## Xue-Song Bai

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2604371/publications.pdf

Version: 2024-02-01

57758 114465 6,328 213 44 63 citations h-index g-index papers 213 213 213 2812 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Turbulence and combustion interaction: High resolution local flame front structure visualization using simultaneous single-shot PLIF imaging of CH, OH, and CH2O in a piloted premixed jet flame. Combustion and Flame, 2010, 157, 1087-1096.	5.2	156
2	Large eddy simulation and experimental studies of a confined turbulent swirling flow. Physics of Fluids, 2004, 16, 3306-3324.	4.0	137
3	Chemical kinetic modelling of ammonia/hydrogen/air ignition, premixed flame propagation and NO emission. Fuel, 2019, 246, 24-33.	6.4	137
4	Characteristics of oxy-fuel combustion in gas turbines. Applied Energy, 2012, 89, 387-394.	10.1	117
5	Comparison of well-mixed and multiple representative interactive flamelet approaches for diesel spray combustion modelling. Combustion Theory and Modelling, 2014, 18, 65-88.	1.9	117
6	Distributed reactions in highly turbulent premixed methane/air flames. Combustion and Flame, 2015, 162, 2937-2953.	<b>5.</b> 2	117
7	Laser-induced fluorescence of formaldehyde in combustion using third harmonic Nd:YAG laser excitation. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 3347-3356.	3.9	113
8	Large eddy simulation and laser diagnostic studies on a low swirl stratified premixed flame. Combustion and Flame, 2009, 156, 25-36.	<b>5.</b> 2	109
9	Large eddy simulation of n-Dodecane spray combustion in a high pressure combustion vessel. Applied Energy, 2014, 136, 373-381.	10.1	100
10	Experimental and modeling study of liquid fuel injection and combustion in diesel engines with a common rail injection system. Applied Energy, 2018, 230, 287-304.	10.1	94
11	High-order Cartesian grid method for calculation of incompressible turbulent flows. International Journal for Numerical Methods in Fluids, 2001, 36, 687-709.	1.6	89
12	Simultaneous multi-species and temperature visualization of premixed flames in the distributed reaction zone regime. Proceedings of the Combustion Institute, 2015, 35, 1409-1416.	3.9	83
13	Towards a comprehensive optimization of engine efficiency and emissions by coupling artificial neural network (ANN) with genetic algorithm (GA). Energy, 2021, 225, 120331.	8.8	82
14	LIBS measurements and numerical studies of potassium release during biomass gasification. Proceedings of the Combustion Institute, 2015, 35, 2389-2396.	3.9	80
15	Multiple-objective optimization of methanol/diesel dual-fuel engine at low loads: A comparison of reactivity controlled compression ignition (RCCI) and direct dual fuel stratification (DDFS) strategies. Fuel, 2020, 262, 116673.	6.4	80
16	Detailed numerical simulation of transient mixing and combustion of premixed methane/air mixtures in a pre-chamber/main-chamber system relevant to internal combustion engines. Combustion and Flame, 2018, 188, 357-366.	5.2	79
17	Investigation of local flame structures and statistics in partially premixed turbulent jet flames using simultaneous single-shot CH and OH planar laser-induced fluorescence imaging. Combustion and Flame, 2008, 154, 802-818.	5.2	78
18	Computational study of the combustion process and NO formation in a small-scale wood pellet furnace. Fuel, 2007, 86, 1465-1474.	6.4	74

#	Article	IF	Citations
19	Large Eddy Simulation of the fuel transport and mixing process in a scramjet combustor with rearwall-expansion cavity. Acta Astronautica, 2016, 126, 375-381.	3.2	74
20	Experimental and modeling study of laminar burning velocity of biomass derived gases/air mixtures. International Journal of Hydrogen Energy, 2011, 36, 3769-3777.	7.1	73
21	Simultaneous visualization of OH, CH, CH2O and toluene PLIF in a methane jet flame with varying degrees of turbulence. Proceedings of the Combustion Institute, 2013, 34, 1475-1482.	3.9	72
22	Thin reaction zone and distributed reaction zone regimes in turbulent premixed methane/air flames: Scalar distributions and correlations. Combustion and Flame, 2017, 175, 220-236.	5.2	72
23	Ignition processes and modes excited by laser-induced plasma in a cavity-based supersonic combustor. Applied Energy, 2018, 228, 1777-1782.	10.1	67
