Hongsheng Guo

List of Publications by Year
in descending order

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114 papers	4,560 citations	101496 36 h-index	106281 65 g-index
114 all docs	114 docs citations	114 times ranked	1972 citing authors

#	Article	IF	Citations
1	The chemical effects of carbon dioxide as an additive in an ethylene diffusion flame: implications for soot and NOx formation. Combustion and Flame, 2001, 125, 778-787.	2.8	341
2	The chemical effect of CO2 replacement of N2 in air on the burning velocity of CH4 and H2 premixed flames. Combustion and Flame, 2003, 133, 495-497.	2.8	283
3	On the extinction limit and flammability limit of non-adiabatic stretched methaneâ€“air premixed flames. Journal of Fluid Mechanics, 1997, 342, 315-334.	1.4	276
4	The effect of hydrogen addition on flammability limit and NOx emission in ultra-lean counterflow CH4/air premixed flames. Proceedings of the Combustion Institute, 2005, 30, 303-311.	2.4	185
5	Numerical study on the influence of hydrogen addition on soot formation in a laminar ethyleneâ€“air diffusion flame. Combustion and Flame, 2006, 145, 324-338.	2.8	156
6	CoFlame: A refined and validated numerical algorithm for modeling sooting laminar coflow diffusion flames. Computer Physics Communications, 2016, 207, 464-477.	3.0	136
7	Effects of gas and soot radiation on soot formation in a coflow laminar ethylene diffusion flame. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 73, 409-421.	1.1	127
8	Effects of ammonia energy fraction and diesel injection timing on combustion and emissions of an ammonia/diesel dual-fuel engine. Fuel, 2022, 314, 122723.	3.4	127
9	Extinction of low-stretched diffusion flame in microgravity. Combustion and Flame, 1998, 112, 181-187.	2.8	118
10	Modeling of soot aggregate formation and size distribution in a laminar ethylene/air coflow diffusion flame with detailed PAH chemistry and an advanced sectional aerosol dynamics model. Proceedings of the Combustion Institute, 2009, 32, 761-768.	2.4	109
11	An experimental and numerical study on diesel injection split of a natural gas/diesel dual-fuel engine at a low engine load. Fuel, 2018, 212, 332-346.	3.4	109
12	Numerical modelling of soot formation and oxidation in laminar coflow non-smoking and smoking ethylene diffusion flames. Combustion Theory and Modelling, 2003, 7, 301-315.	1.0	106
13	Effects of radiation model on the modeling of a laminar coflow methane/air diffusion flame. Combustion and Flame, 2004, 138, 136-154.	2.8	103
14	An experimental and numerical study of the effect of diesel injection timing on natural gas/diesel dual-fuel combustion at low load. Fuel, 2017, 203, 642-657.	3.4	102
15	Numerical and experimental study of an axisymmetric coflow laminar methaneâ€“air diffusion flame at pressures between 5 and 40 atmospheres. Combustion and Flame, 2006, 146, 456-471.	2.8	96
16	Radiation extinction limit of counterflow premixed lean methane-air flames. Combustion and Flame, 1997, 109, 639-646.	2.8	94
17	Effect of diesel injection timing on the combustion of natural gas/diesel dual-fuel engine at low-high load and low-high speed conditions. Fuel, 2019, 235, 838-846.	3.4	92
18	An experimental and numerical study of the effects of dimethyl ether addition to fuel on polycyclic aromatic hydrocarbon and soot formation in laminar coflow ethylene/air diffusion flames. Combustion and Flame, 2011, 158, 547-563.	2.8	89

