Dimitrios C Kyritsis

List of Publications by Year
in descending order

77 papers	3,371 citations	172457 29 h-index	149698 56 g-index
78 all docs	78 docs citations	78 times ranked	2050 citing authors

#	Article	IF	Citations
1	Effects of butanolâ€“diesel fuel blends on the performance and emissions of a high-speed DI diesel engine. Energy Conversion and Management, 2010, 51, 1989-1997.	9.2	516
2	Combustion heat release analysis of ethanol or n-butanol diesel fuel blends in heavy-duty DI diesel engine. Fuel, 2011, 90, 1855-1867.	6.4	288
3	Influence of properties of various common bio-fuels on the combustion and emission characteristics of high-speed DI (direct injection) diesel engine: Vegetable oil, bio-diesel, ethanol, n-butanol, diethyl ether. Energy, 2014, 73, 354-366.	8.8	268
4	Comparative second-law analysis of internal combustion engine operation for methane, methanol, and dodecane fuels. Energy, 2001, 26, 705-722.	8.8	137
5	Experimental study of flame stabilization in low Reynolds and Dean number flows in curved mesoscale ducts. Proceedings of the Combustion Institute, 2005, 30, 2419-2427.	3.9	126
6	Validation and sensitivity analysis of a two zone Diesel engine model for combustion and emissions prediction. Energy Conversion and Management, 2004, 45, 1471-1495.	9.2	124
7	Availability analysis of hydrogen/natural gas blends combustion in internal combustion engines. Energy, 2008, 33, 248-255.	8.8	113
8	Hydrogen enrichment effects on the second law analysis of natural and landfill gas combustion in engine cylinders. International Journal of Hydrogen Energy, 2006, 31, 1384-1393.	7.1	94
9	Optimization of a catalytic combustor using electrosprayed liquid hydrocarbons for mesoscale power generation. Combustion and Flame, 2004, 139, 77-89.	5.2	89
10	Mesoscale combustion: a first step towards liquid fueled batteries. Experimental Thermal and Fluid Science, 2004, 28, 763-770.	2.7	87
11	Mesoscale power generation by a catalytic combustor using electrosprayed liquid hydrocarbons. Proceedings of the Combustion Institute, 2002, 29, 965-972.	3.9	86
12	Experimental-stochastic investigation of the combustion cyclic variability in HSDI diesel engine using ethanolâ€“diesel fuel blends. Fuel, 2008, 87, 1478-1491.	6.4	86
13	Development and validation of a comprehensive two-zone model for combustion and emissions formation in a DI diesel engine. International Journal of Energy Research, 2003, 27, 1221-1249.	4.5	82
14	Operational regimes of rich methane and propane/oxygen flames in mesoscale non-adiabatic ducts. Proceedings of the Combustion Institute, 2009, 32, 3107-3114.	3.9	69
15	METHANE FLAME PROPAGATION IN COMPOSITIONALLY STRATIFIED GASES. Combustion Science and Technology, 2005, 177, 2191-2210.	2.3	63
16	Departure from quasi-homogeneity during laminar flame propagation in lean, compositionally stratified methaneâ€“air mixtures. Proceedings of the Combustion Institute, 2007, 31, 1075-1083.	3.9	54
17	An experimental comparison of non-premixed bio-butanol flames with the corresponding flames of ethanol and methane. Fuel, 2011, 90, 255-262.	6.4	44
18	Availability accumulation and destruction in a DI diesel engine with special reference to the limited cooled case. Heat Recovery Systems & CHP, 1993, 13, 261-276.	0.3	40