24	Direct numerical simulation of lean hydrogen/air auto-ignition in a constant volume enclosure. Combustion and Flame, 2013, 160, 1706-1716.	5.2	63
25	Effect of cavity geometry on fuel transport and mixing processes in a scramjet combustor. Aerospace Science and Technology, 2018, 80, 309-314.	4.8	63
26	Large eddy simulation and experiments of stratified lean premixed methane/air turbulent flames. Proceedings of the Combustion Institute, 2007, 31, 1467-1475.	3.9	61
27	Combustion and Emission Characteristics of Ammonia under Conditions Relevant to Modern Gas Turbines. Combustion Science and Technology, 2021, 193, 2514-2533.	2.3	61
28	Biomass steam gasification in bubbling fluidized bed for higher-H2 syngas: CFD simulation with coarse grain model. International Journal of Hydrogen Energy, 2019, 44, 6448-6460.	7.1	60
29	Structure and Laminar Flame Speed of an Ammonia/Methane/Air Premixed Flame under Varying Pressure and Equivalence Ratio. Energy &	5.1	60
30	A fully divergence-free method for generation of inhomogeneous and anisotropic turbulence with large spatial variation. Journal of Computational Physics, 2014, 256, 234-253.	3.8	59
31	Transition from HCCI to PPC: the Sensitivity of Combustion Phasing to the Intake Temperature and the Injection Timing with and without EGR. , $0$ , , .		57
32	Development of improved PLIF CH detection using an Alexandrite laser for single-shot investigation of turbulent and lean flames. Proceedings of the Combustion Institute, 2007, 31, 727-735.	3.9	55
33	Structures and burning velocity of biomass derived gas flames. International Journal of Hydrogen Energy, 2010, 35, 542-555.	7.1	55
34	Experimental and kinetic modelling investigation on NO, CO and NH3 emissions from NH3/CH4/air premixed flames. Fuel, 2019, 254, 115693.	6.4	55
35	Direct numerical simulation of lean premixed CH4/air and H2/air flames at high KarlovitzÂnumbers. International Journal of Hydrogen Energy, 2014, 39, 20216-20232.	7.1	54
36	An improved high-order scheme for DNS of low Mach number turbulent reacting flows based on stiff chemistry solver. Journal of Computational Physics, 2012, 231, 5504-5521.	3.8	53

#	Article	IF	CITATIONS
37	Detailed soot modeling in turbulent jet diffusion flames. Proceedings of the Combustion Institute, 1998, 27, 1623-1630.	0.3	52
38	Combustion of NH <sub>3</sub> /CH <sub>4</sub> /Air and NH <sub>3</sub> /H <sub>2</sub> /Air Mixtures in a Porous Burner: Experiments and Kinetic Modeling. Energy &	5.1	52
39	Large eddy simulation of turbulent premixed flames using level-set G-equation. Proceedings of the Combustion Institute, 2005, 30, 583-591.	3.9	51
40	Structure and stabilization mechanism of a stratified premixed low swirl flame. Proceedings of the Combustion Institute, 2011, 33, 1567-1574.	3.9	51
41	Investigation of radiative heat transfer in fixed bed biomass furnaces. Fuel, 2008, 87, 2141-2153.	6.4	50
42	Multidimensional chemistry coordinate mapping approach for combustion modelling with finite-rate chemistry. Combustion Theory and Modelling, 2012, 16, 1109-1132.	1.9	50
43	A Comprehensive Mathematical Model for Biomass Combustion. Combustion Science and Technology, 2014, 186, 574-593.	2.3	50
44	Structural evolution of biomass char and its effect on the gasification rate. Applied Energy, 2017, 185, 998-1006.	10.1	49
45	Large eddy simulation of spray combustion using flamelet generated manifolds combined with artificial neural networks. Energy and Al, 2020, 2, 100021.	10.6	46
46	Flame structure analysis for categorization of lean premixed CH4/air and H2/air flames at high Karlovitz numbers: Direct numerical simulation studies. Proceedings of the Combustion Institute, 2015, 35, 1425-1432.	3.9	45
47	On large eddy simulation of diesel spray for internal combustion engines. International Journal of Heat and Fluid Flow, 2015, 53, 68-80.	2.4	45
48	Recent Development in Numerical Simulations and Experimental Studies of Biomass Thermochemical Conversion. Energy & Energy & 2021, 35, 6940-6963.	5.1	45
49	Onset of cellular flame instability in adiabatic CH4/O2/CO2 and CH4/air laminar premixed flames stabilized on a flat-flame burner. Combustion and Flame, 2013, 160, 1276-1286.	<b>5.</b> 2	44