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19	A numerical investigation on methane combustion and emissions from a natural gas-diesel dual fuel engine using CFD model. Applied Energy, 2017, 205, 153-162.	5.1	89
20	The flame preheating effect on numerical modelling of soot formation in a two-dimensional laminar ethyleneâ€“air diffusion flame. Combustion Theory and Modelling, 2002, 6, 173-187.	1.0	82
21	Effects of the Lewis number and radiative heat loss on the bifurcation and extinction of CH4/O2-N2-He flames. Journal of Fluid Mechanics, 1999, 379, 165-190.	1.4	81
22	A study on split diesel injection on thermal efficiency and emissions of an ammonia/diesel dual-fuel engine. Fuel, 2022, 316, 123412.	3.4	71
23	A Numerical Study on the Influence of CO₂Addition on Soot Formation in an Ethylene/Air Diffusion Flame. Combustion Science and Technology, 2008, 180, 1695-1708.	1.2	68
24	A numerical study of soot aggregate formation in a laminar coflow diffusion flame. Combustion and Flame, 2009, 156, 697-705.	2.8	65
25	An experimental study on the effect of hydrogen enrichment on diesel fueled HCCI combustion. International Journal of Hydrogen Energy, 2011, 36, 13820-13830.	3.8	57
26	The effect of hydrogen addition on combustion and emission characteristics of an n-heptane fuelled HCCI engine. International Journal of Hydrogen Energy, 2013, 38, 11429-11437.	3.8	56
27	On greenhouse gas emissions and thermal efficiency of natural gas/diesel dual-fuel engine at low load conditions: Coupled effect of injector rail pressure and split injection. Applied Energy, 2019, 242, 216-231.	5.1	53
28	Implementation of an advanced fixed sectional aerosol dynamics model with soot aggregate formation in a laminar methane/air coflow diffusion flame. Combustion Theory and Modelling, 2008, 12, 621-641.	1.0	50
29	Effects of gas and soot radiation on soot formation in counterflow ethylene diffusion flames. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 84, 501-511.	1.1	49
30	Soot formation in a laminar ethylene/air diffusion flame at pressures from 1 to 8 atm. Proceedings of the Combustion Institute, 2013, 34, 1795-1802.	2.4	47
31	A numerical and experimental study of a laminar sooting coflow Jet-A1 diffusion flame. Proceedings of the Combustion Institute, 2011, 33, 601-608.	2.4	45
32	Effect of swirl ratio on NG/diesel dual-fuel combustion at low to high engine load conditions. Applied Energy, 2018, 229, 375-388.	5.1	43
33	Soot and NO formation in counterflow ethylene/oxygen/nitrogen diffusion flames. Combustion Theory and Modelling, 2004, 8, 475-489.	1.0	42
34	Numerical study of the superadiabatic flame temperature phenomenon in hydrocarbon premixed flames. Proceedings of the Combustion Institute, 2002, 29, 1543-1550.	2.4	41
35	An experimental study on the formation of polycyclic aromatic hydrocarbons in laminar coflow non-premixed methane/air flames doped with four isomeric butanols. Proceedings of the Combustion Institute, 2013, 34, 779-786.	2.4	40
36	Measurement and modeling of the sooting propensity of binary fuel mixtures. Proceedings of the Combustion Institute, 2007, 31, 611-619.	2.4	38

