Yu Wang

List of Publications by Year
in descending order

62 papers	3,115 citations	159585 30 h-index	161849 54 g-index
62 all docs	62 docs citations	62 times ranked	1465 citing authors

#	Article	IF	Citations
1	Chemical and Sooting Structures of Counterflow Diffusion Flames of Butanol Isomers: An Experimental and Modeling Study. Combustion Science and Technology, 2023, 195, 2165-2190.	2.3	1
2	Midâ€infrared multiline absorption tomography for in situ analysis of thermochemical structure in natural gasâ€fired cooker flame. Microwave and Optical Technology Letters, 2023, 65, 1215-1222.	1.4	3
3	Experimental Investigations on Non-premixed Methane-air Flames in Radial Microchannels with a Controlled Temperature Profile. Combustion Science and Technology, 2022, 194, 3318-3339.	2.3	2
4	Transient process of methane-oxygen diffusion flame-street establishment in a microchannel. Frontiers in Energy, 2022, 16, 988-999.	2.3	3
5	Chemical speciation and soot measurements in laminar counterflow diffusion flames of ethylene and ammonia mixtures. Fuel, 2022, 308, 122003.	6.4	39
6	Effects of thermochemical non-uniformity on line-of-sight laser absorption thermometry in counterflow diffusion flames. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 277, 107990.	2.3	2
7	Development of an infrared laser absorption sensor for non-intrusive gas temperature measurements. Energetic Materials Frontiers, 2022, 3, 10-17.	3.2	1
8	Effects of oxygenated biofuel additives on soot formation: A comprehensive review of laboratory-scale studies. Fuel, 2022, 313, 122635.	6.4	31
9	A Laser-Based Multipass Absorption Sensor for Sub-ppm Detection of Methane, Acetylene and Ammonia. Sensors, 2022, 22, 556.	3.8	8
10	Slight asymmetry induces significant distortion of soot volume fraction measurements in counterflow diffusion flames with diffuse back-illumination imaging. Optics Express, 2022, 30, 6671.	3.4	3
11	Simultaneous measurements of temperature, CO2 concentration and soot volume fraction in counterflow diffusion flames using a single mid-infrared laser. Applied Physics B: Lasers and Optics, 2022, 128, 1.	2.2	3
12	Sensitivity of soot formation to strain rate in steady counterflow flames determines its response under unsteady conditions. Combustion and Flame, 2022, 241, 112107.	5.2	8
13	Probing sooting limits in counterflow diffusion flames via multiple optical diagnostic techniques. Experimental Thermal and Fluid Science, 2022, 136, 110679.	2.7	0
14	An experimental and modeling study on sooting characteristics of laminar counterflow diffusion flames with partial premixing. Energy, 2021, 218, 119479.	8.8	16
15	Sooting characteristics of partially-premixed flames of ethanol and ethylene mixtures: Unravelling the opposing effects of ethanol addition on soot formation in non-premixed and premixed flames. Fuel, 2021, 291, 120089.	6.4	16
16	Planar Light Extinction Measurement of Soot Volume Fraction in Laminar Counterflow Diffusion Flames. Frontiers in Mechanical Engineering, 2021, 7, .	1.8	1
17	Experimental and Numerical Study on the Sooting Behaviors of Furanic Biofuels in Laminar Counterflow Diffusion Flames. Energies, 2021, 14, 5995.	3.1	2
18	An experimental multiparameter investigation on the thermochemical structures of benchmark ethylene and propane counterflow diffusion flames and implications to their numerical modeling. Combustion and Flame, 2021, 234, 111622.	5.2	17