50	Large Eddy Simulation of Air Entrainment and Mixing in Reacting and Non-Reacting Diesel Sprays. Flow, Turbulence and Combustion, 2014, 93, 385-404.	2.6	44
51	Fractal flame structure due to the hydrodynamic Darrieus-Landau instability. Physical Review E, 2015, 92, 063028.	2.1	44
52	Modeling of alkali metal release during biomass pyrolysis. Proceedings of the Combustion Institute, 2017, 36, 2243-2251.	3.9	44
53	Effects of EGR on the structure and emissions of diesel combustion. Proceedings of the Combustion Institute, 2013, 34, 3091-3098.	3.9	43
54	Effect of combustor geometry and fuel injection scheme on the combustion process in a supersonic flow. Acta Astronautica, 2016, 129, 44-51.	3.2	42

#	Article	IF	Citations
55	Pulverised wood combustion in a vertical furnace: Experimental and computational analyses. Applied Energy, 2013, 112, 454-464.	10.1	41
56	Direct numerical simulation of PRF70/air partially premixed combustion under IC engine conditions. Proceedings of the Combustion Institute, 2015, 35, 2975-2982.	3.9	41
57	Experimental and numerical study of a conical turbulent partially premixed flame. Proceedings of the Combustion Institute, 2009, 32, 1811-1818.	3.9	39
58	Large eddy simulation of hydrogen combustion in supersonic flows using an Eulerian stochastic fields method. International Journal of Hydrogen Energy, 2017, 42, 1264-1275.	7.1	39
59	Pure rotational CARS measurements of temperature and relative O2-concentration in a low swirl turbulent premixed flame. Proceedings of the Combustion Institute, 2013, 34, 3629-3636.	3.9	38
60	Combustion characteristics of gasoline DICI engine in the transition from HCCI to PPC: Experiment and numerical analysis. Energy, 2019, 185, 922-937.	8.8	37
61	Fluorescence lifetimes of formaldehyde (H2CO) in the band system at elevated temperatures and pressures. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 1043-1053.	3.9	35
62	Effect of split fuel injection on heat release and pollutant emissions in partially premixed combustion of PRF70/air/EGR mixtures. Applied Energy, 2015, 149, 283-296.	10.1	35
63	Multi-species PLIF study of the structures of turbulent premixed methane/air jet flames in the flamelet and thin-reaction zones regimes. Combustion and Flame, 2017, 182, 324-338.	5.2	35
64	Structures of turbulent premixed flames in the high Karlovitz number regime – DNS analysis. Fuel, 2018, 216, 627-638.	6.4	35
65	A multi-zone chemistry mapping approach for direct numerical simulation of auto-ignition and flame propagation in a constant volume enclosure. Combustion Theory and Modelling, 2012, 16, 221-249.	1.9	34
66	A direct numerical simulation study of interface propagation in homogeneous turbulence. Journal of Fluid Mechanics, 2015, 772, 127-164.	3.4	33
67	Evaluation and optimisation of phenomenological multi-step soot model for spray combustion under diesel engine-like operating conditions. Combustion Theory and Modelling, 2015, 19, 279-308.	1.9	33
68	Effect of burner geometry on swirl stabilized methane/air flames: A joint LES/OH-PLIF/PIV study. Fuel, 2017, 207, 533-546.	6.4	33
69	Effect of geometrical contraction on vortex breakdown of swirling turbulent flow in a model combustor. Fuel, 2016, 170, 210-225.	6.4	32
70	Effects of ambient pressure on ignition and flame characteristics in diesel spray combustion. Fuel, 2019, 237, 676-685.	6.4	32
71	Effects of ambient methanol on pollutants formation in dual-fuel spray combustion at varying ambient temperatures: A large-eddy simulation. Applied Energy, 2020, 279, 115774.	10.1	32
72	Investigation of turbulent premixed methane/air and hydrogen-enriched methane/air flames in a laboratory-scale gas turbine model combustor. International Journal of Hydrogen Energy, 2021, 46, 13377-13388.	7.1	32

#	Article	IF	CITATIONS
73	Modelling of turbulent reacting flows past a bluff body: assessment of accuracy and efficiency. Computers and Fluids, 1994, 23, 507-521.	2.5	31
74	Swirling turbulent flows in a combustion chamber with and without heat release. Fuel, 2013, 104, 133-146.	6.4	31
75	Visualization of multi-regime turbulent combustion in swirl-stabilized lean premixed flames. Combustion and Flame, 2015, 162, 2954-2958.	5.2	31
76	Numerical simulation of ignition mode and ignition delay time of pulverized biomass particles. Combustion and Flame, 2019, 206, 400-410.	5.2	31
