fractal grid	Junghyun Kim, Keeman Lee	17th May 15:40-16:00	303b
342	A study on the characteristics of the low swirl combustion generated from a hybrid fractal grid	Geonryul Lee, Keeman Lee	17th May 15:20-15:40	303b
345	Improving chemical mechanism for NH ₃ /H ₂ combustion and adaptation of artificial neural network (ANN) for acceleration of the simulation	Serang Kwon, Seongkyun Im	16th May 10:20-10:40	303a
347	A multi stage kinetic reaction optimization strategy applied to n-heptane combustion mechanism	Krunal R Panchal, Vaisakh Vasudaven, Krithika Narayanaswamy	18th May 10:40-11:00	303a
349	Experimental investigation of thermal behaviors of the components of high	Ayushi Mehrotra, Juyoung Oh, Yejun Lee, Jack J Yoh	15th May 14:00-14:20	302b

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351	Effects of oxygen concentration of oxygen enriched CH ₄ /O ₂ /N ₂ flames in temperature measurements using LITGS at 1.0 Mpa	Hiromi Kondo, Yuta Mizuno, Taku Kudo, Akihiro Hayakawa	18th May 13:40-14:00	302a
352	On the autoxidation of limonene under cool flame conditions: formation of oxygenated and aromatic products	Zahraa Dbouk, Nesrine Belhadj, Maxence Lailliau, Roland Benoit, Philippe Dagaut	15th May 13:20-13:40	303a
353	Numerical study of multiband-multiline tomographic absorption spectroscopy for flame measurements	Tengfei Jiao, Kin-Pang Cheong, Wenju Hu, Yushuai Liu, Lihao Ma	15th May 16:40-17:00	302a
354	Oxygen and pressure effects on the ignition of polymer-insulated wire with short-term excess current in microgravity: a numerical study	Feng Guo, Nozomu Hashimoto, Osamu Fujita	18th May 14:20-14:40	302b
355	Development and validation of compact kinetic model for high temperature oxidation of 3-hexene	Lalit Y Attarde, Krithika Narayanaswamy	17th May 14:20-14:40	303a
356	A comparative study of reaction mechanisms towards predicting NO _x in methane/hydrogen premixed flames	Md Adil, Krithika Narayanaswamy	16th May 10:40-11:00	303a
357	Large eddy simulation of a turbulent dimethyl ether jet flame with direct moment closure model	Runzhi Liu, Kun Luo, Tai Jin, Jianren Fan	16th May 11:40-12:00	303b
358	Low-pressure ignition and combustion characteristics of a dual-mode ionic liquid propellant in a catalyst bed reactor	Zun Wang, Jie Fang, Shaolong Li, Zhaopu Yao, Shuiqing Li	15th May 16:40-17:00	303e
359	An extend measurement of auto-ignition and kinetic model assessment for RP-3 aviation kerosene	Congjie Hong, Wuchuan Sun, Wenlin Huang, Wu Honghuan, Zuohua Huang, Yingjia Zhang	17th May 11:40-12:00	303b
360	Low to high temperature oxidation of <i>n</i> -dodecane/air mixtures	Congjie Hong, Chunyu Wang, Yilong Ao, Wuchuan Sun, Zuohua Huang, Yingjia Zhang	17th May 16:40-17:00	303a
361	On the stability of steady symmetric flames propagating from an open towards a closed end of a narrow channel	Chengxi Miao, Damir Valiev	17th May 16:20-16:40	303a
361	On the stability of steady symmetric flames propagating from an open	Chengxi Miao, Damir Valiev	17th May 16:20-16:40	303a

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362	Volume-of-fluid simulations of spray injection in a coaxial air-blast atomizer	Po-Han Chen, Alberto Ceschin, Francisco Hernandez Pérez, Hong G Im	18th May 10:20-10:40	303b
363	Detection of extreme events in hydrogen combustion relevant to reheat burners	Dibyajyoti Nayak, Konduri Aditya	16th May 11:40-12:00	304a
365	Investigation of influence of chemical kinetics mechanisms for hydrogen jet flame in a vitiated co-flow	Yuyang Zhang, Hao Zhao, Zuohua Huang, Yingjia Zhang	15th May 16:40-17:00	304a
366	On the unified modeling of the hydraulic resistance-driven and Shchelkin-type laminar flame acceleration in channels	Canruo Chen, Damir Valiev	17th May 14:00-14:20	303e
367	Numerical investigation on the flame behaviors in a mesoscale channel of one backward-facing step	Jyun-Hao Huang, Sheng-Yen Hsu	17th May 15:20-15:40	303a
369	Theoretical study on the tert-butyl hydroperoxide pyrolysis reaction	Yingjia Zhang, Binxu Pu, Qian Zhao, Zuohua Huang	15th May 14:00-14:20	303a
372	Numerical analysis of the effect of soot radiation on the wall temperature of the combustion chamber	Zhengzhe Fang, Zhang Chi, Bosen Wang, Chunhua Yang	17th May 11:20-11:40	303b
373	Application of quantitative Raman spectroscopy to turbulent flames of H ₂ /N ₂	Andrew R Macfarlane, Assaad Masri, Matthew J Dunn, Hao Tang, Gaetano Magnotti	16th May 11:00-11:20	302a
374	Thermal performance of fire blankets for protection against WUI fires	Robin Neupane, Ankit Sharma, Jonathan Fu, Ya-Ting T Liao, Fumiaki Takahashi	18th May 10:40-11:00	302b
375	Investigation on the opening location affecting the delay time of backdraft	Chia Lung Wu, Carvel Ricky, Wen-Yen Juan	16th May 11:00-11:20	302b
376	Further insights into the cascade utilization of chemical energy	Honghuan Wu, Qian Zhao, Wenlin Huang, Wuchuan Sun, Zuohua Huang, Yingjia Zhang	18th May 16:20-16:40	303e
376	Further insights into the cascade utilization of chemical energy	Honghuan Wu, Qian Zhao, Wenlin Huang, Wuchuan Sun, Zuohua Huang, Yingjia Zhang	18th May 16:20-16:40	303e
377	Laser absorption diagnostics of OH concentration time-histories during dimethyl ether (DME) oxidation	Xin Zhang, Zilong Feng, Yufan Zhang, Zuohua Huang, Yingjia Zhang	18th May 16:20-16:40	302a

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378	Ozone-assisted low-temperature oxidation of iso-butane in a jet-stirred reactor	Long Zhu, Qiang Xu, Bingzhi Liu, Zhandong Wang	17th May 14:40-15:00	303a
380	Lift-off and stabilization characteristics of turbulent autoigniting partially premixed NH ₃ +H ₂ flames	Matthew J Dunn, Andrew MacFarlane, Assaad Masri	18th May 11:00-11:20	304a
381	Ammonia/hydrogen mild combustion in a cyclonic burner	Giancarlo Sorrentino, Giovanni Battista Ariemma, Pino Sabia, Raffaele Ragucci, Mara de Joannon	15th May 15:20-15:40	303a
382	Co-combustion characteristics of solid waste and coal	Shuhn-Shyurng Hou, Chung-Yao Hsuan	17th May 13:40-14:00	302a