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19	The suppression mechanism of PAHs formation by coarser-sized bed material during medical waste fluidized bed incineration. Journal of the Energy Institute, 2020, 93, 1138-1147.	5.3	2
20	Chemical effects of hydrogen addition on soot formation in counterflow diffusion flames: Dependence on fuel type and oxidizer composition. Combustion and Flame, 2020, 213, 14-25.	5.2	51
21	Numerical investigations on the methane-oxygen diffusion flame-street phenomena in a microchannel: Effects of wall temperatures, inflow rates and global equivalence ratios on flame behaviors and combustion performances. Energy, 2020, 207, 118194.	8.8	8
22	A comparative study of the sooting tendencies of various C5â€"C8 alkanes, alkenes and cycloalkanes in counterflow diffusion flames. Applications in Energy and Combustion Science, 2020, 1-4, 100007.	1.5	2
23	Machine Learning-Based Method for Remaining Range Prediction of Electric Vehicles. IEEE Access, 2020, 8, 212423-212441.	4.2	22
24	Effects of carbon monoxide addition on the sooting characteristics of ethylene and propane counterflow diffusion flames. Fuel, 2020, 271, 117674.	6.4	9
25	Role of dimethyl ether in incipient soot formation in premixed ethylene flames. Combustion and Flame, 2020, 216, 271-279.	5.2	24
26	An Experimental Investigation of the Impact of Washcoat Composition on Gasoline Particulate Filter (GPF) Performance. Energies, 2020, 13, 693.	3.1	6
27	Synergistic effects on soot formation in counterflow diffusion flames of acetylene-based binary mixture fuels. Combustion and Flame, 2020, 216, 24-28.	5.2	12
28	Temperature dependence of the fuel mixing effect on soot precursor formation in ethylene-based diffusion flames. Fuel, 2020, 267, 117121.	6.4	19
29	Spatially and temporally resolved temperature measurements in counterflow flames using a single interband cascade laser. Optics Express, 2020, 28, 37879.	3.4	22
30	Soot formation in laminar counterflow flames. Progress in Energy and Combustion Science, 2019, 74, 152-238.	31.2	293
31	A numerical investigation on the thermo-chemical structures of methane-oxygen diffusion flame-streets in a microchannel. Combustion and Flame, 2019, 206, 266-281.	5.2	23
32	Coupled Effects of Carbon Dioxide and Water Vapor Addition on Soot Formation in Ethylene Diffusion Flames. Energy & Fuels, 2019, 33, 5582-5596.	5.1	32
33	On the opposing effects of methanol and ethanol addition on PAH and soot formation in ethylene counterflow diffusion flames. Combustion and Flame, 2019, 202, 228-242.	5.2	79
34	An experimental study on the spectral dependence of light extinction in sooting ethylene counterflow diffusion flames. Experimental Thermal and Fluid Science, 2019, 100, 259-270.	2.7	35
35	Effects of fuel inlet boundary condition on aromatic species formation in coflow diffusion flames. Journal of the Energy Institute, 2019, 92, 288-297.	5.3	14
36	A comparative study on the sooting tendencies of various 1-alkene fuels in counterflow diffusion flames. Combustion and Flame, 2018, 192, 71-85.	5.2	37

