

Xue-Song Bai

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	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
2	On element mass conservation in Eulerian stochastic fields modeling of turbulent combustion. Combustion and Flame, 2022, 239, 111577.	5.2	2
3	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
4	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
5	Large eddy simulation of soot formation and oxidation for different ambient temperatures and oxygen levels. Applied Energy, 2022, 306, 118094.	10.1	6
6	Large-eddy simulation of the injection timing effects on the dual-fuel spray flame. Fuel, 2022, 310, 122445.	6.4	8
7	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
8	Effects of ambient CO ₂ and H ₂ O on soot processes in n-dodecane spray combustion using large eddy simulation. Fuel, 2022, 312, 122700.	6.4	2
9	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
10	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
11	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
12	Structure and scalar correlation of ammonia/air turbulent premixed flames in the distributed reaction zone regime. Combustion and Flame, 2022, 241, 112090.	5.2	17
13	Effects of pre-injection on ignition, combustion and emissions of spray under engine-like conditions. Combustion and Flame, 2022, 241, 112082.	5.2	8
14	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
15	Combustion and Emission Characteristics of Ammonia under Conditions Relevant to Modern Gas Turbines. Combustion Science and Technology, 2021, 193, 2514-2533.	2.3	61
16	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
17	Numerical simulation of a mixed-mode reaction front in a PPC engine. Proceedings of the Combustion Institute, 2021, 38, 5703-5711.	3.9	5
18	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

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19	Large-eddy simulation of n-dodecane spray flame: Effects of nozzle diameters on autoignition at varying ambient temperatures. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 3427-3434.	3.9	16
20	LES/TPDF investigation of the effects of ambient methanol concentration on pilot fuel ignition characteristics and reaction front structures. <i>Fuel</i> , 2021, 287, 119502.	6.4	17
21	Structure and Laminar Flame Speed of an Ammonia/Methane/Air Premixed Flame under Varying Pressure and Equivalence Ratio. <i>Energy & Fuels</i> , 2021, 35, 7179-7192.	5.1	60
22	Displacement speed analysis of surface propagation in moderately turbulent premixed reacting waves. <i>Physics of Fluids</i> , 2021, 33, 035109.	4.0	3
23	Experimental and Kinetic Investigation of Stoichiometric to Rich $\text{NH}_3/\text{H}_2/\text{Air}$ Flames in a Swirl and Bluff-Body Stabilized Burner. <i>Energy & Fuels</i> , 2021, 35, 7201-7216.	5.1	24
24	Recent Development in Numerical Simulations and Experimental Studies of Biomass Thermochemical Conversion. <i>Energy & Fuels</i> , 2021, 35, 6940-6963.	5.1	45
25	Assessment of a flamelet approach to evaluating mean species mass fractions in moderately and highly turbulent premixed flames. <i>Physics of Fluids</i> , 2021, 33, .	4.0	16
26	Effects of ambient pressure and nozzle diameter on ignition characteristics in diesel spray combustion. <i>Fuel</i> , 2021, 290, 119887.	6.4	11
27	Investigation of turbulent premixed methane/air and hydrogen-enriched methane/air flames in a laboratory-scale gas turbine model combustor. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 13377-13388.	7.1	32
28	Towards a comprehensive optimization of engine efficiency and emissions by coupling artificial neural network (ANN) with genetic algorithm (GA). <i>Energy</i> , 2021, 225, 120331.	8.8	82
29	Numerical study of the combustion and application of SNCR for NO reduction in a lab-scale biomass boiler. <i>Fuel</i> , 2021, 293, 120154.	6.4	25
30	Numerical Study of the Influence of Turbulence–Chemistry Interaction on URANS Simulations of Diesel Spray Flame Structures under Marine Engine-like Conditions. <i>Energy & Fuels</i> , 2021, 35, 11457-11467.	5.1	1
31	Combustion characteristics of n-heptane spray combustion in a low temperature reform gas/air environment. <i>Fuel</i> , 2021, 293, 120377.	6.4	10
32	An investigation on early evolution of soot in n-dodecane spray combustion using large eddy simulation. <i>Fuel</i> , 2021, 293, 120072.	6.4	15
33	Large eddy simulation of n-heptane/syngas pilot ignition spray combustion: Ignition process, liftoff evolution and pollutant emissions. <i>Energy</i> , 2021, 233, 121080.	8.8	10
34	Numerical studies of flame extinction and re-ignition behaviors in a novel, ultra-lean, non-premixed model GT burner using LES-ESF method. <i>Fuel</i> , 2020, 262, 116617.	6.4	4
35	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. <i>Fuel</i> , 2020, 262, 116673.	6.4	80
36	Effects of ambient methanol on pollutants formation in dual-fuel spray combustion at varying ambient temperatures: A large-eddy simulation. <i>Applied Energy</i> , 2020, 279, 115774.	10.1	32