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19	Experimental determination of the structure of catalytic micro-combustion flows over small-scale flat plates for methane and propane fuel. Combustion and Flame, 2012, 159, 802-816.	5.2	40
20	Autoignition dynamics of DME/air and EtOH/air homogeneous mixtures. Combustion and Flame, 2015, 162, 3263-3276.	5.2	40
21	Phenomenology of methane flame propagation into compositionally stratified, gradually richer mixtures. Proceedings of the Combustion Institute, 2009, 32, 979-985.	3.9	38
22	A methodology for velocity field measurement in multiphase highâ€pressure flow of CO₂ and water in micromodels. Water Resources Research, 2015, 51, 3017-3029.	4.2	37
23	Vortex-induced extinction behavior in methanol gaseous flames: A comparison with quasi-steady extinction. Proceedings of the Combustion Institute, 2000, 28, 2109-2116.	3.9	35
24	Algorithmic determination of the mechanism through which H2O-dilution affects autoignition dynamics and NO formation in CH4/air mixtures. Fuel, 2016, 183, 90-98.	6.4	35
25	Ignition delay control of DME/air and EtOH/air homogeneous autoignition with the use of various additives. Fuel, 2016, 169, 15-24.	6.4	33
26	Electrostatic atomization of hydrocarbon fuels and bio-alcohols for engine applications. Energy Conversion and Management, 2012, 60, 10-17.	9.2	31
27	Comparative investigation of homogeneous autoignition of DME/air and EtOH/air mixtures at low initial temperatures. Combustion Theory and Modelling, 2017, 21, 93-119.	1.9	31
28	The use of CO2 as an additive for ignition delay and pollutant control in CH4/air autoignition. Fuel, 2018, 211, 898-905.	6.4	30
29	The effect of temperature correction on the measured thickness of formaldehyde zones in diffusion flames for 355ï¿½nm excitation. Experiments in Fluids, 2004, 37, 769-772.	2.4	29
30	Effect of bottom surface optical boundary conditions on nanofluid-based DASC: Parametric study and optimization. Solar Energy, 2018, 164, 210-223.	6.1	29
31	Numerical investigation of nanofluid particle migration and convective heat transfer in microchannels using an Eulerianâ€“Lagrangian approach. Journal of Fluid Mechanics, 2019, 878, 62-97.	3.4	29
32	An experimental study of vortex-flame interaction in counterflow spray diffusion flames. Proceedings of the Combustion Institute, 2000, 28, 1023-1030.	3.9	28
33	The Electrospray and Combustion at the Mesoscale.. Journal of the Mass Spectrometry Society of Japan, 2003, 51, 42-49.	0.1	28
34	Experimental Study of Steady Quasi-Cone-Jet Electrostatic Sprays of Biobutanol for Engine Applications. Journal of Energy Engineering - ASCE, 2014, 140, .	1.9	27
35	A combined experimental/computational investigation of stratified combustion in methaneâ€“air mixtures. Energy Conversion and Management, 2007, 48, 2769-2774.	9.2	25
36	NO Formation and Autoignition Dynamics during Combustion of H2O-Diluted NH3/H2O2 Mixtures with Air. Energies, 2021, 14, 84.	3.1	24

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37	Intermediate Reynolds number flat plate boundary layer flows over catalytic surfaces for â€œmicroâ€•combustion applications. Proceedings of the Combustion Institute, 2009, 32, 3035-3042.	3.9	23
38	Comparative Evaluation of Extinction through Strain among Three Alcoholic Butanol Isomers in Non-Premixed Counterflow Flames. Journal of Energy Engineering - ASCE, 2014, 140, .	1.9	22
39	H2/Air Autoignition Dynamics around the Third Explosion Limit. Journal of Energy Engineering - ASCE, 2019, 145, .	1.9	22
40	Phenomenology of electrostatically charged droplet combustion in normal gravity. Combustion and Flame, 2008, 154, 624-629.	5.2	20
41	Algorithmic Analysis of Chemical Dynamics of the Autoignition of NH3â€“H2O2/Air Mixtures. Energies, 2019, 12, 4422.	3.1	20
42	Quantitative scalar dissipation rate measurements in vortex-perturbed counterflow diffusion flames. Proceedings of the Combustion Institute, 2002, 29, 1679-1685.	3.9	17
43	Fuel composition effect on the electrostatically-driven atomization of bio-butanol containing engine fuel blends. Energy Conversion and Management, 2012, 60, 28-35.	9.2	17
44	Combined aerodynamic and electrostatic atomization of dielectric liquid jets. Experiments in Fluids, 2012, 53, 221-235.	2.4	16
45	Experimental investigation of the possibility of automotive gasoline spray manipulation through electrostatic fields. International Journal of Vehicle Design, 2007, 45, 61.	0.3	14
46	Preliminary experimental study of butanol electrosprays for power generation. , 2007, , .		14
47	Synopsis of experimentally determined effects of electrostatic charge on gasoline sprays. Energy Conversion and Management, 2007, 48, 2762-2768.	9.2	14
48	Experimental investigation of bio-butanol laminar non-premixed flamelets. Applied Energy, 2012, 93, 296-304.	10.1	14
49	Laminar Non-Premixed Counterflow Flames Manipulation through the Application of External Direct Current Fields. Journal of Energy Engineering - ASCE, 2017, 143, .	1.9	14
50	Occupant Tenability in Single Family Homes: Part Iâ€”Impact of Structure Type, Fire Location and Interior Doors Prior to Fire Department Arrival. Fire Technology, 2017, 53, 1589-1610.	3.0	14
51	Theoretical investigation of flame propagation through compositionally stratified methaneâ€“air mixtures. Combustion Theory and Modelling, 2009, 13, 705-719.	1.9	13
52	NH₃ vs. CH₄ autoignition: A comparison of chemical dynamics. Combustion Theory and Modelling, 2021, 25, 1110-1131.	1.9	13
53	Experimental Investigation of the Effects of Flame Phenomenology on the Wall Temperature Distribution of Mesoscale Nonadiabatic Ducts. Combustion Science and Technology, 2011, 183, 847-867.	2.3	11
54	Nitric oxide formation during flame/vortex interaction. Proceedings of the Combustion Institute, 2002, 29, 2227-2233.	3.9	10