77	Level-set flamelet library approach for premixed turbulent combustion. Experimental Thermal and Fluid Science, 2000, 21, 87-98.	2.7	30
78	The role of a split injection strategy in the mixture formation and combustion of diesel spray: A large-eddy simulation. Proceedings of the Combustion Institute, 2019, 37, 4709-4716.	3.9	30
79	Effect of piston bowl geometry and compression ratio on in-cylinder combustion and engine performance in a gasoline direct-injection compression ignition engine under different injection conditions. Applied Energy, 2020, 280, 115920.	10.1	30
80	Stabilization and liftoff length of a non-premixed methane/air jet flame discharging into a high-temperature environment: An accelerated transported PDF method. Combustion and Flame, 2015, 162, 408-419.	5.2	29
81	Structures and stabilization of low calorific value gas turbulent partially premixed flames in a conical burner. Experimental Thermal and Fluid Science, 2010, 34, 412-419.	2.7	28
82	Emission characteristics and engine performance of gasoline DICI engine in the transition from HCCI to PPC. Fuel, 2019, 254, 115619.	6.4	28
83	Structure and burning velocity of turbulent premixed methane/air jet flames in thin-reaction zone and distributed reaction zone regimes. Proceedings of the Combustion Institute, 2019, 37, 2537-2544.	3.9	28
84	Effect of Turbulence on HCCI Combustion. , 0, , .		27
85	Effects of fuel cetane number on the structure of diesel spray combustion: An accelerated Eulerian stochastic fields method. Combustion Theory and Modelling, 2015, 19, 549-567.	1.9	27
86	A semiâ€implicit scheme for large Eddy simulation of piston engine flow and combustion. International Journal for Numerical Methods in Fluids, 2013, 71, 13-40.	1.6	26
87	Laser-Induced Plasma Ignition in a Cavity-Based Scramjet Combustor. AIAA Journal, 2018, 56, 4884-4892.	2.6	26
88	Lift-off and stabilization of n-heptane combustion in a diesel engine with a multiple-nozzle injection. Proceedings of the Combustion Institute, 2013, 34, 3031-3038.	3.9	25
89	Modelling of diesel spray flames under engine-like conditions using an accelerated Eulerian Stochastic Field method. Combustion and Flame, 2018, 193, 363-383.	5.2	25
90	Numerical study of the combustion and application of SNCR for NO reduction in a lab-scale biomass boiler. Fuel, 2021, 293, 120154.	6.4	25

#	Article	IF	CITATIONS
91	Modelling of pulverised wood combustion using a functional group model. Combustion Theory and Modelling, 2008, 12, 883-904.	1.9	24
92	Comparison of LES Models Applied to a Bluff Body Stabilized Flame. , 2009, , .		24
93	Numerical computations and optical diagnostics of unsteady partially premixed methane/air flames. Combustion and Flame, 2010, 157, 915-924.	5.2	24
94	Investigation of OH and CH2O distributions at ultra-high repetition rates by planar laser induced fluorescence imaging in highly turbulent jet flames. Fuel, 2018, 234, 1528-1540.	6.4	24
95	Experimental and Kinetic Investigation of Stoichiometric to Rich NH <sub>3</sub> /H <sub>2</sub> /Air Flames in a Swirl and Bluff-Body Stabilized Burner. Energy & Energy	5.1	24
96	Laminar flamelet structure at low and vanishing scalar dissipation rate. Combustion and Flame, 2000, 120, 285-300.	5.2	23
97	Flame growth and wrinkling in a turbulent flow. Applied Physics B: Lasers and Optics, 2000, 71, 711-716.	2.2	23
98	Large eddy simulations of turbulent swirling flows in a dump combustor: a sensitivity study. International Journal for Numerical Methods in Fluids, 2005, 47, 99-120.	1.6	23
99	Characterization of the reaction zone structures in a laboratory combustor using optical diagnostics: from flame to flameless combustion. Proceedings of the Combustion Institute, 2017, 36, 4305-4312.	3.9	23
100	Assessment of uncertainties of laminar flame speed of premixed flames as determined using a Bunsen burner at varying pressures. Applied Energy, 2018, 227, 149-158.	10.1	23
101	Detailed numerical simulation of syngas combustion under partially premixed combustion engine conditions. International Journal of Hydrogen Energy, 2012, 37, 17285-17293.	7.1	22
102	Tubulent Methane/Air Premixed Flame Structure at High Karlovitz Numbers. Flow, Turbulence and Combustion, 2013, 90, 325-341.	2.6	22