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37	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
38	Flame investigations of a laboratory-scale CECOST swirl burner at atmospheric pressure conditions. Fuel, 2020, 279, 118421.	6.4	13
39	Structure and propagation of n-heptane/air premixed flame in low temperature ignition regime. Applied Energy, 2020, 275, 115320.	10.1	9
40	The Role of Multiple Injections on Combustion in a Light-Duty PPC Engine. Energies, 2020, 13, 5535.	3.1	0
41	Large eddy simulation of spray combustion using flamelet generated manifolds combined with artificial neural networks. Energy and AI, 2020, 2, 100021.	10.6	46
42	LES/PDF modeling of swirl-stabilized non-premixed methane/air flames with local extinction and re-ignition. Combustion and Flame, 2020, 219, 102-119.	5.2	16
43	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
44	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
45	Combustion characteristics of gasoline DICl engine in the transition from HCCI to PPC: Experiment and numerical analysis. Energy, 2019, 185, 922-937.	8.8	37
46	Experimental and kinetic modelling investigation on NO, CO and NH ₃ emissions from NH ₃ /CH ₄ /air premixed flames. Fuel, 2019, 254, 115693.	6.4	55
47	Combustion of NH ₃ /CH ₄ /Air and NH ₃ /H ₂ /Air Mixtures in a Porous Burner: Experiments and Kinetic Modeling. Energy & Fuels, 2019, 33, 12767-12780.	5.1	52
48	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
49	Evolution of averaged local premixed flame thickness in a turbulent flow. Combustion and Flame, 2019, 207, 232-249.	5.2	17
50	Emission characteristics and engine performance of gasoline DICl engine in the transition from HCCI to PPC. Fuel, 2019, 254, 115619.	6.4	28
51	Numerical simulation of ignition mode and ignition delay time of pulverized biomass particles. Combustion and Flame, 2019, 206, 400-410.	5.2	31
52	Biomass steam gasification in bubbling fluidized bed for higher-H ₂ syngas: CFD simulation with coarse grain model. International Journal of Hydrogen Energy, 2019, 44, 6448-6460.	7.1	60
53	Chemical kinetic modelling of ammonia/hydrogen/air ignition, premixed flame propagation and NO emission. Fuel, 2019, 246, 24-33.	6.4	137
54	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

