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	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
2	Soot formation in laminar counterflow flames. Progress in Energy and Combustion Science, 2019, 74, 152-238.	31.2	293
3	A PAH growth mechanism and synergistic effect on PAH formation in counterflow diffusion flames. Combustion and Flame, 2013, 160, 1667-1676.	5.2	254
4	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
5	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
6	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
7	Soot modeling of counterflow diffusion flames of ethylene-based binary mixture fuels. Combustion and Flame, 2015, 162, 586-596.	5.2	117
8	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
9	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
10	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
11	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
12	Kinetics of ethylcyclohexane pyrolysis and oxidation: An experimental and detailed kinetic modeling study. Combustion and Flame, 2015, 162, 2873-2892.	5.2	70
13	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
14	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
15	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
16	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
17	Strain rate effect on sooting characteristics in laminar counterflow diffusion flames. Combustion and Flame, 2016, 165, 433-444.	5.2	51
18	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

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19	Formation of Soot in Counterflow Diffusion Flames with Carbon Dioxide Dilution. Combustion Science and Technology, 2016, 188, 805-817.	2.3	48
20	A computational study of ethyleneâ€“air sooting flames: Effects of large polycyclic aromatic hydrocarbons. Combustion and Flame, 2016, 163, 427-436.	5.2	48
21	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
22	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
23	Aromatic ring formation in opposed-flow diffusive 1,3-butadiene flames. Proceedings of the Combustion Institute, 2017, 36, 947-955.	3.9	41
24	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
25	Chemical speciation and soot measurements in laminar counterflow diffusion flames of ethylene and ammonia mixtures. Fuel, 2022, 308, 122003.	6.4	39
26	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
27	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
28	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
29	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
30	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
31	Effects of oxygenated biofuel additives on soot formation: A comprehensive review of laboratory-scale studies. Fuel, 2022, 313, 122635.	6.4	31
32	Role of dimethyl ether in incipient soot formation in premixed ethylene flames. Combustion and Flame, 2020, 216, 271-279.	5.2	24
33	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
34	Machine Learning-Based Method for Remaining Range Prediction of Electric Vehicles. IEEE Access, 2020, 8, 212423-212441.	4.2	22
35	Spatially and temporally resolved temperature measurements in counterflow flames using a single interband cascade laser. Optics Express, 2020, 28, 37879.	3.4	22
36	Temperature dependence of the fuel mixing effect on soot precursor formation in ethylene-based diffusion flames. Fuel, 2020, 267, 117121.	6.4	19

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37	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
38	An experimental and modeling study on sooting characteristics of laminar counterflow diffusion flames with partial premixing. Energy, 2021, 218, 119479.	8.8	16
39	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
40	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
41	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
42	A Quasi-Dimensional Combustion Model for SI Engines Fuelled by Hydrogen Enriched Compressed Natural Gas. , 0, , .		11
43	Effects of carbon monoxide addition on the sooting characteristics of ethylene and propane counterflow diffusion flames. Fuel, 2020, 271, 117674.	6.4	9
44	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
45	A Laser-Based Multipass Absorption Sensor for Sub-ppm Detection of Methane, Acetylene and Ammonia. Sensors, 2022, 22, 556.	3.8	8
46	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
47	An Experimental Investigation of the Impact of Washcoat Composition on Gasoline Particulate Filter (GPF) Performance. Energies, 2020, 13, 693.	3.1	6
48	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
49	Transient process of methane-oxygen diffusion flame-street establishment in a microchannel. Frontiers in Energy, 2022, 16, 988-999.	2.3	3
50	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
51	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
52	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
53	Stochastic Simulation of Soot Formation Evolution in Counterflow Diffusion Flames. Journal of Nanotechnology, 2018, 2018, 1-8.	3.4	2
54	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

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55	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
56	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
57	Experimental and Numerical Study on the Sooting Behaviors of Furanic Biofuels in Laminar Counterflow Diffusion Flames. Energies, 2021, 14, 5995.	3.1	2
58	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
59	Planar Light Extinction Measurement of Soot Volume Fraction in Laminar Counterflow Diffusion Flames. Frontiers in Mechanical Engineering, 2021, 7, .	1.8	1
60	Development of an infrared laser absorption sensor for non-intrusive gas temperature measurements. Energetic Materials Frontiers, 2022, 3, 10-17.	3.2	1
61	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
62	Probing sooting limits in counterflow diffusion flames via multiple optical diagnostic techniques. Experimental Thermal and Fluid Science, 2022, 136, 110679.	2.7	0