103	The hybrid RANS/LES of partially premixed supersonic combustion using G/Z flamelet model. Acta Astronautica, 2016, 127, 375-383.	3.2	22
104	CFD modeling of biomass combustion and gasification in fluidized bed reactors using a distribution kernel method. Combustion and Flame, 2022, 236, 111744.	5.2	22
105	Asymptotic Analysis of the Structure of Moderately Rich Methane-Air Flames. Combustion and Flame, 1998, 113, 589-602.	5.2	21
106	Pressure effect on soot formation in turbulent diffusion flames. Chemosphere, 2001, 42, 811-821.	8.2	21
107	Asymptotic structure of rich methane-air flames. Combustion and Flame, 2001, 127, 2265-2277.	5.2	21
108	A generalized flamelet tabulation method for partially premixed combustion. Combustion and Flame, 2018, 198, 54-68.	5.2	21

#	Article	IF	CITATIONS
109	Flame structure and burning velocity of ammonia/air turbulent premixed flames at high Karlovitz number conditions. Combustion and Flame, 2022, 238, 111943.	5.2	21
110	Large eddy simulation of bluff body flames close to blow-off using an Eulerian stochastic field method. Combustion and Flame, 2017, 181, 1-15.	5.2	20
111	Nonlinear evolution of 2D cellular lean hydrogen/air premixed flames with varying initial perturbations in the elevated pressure environment. International Journal of Hydrogen Energy, 2017, 42, 3790-3803.	7.1	20
112	Modelling of pulverised wood combustion: a comparison of different models. Progress in Computational Fluid Dynamics, 2006, 6, 188.	0.2	19
113	Three-dimensional direct numerical simulation study of conditioned moments associated with front propagation in turbulent flows. Physics of Fluids, 2014, 26, .	4.0	19
114	Combustion process in a biomass grate fired industry furnace: a CFD study. Progress in Computational Fluid Dynamics, 2006, 6, 278.	0.2	18
115	Effect of Partial Premixing on Stabilization and Local Extinction of Turbulent Methane/Air Flames. Flow, Turbulence and Combustion, 2013, 90, 269-284.	2.6	17
116	Development of Chemistry Coordinate Mapping Approach for Turbulent Partially Premixed Combustion. Flow, Turbulence and Combustion, 2013, 90, 285-299.	2.6	17
117	Evolution of averaged local premixed flame thickness in a turbulent flow. Combustion and Flame, 2019, 207, 232-249.	5.2	17
118	LES study of diesel flame/wall interaction and mixing mechanisms at different wall distances. Proceedings of the Combustion Institute, 2021, 38, 5597-5604.	3.9	17
119	LES/TPDF investigation of the effects of ambient methanol concentration on pilot fuel ignition characteristics and reaction front structures. Fuel, 2021, 287, 119502.	6.4	17
120	Structure and scalar correlation of ammonia/air turbulent premixed flames in the distributed reaction zone regime. Combustion and Flame, 2022, 241, 112090.	5 <b>.</b> 2	17
121	Large Eddy Simulation and Extended Dynamic Mode Decomposition of Flow-Flame Interaction in a Lean Premixed Low Swirl Stabilized Flame. Flow, Turbulence and Combustion, 2014, 93, 505-519.	2.6	16
122	A priori analysis of sub-grid variance of a reactive scalar using DNS data of high Ka flames. Combustion Theory and Modelling, 2019, 23, 885-906.	1.9	16
123	LES/PDF modeling of swirl-stabilized non-premixed methane/air flames with local extinction and re-ignition. Combustion and Flame, 2020, 219, 102-119.	5 <b>.</b> 2	16
124	Large-eddy simulation of n-dodecane spray flame: Effects of nozzle diameters on autoignition at varying ambient temperatures. Proceedings of the Combustion Institute, 2021, 38, 3427-3434.	3.9	16
125	Assessment of a flamelet approach to evaluating mean species mass fractions in moderately and highly turbulent premixed flames. Physics of Fluids, 2021, 33, .	4.0	16
126	Numerical and Experimental Investigation of Turbulent Flows in a Diesel Engine. , 0, , .		15

#	Article	IF	Citations
127	Effect of Turbulence and Initial Temperature Inhomogeneity on Homogeneous Charge Compression Ignition Combustion., 2006,,.		15
128	Onset of cellular instability in adiabatic H2/O2/N2 premixed flames anchored to a flat-flame heat-flux burner. International Journal of Hydrogen Energy, 2013, 38, 14866-14878.	7.1	15
129	Large eddy simulations and rotational CARS/PIV/PLIF measurements of a lean premixed low swirl stabilized flame. Combustion and Flame, 2014, 161, 2539-2551.	5.2	15