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37	Effects of Hydrogen Addition on the Standoff Distance of Premixed Burner-Stabilized Flames of Various Hydrocarbon Fuels. Energy & Fuels, 2018, 32, 2385-2396.	5.1	5
38	Application of hydrogen enriched natural gas in spark ignition IC engines: from fundamental fuel properties to engine performances and emissions. Renewable and Sustainable Energy Reviews, 2018, 82, 1457-1488.	16.4	112
39	Effect of dimethyl ether (DME) addition on sooting limits in counterflow diffusion flames of ethylene at elevated pressures. Combustion and Flame, 2018, 197, 463-470.	5.2	34
40	Experimental and soot modeling studies of ethylene counterflow diffusion flames: Non-monotonic influence of the oxidizer composition on soot formation. Combustion and Flame, 2018, 197, 304-318.	5.2	47
41	Stochastic Simulation of Soot Formation Evolution in Counterflow Diffusion Flames. Journal of Nanotechnology, 2018, 2018, 1-8.	3.4	2
42	Compositional effects on PAH and soot formation in counterflow diffusion flames of gasoline surrogate fuels. Combustion and Flame, 2017, 178, 46-60.	5.2	102
43	Aromatic ring formation in opposed-flow diffusive 1,3-butadiene flames. Proceedings of the Combustion Institute, 2017, 36, 947-955.	3.9	41
44	Formation of Soot in Counterflow Diffusion Flames with Carbon Dioxide Dilution. Combustion Science and Technology, 2016, 188, 805-817.	2.3	48
45	A computational study of ethyleneâ€“air sooting flames: Effects of large polycyclic aromatic hydrocarbons. Combustion and Flame, 2016, 163, 427-436.	5.2	48
46	Strain rate effect on sooting characteristics in laminar counterflow diffusion flames. Combustion and Flame, 2016, 165, 433-444.	5.2	51
47	Soot modeling of counterflow diffusion flames of ethylene-based binary mixture fuels. Combustion and Flame, 2015, 162, 586-596.	5.2	117
48	Kinetics of ethylcyclohexane pyrolysis and oxidation: An experimental and detailed kinetic modeling study. Combustion and Flame, 2015, 162, 2873-2892.	5.2	70
49	Effect of strain rate on sooting limits in counterflow diffusion flames of gaseous hydrocarbon fuels: Sooting temperature index and sooting sensitivity index. Combustion and Flame, 2014, 161, 1224-1234.	5.2	54
50	Sooting limit in counterflow diffusion flames of ethylene/propane fuels and implication to threshold soot index. Proceedings of the Combustion Institute, 2013, 34, 1803-1809.	3.9	47
51	A PAH growth mechanism and synergistic effect on PAH formation in counterflow diffusion flames. Combustion and Flame, 2013, 160, 1667-1676.	5.2	254
52	The Impact of Ice Formation on Wind Turbine Performance and Aerodynamics. Journal of Solar Energy Engineering, Transactions of the ASME, 2011, 133, .	1.8	67
53	Combustion and emission characteristics of a port-injection HCNG engine under various ignition timings. International Journal of Hydrogen Energy, 2008, 33, 816-822.	7.1	127
54	Effects of hydrogen addition on cycle-by-cycle variations in a lean burn natural gas spark-ignition engine. International Journal of Hydrogen Energy, 2008, 33, 823-831.	7.1	241

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55	Study on the extension of lean operation limit through hydrogen enrichment in a natural gas spark-ignition engine. International Journal of Hydrogen Energy, 2008, 33, 1416-1424.	7.1	167
56	Development and validation of a quasi-dimensional combustion model for SI engines fuelled by HCNG with variable hydrogen fractions. International Journal of Hydrogen Energy, 2008, 33, 4863-4875.	7.1	54
57	Study on combustion behaviors and cycle-by-cycle variations in a turbocharged lean burn natural gas S.I. engine with hydrogen enrichment. International Journal of Hydrogen Energy, 2008, 33, 7245-7255.	7.1	107
58	An investigation of optimum control of a spark ignition engine fueled by NG and hydrogen mixtures. International Journal of Hydrogen Energy, 2008, 33, 7592-7606.	7.1	35
59	Effects of Combustion Phasing, Combustion Duration, and Their Cyclic Variations on Spark-Ignition (SI) Engine Efficiency. Energy & Fuels, 2008, 22, 3022-3028.	5.1	39
60	Influence of Different Volume Percent Hydrogen/Natural Gas Mixtures on Idle Performance of a CNG Engine. Energy & Fuels, 2008, 22, 1880-1887.	5.1	61
61	Experimental study on thermal efficiency and emission characteristics of a lean burn hydrogen enriched natural gas engine. International Journal of Hydrogen Energy, 2007, 32, 5067-5075.	7.1	328
62	A Quasi-Dimensional Combustion Model for SI Engines Fuelled by Hydrogen Enriched Compressed Natural Gas. , 0, , .		11