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37	Impact of CO2, N2 or Ar diluted in air on the length and lifting behavior of a laminar diffusion flame. Proceedings of the Combustion Institute, 2011, 33, 1071-1078.	2.4	38
38	Burning rates and surface characteristics of hydrogen-enriched turbulent lean premixed methaneâ€“air flames. International Journal of Hydrogen Energy, 2010, 35, 11342-11348.	3.8	36
39	A Numerical Investigation of Thermal Diffusion Influence on Soot Formation in Ethylene/Air Diffusion Flames. International Journal of Computational Fluid Dynamics, 2004, 18, 139-151.	0.5	35
40	On the effect of carbon monoxide addition on soot formation in a laminar ethylene/air coflow diffusion flame. Combustion and Flame, 2009, 156, 1135-1142.	2.8	35
41	Modeling of Oxidation-Driven Soot Aggregate Fragmentation in a Laminar Coflow Diffusion Flame. Combustion Science and Technology, 2010, 182, 491-504.	1.2	34
42	Numerical Investigation of CH4/CO2/Air and CH4/CO2/O2Counterflow Premixed Flames with Radiation Reabsorption. Combustion Science and Technology, 1998, 135, 49-64.	1.2	32
43	A Numerical Study on the Effects of CO₂/N₂/Ar Addition to Air on Liftoff of a Laminar CH₄/Air Diffusion Flame. Combustion Science and Technology, 2010, 182, 1549-1563.	1.2	32
44	A numerical study on NOx formation in laminar counterflow CH4/air triple flames. Combustion and Flame, 2005, 143, 282-298.	2.8	31
45	Split diesel injection effect on knocking of natural gas/diesel dual-fuel engine at high load conditions. Applied Energy, 2020, 279, 115828.	5.1	31
46	Flame Bifurcations and Flammable Regions of Radiative Counterflow Premixed Flames with General Lewis Numbers. Combustion and Flame, 1998, 113, 603-614.	2.8	29
47	The interaction between soot and NO formation in a laminar axisymmetric coflow ethylene/air diffusion flame. Combustion and Flame, 2007, 149, 225-233.	2.8	26
48	A numerical investigation on NO2 formation reaction pathway in a natural gasâ€“diesel dual fuel engine. Combustion and Flame, 2018, 190, 337-348.	2.8	26
49	The effect of reformate gas enrichment on extinction limits and NOX formation in counterflow CH4/air premixed flames. Proceedings of the Combustion Institute, 2007, 31, 1197-1204.	2.4	25
50	A numerical study on the effect of hydrogen/reformate gas addition on flame temperature and NO formation in strained methane/air diffusion flames. Combustion and Flame, 2009, 156, 477-483.	2.8	25
51	Heat release rate variations in a globally stoichiometric, stratified iso-octane/air turbulent V-flame. Combustion and Flame, 2015, 162, 944-959.	2.8	23
52	A numerical study of the influence of transport properties of inert diluents on soot formation in a coflow laminar ethylene/air diffusion flame. Proceedings of the Combustion Institute, 2002, 29, 2359-2365.	2.4	22
53	A numerical study on the chemical kinetics process during auto-ignition of n-heptane in a direct injection compression ignition engine. Applied Energy, 2018, 212, 909-918.	5.1	22
54	Effect of post-injection strategy on greenhouse gas emissions of natural gas/diesel dual-fuel engine at high load conditions. Fuel, 2021, 290, 120071.	3.4	22

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55	Effects of different cetane number enhancement strategies on HCCI combustion and emissions. International Journal of Engine Research, 2011, 12, 89-108.	1.4	21
56	A robust and accurate algorithm of the Î²-pdf integration and its application to turbulent methaneâ€“air diffusion combustion in a gas turbine combustor simulator. International Journal of Thermal Sciences, 2002, 41, 763-772.	2.6	20
57	An Experimental and Modeling Study of HCCI Combustion Using n-Heptane. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	0.5	20
58	An Experimental Investigation on the Combustion and Emissions Performance of a Natural Gasâ€“Diesel Dual Fuel Engine at Low and Medium Loads. , 2015, , .		19
59	Effects of Cetane Number, Aromatic Content and 90% Distillation Temperature on HCCI Combustion of Diesel Fuels. , 0, , .		18
60	Numerical Study of NOx Emission in High Temperature Air Combustion.. JSME International Journal Series B, 1998, 41, 331-337.	0.3	15
61	Determination of Burning Velocity and Flammability Limit of Methane/Air Mixture Using Counterflow Flames. Japanese Journal of Applied Physics, 1999, 38, 961-967.	0.8	14
62	A numerical study of laminar methane/air triple flames in two-dimensional mixing layers. International Journal of Thermal Sciences, 2006, 45, 586-594.	2.6	14
63	Combustion Performance and Unburned Hydrocarbon Emissions of a Natural Gasâ€“Diesel Dual Fuel Engine at a Low Load Condition. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	14
64	Effect of fuel composition on properties of particles emitted from a dieselâ€“natural gas dual fuel engine. International Journal of Engine Research, 2021, 22, 77-87.	1.4	14
65	The Combustion and Emissions Performance of a Syngas-Diesel Dual Fuel Compression Ignition Engine. , 2016, , .		13
66	Effect of pre-main-post diesel injection strategy on greenhouse gas and nitrogen oxide emissions of natural gas/diesel dual-fuel engine at high load conditions. Fuel, 2021, 302, 121110.	3.4	13
67	Evaluation of the laminar diffusion flamelet model in the calculation of an axisymmetric coflow laminar ethyleneâ€“air diffusion flame. Combustion and Flame, 2006, 144, 605-618.	2.8	12
68	Fuel Property Effects on PCCI Combustion in a Heavy-Duty Diesel Engine. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	0.5	12
69	The NOx and N2O Emission Characteristics of an HCCI Engine Operated With n-Heptane. Journal of Energy Resources Technology, Transactions of the ASME, 2012, 134, .	1.4	11
70	Further examinations on extinction and bifurcations of radiative CH4/air and C3H8/air premixed flames. Proceedings of the Combustion Institute, 1998, 27, 2551-2557.	0.3	10
71	A numerical investigation on NOX formation in counterflow n-heptane triple flames. International Journal of Thermal Sciences, 2007, 46, 936-943.	2.6	10
72	An Experimental Study on the Effect of Exhaust Gas Recirculation on a Natural Gas-Diesel Dual-Fuel Engine. , 0, , .		9