130	Effect of Pore Size on the Gasification of Biomass Char. Energy Procedia, 2015, 75, 779-785.	1.8	15
131	Numerical study on K/S/Cl release during devolatilization of pulverized biomass at high temperature. Proceedings of the Combustion Institute, 2021, 38, 3909-3917.	3.9	15
132	An investigation on early evolution of soot in n-dodecane spray combustion using large eddy simulation. Fuel, 2021, 293, 120072.	6.4	15
133	Rate-ratio asymptotic analysis of non-premixed methane flames. Combustion Theory and Modelling, 1999, 3, 51-75.	1.9	15
134	Calculation of turbulent combustion of propane in furnaces. International Journal for Numerical Methods in Fluids, 1993, 17, 221-239.	1.6	14
135	Sensitivity study of turbulent reacting flow modeling in gas turbine combustors. AIAA Journal, 1995, 33, 1857-1864.	2.6	14
136	Absorption of formaldehyde (H2CO) in the band system at elevated temperatures and pressures. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 821-828.	3.9	14
137	Rate-ratio asymptotic analysis of the structure and extinction of partially premixed flames. Proceedings of the Combustion Institute, 2007, 31, 1181-1188.	3.9	14
138	Large Eddy Simulation and Experiments of the Auto-Ignition Process of Lean Ethanol/Air Mixture in HCCI Engines. SAE International Journal of Fuels and Lubricants, 2008, 1, 1110-1119.	0.2	14
139	Numerical Investigation of Methane/Hydrogen/Air Partially Premixed Flames in the SGT-800 Burner Fitted to a Combustion Rig. Flow, Turbulence and Combustion, 2016, 96, 987-1003.	2.6	14
140	Direct numerical simulation of H2/air combustion with composition stratification in a constant volume enclosure relevant to HCCI engines. International Journal of Hydrogen Energy, 2016, 41, 13758-13770.	7.1	14
141	Effects of Nozzle Diameter on Diesel Spray Flames: A numerical study using an Eulerian Stochastic Field Method. Energy Procedia, 2017, 142, 1028-1033.	1.8	14
142	Effect of Start of Injection on the Combustion Characteristics in a Heavy-Duty DICI Engine Running on Methanol., 2017,,.		14
143	Gas phase combustion in the vicinity of a biomass particle during devolatilization $\hat{a} \in Model$ development and experimental verification. Combustion and Flame, 2018, 196, 351-363.	5.2	14
144	"Large eddy simulation and laser diagnostic studies on a low swirl stratified premixed flame― [Combust. Flame Vol. 155, Issue 3]. Combustion and Flame, 2008, 155, 357.	5.2	13

#	Article	IF	CITATIONS
145	Effect of Temperature Stratification on the Auto-ignition of Lean Ethanol/Air Mixture in HCCl engine. , 2008, , .		13
146	Numerical and experimental study of flame propagation and quenching of lean premixed turbulent low swirl flames at different Reynolds numbers. Combustion and Flame, 2015, 162, 2582-2591.	5.2	13
147	Diesel flame lift-off stabilization in the presence of laser-ignition: aÂnumerical study. Combustion Theory and Modelling, 2015, 19, 696-713.	1.9	13
148	Flame investigations of a laboratory-scale CECOST swirl burner at atmospheric pressure conditions. Fuel, 2020, 279, 118421.	6.4	13
149	Comparison of efficiency and emission characteristics in a direct-injection compression ignition engine fuelled with iso-octane and methanol under low temperature combustion conditions. Applied Energy, 2022, 312, 118714.	10.1	13
150	Investigation of Chemical Kinetics on Soot Formation Event of n-Heptane Spray Combustion. , 0, , .		12
151	Transport of Pulverized Wood Particles in Turbulent Flow: Numerical and Experimental Studies. Energy Procedia, 2014, 61, 1540-1543.	1.8	12
152	Filtered Reaction Rate Modelling in Moderate and High Karlovitz Number Flames: an a Priori Analysis. Flow, Turbulence and Combustion, 2019, 103, 643-665.	2.6	12
153	Multi-region modeling of conversion of a thick biomass particle and the surrounding gas phase reactions. Combustion and Flame, 2022, 237, 111725.	5.2	12
154	Dual Fuel Combustion of N-heptane/methanol-air-EGR Mixtures. Energy Procedia, 2017, 105, 4943-4948.	1.8	12
155	Numerical Simulation of the ECN Spray A Using Multidimensional Chemistry Coordinate Mapping: n-Dodecane Diesel Combustion., 0, , .		11
156	Jet-jet interaction in multiple injections: A large-eddy simulation study. Fuel, 2018, 234, 286-295.	6.4	11