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55	Experimental evaluation of flame observables for simplified scalar dissipation rate measurements in laminar diffusion flamelets. Proceedings of the Combustion Institute, 2005, 30, 493-500.	3.9	10
56	Emission Quantification via Passive Infrared Optical Gas Imaging: A Review. Energies, 2022, 15, 3304.	3.1	10
57	The effect of fuel additives on the autoignition dynamics of rich methanol/air mixtures. Fuel, 2022, 323, 124275.	6.4	9
58	Quantitative two-dimensional instantaneous Raman concentration measurements in a laminar methane jet. Applied Optics, 2000, 39, 6771.	2.1	8
59	Advanced Combustion and Fuel Technologies for Economical and Environmentally Friendly Power Generation in Engines and Power Plants: Issues and Challenges. Journal of Energy Engineering - ASCE, 2016, 142, .	1.9	8
60	Chemical dynamics of the autoignition of near-stoichiometric and rich methanol/air mixtures. Combustion Theory and Modelling, 2022, 26, 289-319.	1.9	8
61	Dominant dynamics of n-butanol/air autoignition and the influence of additives. Combustion and Flame, 2022, 242, 112173.	5.2	8
62	Special Issue on Contemporary Combustion Experimentation and Modeling for Clean and Efficient Power Generation: Issues and Challenges. Journal of Energy Engineering - ASCE, 2015, 141, .	1.9	7
63	Experimental Investigation of Flame Propagation in Long, Narrow, and Open Tubes. Journal of Energy Engineering - ASCE, 2015, 141, .	1.9	7
64	Bioalcohol Electrosprays for Practical Propulsion Systems. Journal of Energy Engineering - ASCE, 2019, 145, .	1.9	7
65	Experimental Investigation of Coal Combustion in Coal-Laden Methane Jets. Journal of Energy Engineering - ASCE, 2015, 141, .	1.9	6
66	Occupant Tenability in Single Family Homes: Part II: Impact of Door Control, Vertical Ventilation and Water Application. Fire Technology, 2017, 53, 1611-1640.	3.0	6
67	Phenomenology of Electrostatically Manipulated Laminar Counterflow Non-Premixed Methane Flames. Journal of Energy Engineering - ASCE, 2016, 142, .	1.9	5
68	A computational comparison of NH3/O2 and CH4/O2 non-premixed laminar flames. Fuel, 2022, 309, 122200.	6.4	5
69	Experimental investigation of gaseous reactive flows around catalytically coated micro-wires. Proceedings of the Combustion Institute, 2009, 32, 3043-3050.	3.9	4
70	Experimental investigation of electrostatic effects on ethanol and ethanol-diesel blend sprays in atmospheric ambiance. International Journal of Vehicle Design, 2009, 50, 35.	0.3	4
71	Intermediate Reynolds/Peclet number, flat plate boundary layer flows over catalytic surfaces for micro-combustion applications. International Journal of Alternative Propulsion, 2007, 1, 294.	0.9	3
72	Engine and Power Plant Combustion Technologies for Sustainability. Journal of Energy Engineering - ASCE, 2019, 145, 02019001.	1.9	3

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73	Experimental investigation of the reactive flow field around catalytic micro-wires for intermediate Reynolds-number flows. Combustion and Flame, 2011, 158, 1117-1128.	5.2	2
74	Experimental Investigation of the Phenomenology of AC-Driven Ethanol Electrosprays. Journal of Energy Engineering - ASCE, 2020, 146, 04020068.	1.9	2
75	The Effect of Hydrogen Peroxide on NH3/O2 Counterflow Diffusion Flames. Energies, 2022, 15, 2216.	3.1	2
76	Electric Manipulation of Laminar Nonpremixed Counterflow Propane Flames. Journal of Thermal Science and Engineering Applications, 2017, 9, .	1.5	1
77	Effects of Electrostatic Voltage and Polarity on Diffusion-Controlled Propane Flame for Enhanced Efficiency. Journal of Energy Engineering - ASCE, 2018, 144, 04018004.	1.9	1