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73	Effects of radiative heat loss on the extinction of counterflow premixed H2â€“air flames. Combustion Theory and Modelling, 2000, 4, 459-475.	1.0	8
74	A multi-spectral reordering technique for the full spectrum SLMB modeling of radiative heat transfer in nonuniform gaseous mixtures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 394-411.	1.1	8
75	Effects of stratification on locally lean, near-stoichiometric, and rich iso-octane/air turbulent V-flames. Combustion and Flame, 2015, 162, 4231-4240.	2.8	8
76	A Study on the Performance of Combustion in a HCCI Engine Using n-Heptane by a Multi-Zone Model. , 2009, , .		7
77	Evaluation of Kinetics Process in CFD Model and Its Application in Ignition Process Analysis of a Natural Gas-Diesel Dual Fuel Engine. , 0, , .		7
78	Effect of Diesel Injection Split on Combustion and Emissions Performance of a Natural Gasâ€“Diesel Dual Fuel Engine at a Low Load Condition. , 2017, , .		6
79	Injector Tip Temperature and Combustion Performance of a Natural Gas-Diesel Dual Fuel Engine at Medium and High Load Conditions. , 2018, , .		6
80	A numerical study on the effect of CO addition on extinction limits and NO_xformation in lean counterflow CH₄/air premixed flames. Combustion Theory and Modelling, 2007, 11, 741-753.	1.0	5
81	A Numerical Study on the Effect of Water Addition on NO Formation in Counterflow CH4/Air Premixed Flames. Journal of Engineering for Gas Turbines and Power, 2008, 130, .	0.5	5
82	The Effect of Iso-Octane Addition on Combustion and Emission Characteristics of a HCCI Engine Fueled With n-Heptane. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	0.5	5
83	The effect of preferential diffusion on soot formation in a laminar ethylene/air diffusion flame. Combustion Theory and Modelling, 2010, 15, 125-140.	1.0	4
84	On the Variation of the Effect of Natural Gas Fraction on Dual-Fuel Combustion of Diesel Engine Under Low-to-High Load Conditions. Frontiers in Mechanical Engineering, 2020, 6, .	0.8	4
85	An Experimental and Modeling Study of HCCI Combustion Using n-Heptane. , 2006, , .		4
86	Fuel Property Effects on PCCI Combustion in a Heavy-Duty Diesel Engine. , 2010, , .		3
87	Effect of Renewable Diesel and Jet Blending Components on Combustion and Emissions Performance of a HCCI Engine. , 2014, , .		3
88	Combustion and Greenhouse Gas Emissions of a Natural Gas-Diesel Dual Fuel Engine at Low and High Load Conditions. , 2019, , .		3
89	Numerical investigation on NO formation in laminar counterflow methane/n-heptane dual fuel flames. International Journal of Hydrogen Energy, 2022, 47, 13143-13156.	3.8	3
90	Low Stretched Premixed Methane-Air Flame.. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 1997, 63, 699-704.	0.2	2