157	Effects of ambient pressure and nozzle diameter on ignition characteristics in diesel spray combustion. Fuel, 2021, 290, 119887.	6.4	11
158	Large Eddy Simulation of Partially Premixed Combustion in an Internal Combustion Engine., 0,,.		10
159	Heat transfer and flame stabilization of laminar premixed flames anchored to a heat-flux burner. International Journal of Hydrogen Energy, 2016, 41, 2037-2051.	7.1	10
160	Combustion characteristics of n-heptane spray combustion in a low temperature reform gas/air environment. Fuel, 2021, 293, 120377.	6.4	10
161	Large eddy simulation of n-heptane/syngas pilot ignition spray combustion: Ignition process, liftoff evolution and pollutant emissions. Energy, 2021, 233, 121080.	8.8	10
162	Injection of Fuel at High Pressure Conditions: LES Study. , 0, , .		9

#	Article	IF	Citations
163	Modelling of Methanol Combustion in a Direct Injection Compression Ignition Engine using an Accelerated Stochastic Fields Method. Energy Procedia, 2017, 105, 1326-1331.	1.8	9
164	Structure and propagation of n-heptane/air premixed flame in low temperature ignition regime. Applied Energy, 2020, 275, 115320.	10.1	9
165	Experimental and numerical study of flow and ignition and lean blowout characteristics of jet-cooled wall flameholder in a dual-mode combustor. Aerospace Science and Technology, 2022, 122, 107403.	4.8	9
166	Direct numerical simulation of flame/spontaneous ignition interaction fueled with hydrogen under SACI engine conditions. International Journal of Hydrogen Energy, 2017, 42, 3842-3852.	7.1	8
167	Large-eddy simulation of the injection timing effects on the dual-fuel spray flame. Fuel, 2022, 310, 122445.	6.4	8
168	Experimental study on combustion and flow resistance characteristics of an afterburner with air-cooled bluff-body flameholder. Aerospace Science and Technology, 2022, 123, 107488.	4.8	8
169	Effects of pre-injection on ignition, combustion and emissions of spray under engine-like conditions. Combustion and Flame, 2022, 241, 112082.	5.2	8
170	Large Eddy Simulation of Turbulent Combustion in a Spark-Assisted Homogenous Charge Compression Ignition Engine. Combustion Science and Technology, 2012, 184, 1051-1065.	2.3	7
171	The Effect of Injection Pressure on the NOx Emission Rates in a Heavy-Duty DICI Engine Running on Methanol , 0, , .		7
172	FAST MULTIGRID METHOD FOR 3â€D TURBULENT INCOMPRESSIBLE FLOWS. International Journal of Numerical Methods for Heat and Fluid Flow, 1992, 2, 127-137.	2.8	6
173	Large Eddy Simulation of the flame propagation process in an ethylene fueled scramjet combustor in a supersonic flow. , 2017, , .		6
174	Large eddy simulation of soot formation and oxidation for different ambient temperatures and oxygen levels. Applied Energy, 2022, 306, 118094.	10.1	6
175	Flow and Temperature Distribution in an Experimental Engine: LES Studies and Thermographic Imaging. , $2010, $ , .		5
176	Rate-Ratio Asymptotic Analysis of the Influence of Addition of Hydrogen on the Structure and Mechanisms of Extinction of Nonpremixed Methane Flames. Combustion Science and Technology, 2015, 187, 3-26.	2.3	5
177	Numerical and Experimental Study on Laminar Methane/Air Premixed Flames at Varying Pressure. Energy Procedia, 2017, 105, 4970-4975.	1.8	5
178	Rate-ratio asymptotic analysis of the influence of stoichiometric mixture fraction on structure and extinction of laminar, nonpremixed methane flames with comparison to experiments. Proceedings of the Combustion Institute, 2017, 36, 1495-1503.	3.9	5
179	The Effect of Splitting Timing on Mixing in a Jet with Double Injections. Flow, Turbulence and Combustion, 2018, 101, 1157-1171.	2.6	5
180	Numerical and Experimental Investigation of the CeCOST Swirl Burner. , 2018, , .		5

#	Article	IF	Citations
181	LES of Hydrogen Enriched Methane/Air Combustion in the SGT-800 Burner at Real Engine Conditions. , 2018, , .		5
182	Numerical simulation of a mixed-mode reaction front in a PPC engine. Proceedings of the Combustion Institute, 2021, 38, 5703-5711.	3.9	5
183	PDF of distance function for level-set flamelet library modelling. International Journal for Numerical Methods in Fluids, 2003, 41, 653-673.	1.6	4
184	Effects of Negative Valve Overlap on the Auto-ignition Process of Lean Ethanol/Air Mixture in HCCI-Engines. , 2010, , .		4
185	DNS of H2/air Combustion in a Constant Volume Enclosure Relevant to HCCI Engines. Energy Procedia, 2014, 61, 1536-1539.	1.8	4
186	Rate-ratio asymptotic analysis of the structure and mechanisms of extinction of nonpremixed CH 4 /N 2 –O 2 /N 2 O/N 2 flames. Proceedings of the Combustion Institute, 2015, 35, 945-953.	3.9	4
187	Numerical studies of flame extinction and re-ignition behaviors in a novel, ultra-lean, non-premixed model GT burner using LES-ESF method. Fuel, 2020, 262, 116617.	6.4	4
188	A Multi-Grid Method for Calculation of Turbulence and Combustion. , 1994, , 131-142.		4
189	Numerical Investigation of Methanol Ignition Sequence in an Optical PPC Engine with Multiple Injection Strategies. , 0, , .		4
190	Investigation of flame characteristics and cooling effectiveness of jet-cooled wall flameholders in vitiated flow. Aerospace Science and Technology, 2022, 127, 107710.	4.8	4
191	The computation of transonic analysis and design. Acta Mechanica, 1989, 78, 81-94.	2.1	3
192	Mixing in Wall-Jets in a Heavy-Duty Diesel Engine: A LES Study. , 2014, , .		3
193	Effect of Volatile Reactions on the Thermochemical Conversion of Biomass Particles. Energy Procedia, 2017, 105, 4648-4654.	1.8	3
194	Rate-ratio asymptotic analysis of the influence of addition of carbon monoxide on the structure and mechanisms of extinction of nonpremixed methane flames with comparison to experiments. Combustion and Flame, 2017, 175, 107-117.	5.2	3
195	Effect of In-cylinder Flow Structures on Late Cycle Soot Oxidation in a Quiescent Heavy-duty Diesel Engine. Combustion Science and Technology, 2022, 194, 316-336.	2.3	3
196	Large Eddy Simulation and Experimental Analysis of Combustion Dynamics in a Gas Turbine Burner. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	3
197	Displacement speed analysis of surface propagation in moderately turbulent premixed reacting waves. Physics of Fluids, 2021, 33, 035109.	4.0	3
198	On element mass conservation in Eulerian stochastic fields modeling of turbulent combustion. Combustion and Flame, 2022, 239, 111577.	5.2	2

#	Article	IF	CITATIONS
199	Effects of ambient CO2 and H2O on soot processes in n-dodecane spray combustion using large eddy simulation. Fuel, 2022, 312, 122700.	6.4	2
200	Thermal Radiation Heat Transfer and Biomass Combustion in a Large-Scale Fixed Bed Boiler., 2003,, 405.		1
201	Assessment and modification of subâ€cellâ€fix method for reâ€initialization of levelâ€set distance function. International Journal for Numerical Methods in Fluids, 2010, 62, 211-236.	1.6	1
202	A MODIFIED SUB-CELL-FIX METHOD FOR RE-INITIALIZATION OF LEVEL-SET DISTANCE FUNCTION AND ITS DEPENDENCE TESTS ON GRID STRETCHING. Modern Physics Letters B, 2010, 24, 1615-1629.	1.9	1
203	Numerical and Experimental Investigations of the Siemens SGT-800 Burner Fitted to a Water Rig. , 2017, , .		1
204	Numerical Estimation of Asymmetry of In-Cylinder Flow in a Light Duty Direct Injection Engine with Re-Entrant Piston Bowl. , $0$ , , .		1
205	Large Eddy Simulation of Bluff-Body Flame Approaching Blow-Off: A Sensitivity Study. Combustion Science and Technology, 2019, 191, 1815-1842.	2.3	1
206	Numerical Study of the Influence of Turbulence–Chemistry Interaction on URANS Simulations of Diesel Spray Flame Structures under Marine Engine-like Conditions. Energy & Energy & 2021, 35, 11457-11467.	5.1	1
207	Numerical Simulation of Turbulent Biogas Combustion. , 2007, , 885.		0
208	Large Eddy Simulation of Turbulent Flows in a Laboratory Reciprocating Engine. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2012, , 461-470.	0.3	0
209	Numerical Investigation of Hydrogen Enriched Natural Gas in the SGT-800 Burner. , 2015, , .		0
210	Numerical Simulation of Turbulent Combustion in Internal Combustion Engines. Energy, Environment, and Sustainability, 2018, , 513-541.	1.0	0
211	Heat Loss Analysis for Various Piston Geometries in a Heavy-Duty Methanol PPC Engine. , 2018, , .		0
212	The Role of Multiple Injections on Combustion in a Light-Duty PPC Engine. Energies, 2020, 13, 5535.	3.1	0
213	Rate-Ratio Asymptotic Analysis of Strained Premixed Laminar Methane Flame Under Nonadiabatic Conditions. Combustion Science and Technology, 0, , 1-25.	2.3	O