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91	A Numerical Investigation on Soot Formation From Laminar Diffusion Flames of Ethylene/Methane Mixture. , 2008, , .		2
92	A Numerical Investigation on NO2 Formation in a Natural Gas-Diesel Dual Fuel Engine. , 2017, , .		2
93	Combustion Performance and Unburned Hydrocarbon Emissions of a Natural Gasâ€“Diesel Dual Fuel Engine at a Low Load Condition. , 2017, , .		2
94	A Numerical Investigation on NO2 Formation in a Natural Gasâ€“Diesel Dual Fuel Engine. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	2
95	Editorial: Advances in Compression Ignition Natural Gasâ€“Diesel Dual-Fuel Engines. Frontiers in Mechanical Engineering, 2021, 7, .	0.8	2
96	An Experimental Study on NOx Emissions of a Heavy-Duty Diesel Engine during Cold Start and Idling. , 0, , .		2
97	The NOx and N2O Emission Characteristics of an HCCI Engine Operated With N-Heptane. , 2007, , .		2
98	A study on effect of engine operating parameters on NOx emissions and exhaust temperatures of a heavy-duty diesel engine during idling. International Journal of Engine Research, 0, , 146808742210760.	1.4	2
99	A Numerical Study on the Effect of CO Addition on Flame Temperature and NO Formation in Counterflow CH4/Air Diffusion Flames. Journal of Engineering for Gas Turbines and Power, 2008, 130, .	0.5	1
100	A Study on the High Load Operation of a Natural Gas-Diesel Dual-Fuel Engine. Frontiers in Mechanical Engineering, 2020, 6, .	0.8	1
101	A Numerical Investigation of NOx Formation in Counterflow CH4/H2/Air Diffusion Flames. , 2006, , .		1
102	Effects of Ammonia Energy Fraction and Diesel Injection Timing on Combustion and Emissions of an Ammonia/Diesel Dual-Fuel Engine. SSRN Electronic Journal, 0, , .	0.4	1
103	Numerical Modeling of a Lifted Laminar Coflow Methane Diffusion Jet Flames Using Detailed Chemistry and Non-Grey Gas Radiation Models. , 2002, , 119.		0
104	A Numerical Study on the Effect of Water Addition on NO Formation in Counterflow CH4/Air Premixed Flames. , 2005, , 383.		0
105	A Numerical Study on the Effect of CO Addition on Flame Temperature and NO Formation in Counterflow CH4/Air Diffusion Flames. , 2007, , 701.		0
106	Burning Rates and Surface Characteristics of Hydrogen-Enriched Turbulent Lean Premixed Methane-Air Flames. , 2009, , .		0
107	A Numerical Study of the Influence of Hydrogen Addition on Soot Formation in a Laminar Counterflow Ethylene/Oxygen/Nitrogen Diffusion Flame. , 2004, , .		0
108	A Numerical Study on a V-Shaped Laminar Stratified Flame. , 2005, , .		0

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109	Dilution Effects on Partially-Premixed Combustion of an Ultra-Low Sulphur Diesel Fuel Under Low-Load Operation. , 2012, , .		0
110	Combustion and Emission Performance of an HCCI Engine Fuelled by n-Heptane/Toluene Blends at a Low-Load Operating Condition. Journal of Advanced Thermal Science Research, 2019, 5, 17-26.	0.4	0
111	Replacement of Diesel by Biogas Generated From Wastewater Treatment in a Small Diesel Generator by Dual Fuel Technology. , 2020, , .		0
112	An Experimental Study on a Dual-Fuel Generator Fueled With Diesel and Simulated Biogas. , 2021, , .		0
113	A Study on the Use of Intake Flow Path Modification to Reduce Methane Slip of a Natural Gas-Diesel Dual-Fuel Engine. , 0, , .		0
114	An Experimental Study On a Dual-Fuel Generator Fueled with Diesel and Simulated Biogas. Journal of Engineering for Gas Turbines and Power, 2022, , .	0.5	0