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55	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
56	Effects of ambient pressure on ignition and flame characteristics in diesel spray combustion. Fuel, 2019, 237, 676-685.	6.4	32
57	Large Eddy Simulation of Bluff-Body Flame Approaching Blow-Off: A Sensitivity Study. Combustion Science and Technology, 2019, 191, 1815-1842.	2.3	1
58	Numerical Simulation of Turbulent Combustion in Internal Combustion Engines. Energy, Environment, and Sustainability, 2018, , 513-541.	1.0	0
59	Structures of turbulent premixed flames in the high Karlovitz number regime “ DNS analysis. Fuel, 2018, 216, 627-638.	6.4	35
60	The Effect of Splitting Timing on Mixing in a Jet with Double Injections. Flow, Turbulence and Combustion, 2018, 101, 1157-1171.	2.6	5
61	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
62	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
63	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
64	Heat Loss Analysis for Various Piston Geometries in a Heavy-Duty Methanol PPC Engine. , 2018, , .		0
65	A generalized flamelet tabulation method for partially premixed combustion. Combustion and Flame, 2018, 198, 54-68.	5.2	21
66	Laser-Induced Plasma Ignition in a Cavity-Based Scramjet Combustor. AIAA Journal, 2018, 56, 4884-4892.	2.6	26
67	Investigation of OH and CH ₂ O 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
68	Numerical and Experimental Investigation of the CeCOST Swirl Burner. , 2018, , .		5
69	LES of Hydrogen Enriched Methane/Air Combustion in the SGT-800 Burner at Real Engine Conditions. , 2018, , .		5
70	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
71	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
72	Gas phase combustion in the vicinity of a biomass particle during devolatilization “ Model development and experimental verification. Combustion and Flame, 2018, 196, 351-363.	5.2	14

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73	Ignition processes and modes excited by laser-induced plasma in a cavity-based supersonic combustor. Applied Energy, 2018, 228, 1777-1782.	10.1	67
74	Jet-jet interaction in multiple injections: A large-eddy simulation study. Fuel, 2018, 234, 286-295.	6.4	11
75	Structural evolution of biomass char and its effect on the gasification rate. Applied Energy, 2017, 185, 998-1006.	10.1	49
76	Large Eddy Simulation of the flame propagation process in an ethylene fueled scramjet combustor in a supersonic flow. , 2017, , .		6
77	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
78	Effect of Volatile Reactions on the Thermochemical Conversion of Biomass Particles. Energy Procedia, 2017, 105, 4648-4654.	1.8	3
79	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
80	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
81	Numerical and Experimental Investigations of the Siemens SGT-800 Burner Fitted to a Water Rig. , 2017, , .		1
82	Numerical and Experimental Study on Laminar Methane/Air Premixed Flames at Varying Pressure. Energy Procedia, 2017, 105, 4970-4975.	1.8	5
83	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
84	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
85	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
86	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
87	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
88	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
89	Modeling of alkali metal release during biomass pyrolysis. Proceedings of the Combustion Institute, 2017, 36, 2243-2251.	3.9	44
90	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

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91	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
92	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
93	Effect of Start of Injection on the Combustion Characteristics in a Heavy-Duty DICl Engine Running on Methanol. , 2017, , .		14
94	Dual Fuel Combustion of N-heptane/methanol-air-EGR Mixtures. Energy Procedia, 2017, 105, 4943-4948.	1.8	12
95	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
96	The hybrid RANS/LES of partially premixed supersonic combustion using G/Z flamelet model. Acta Astronautica, 2016, 127, 375-383.	3.2	22
97	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
98	Direct numerical simulation of H ₂ /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
99	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
100	Effect of geometrical contraction on vortex breakdown of swirling turbulent flow in a model combustor. Fuel, 2016, 170, 210-225.	6.4	32
101	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
102	Fractal flame structure due to the hydrodynamic Darrieus-Landau instability. Physical Review E, 2015, 92, 063028.	2.1	44
103	Numerical Investigation of Hydrogen Enriched Natural Gas in the SGT-800 Burner. , 2015, , .		0
104	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
105	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
106	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
107	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
108	Flame structure analysis for categorization of lean premixed CH ₄ /air and H ₂ /air flames at high Karlovitz numbers: Direct numerical simulation studies. Proceedings of the Combustion Institute, 2015, 35, 1425-1432.	3.9	45

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109	LIBS measurements and numerical studies of potassium release during biomass gasification. Proceedings of the Combustion Institute, 2015, 35, 2389-2396.	3.9	80
110	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
111	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
112	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
113	A direct numerical simulation study of interface propagation in homogeneous turbulence. Journal of Fluid Mechanics, 2015, 772, 127-164.	3.4	33
114	Visualization of multi-regime turbulent combustion in swirl-stabilized lean premixed flames. Combustion and Flame, 2015, 162, 2954-2958.	5.2	31
115	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
116	Distributed reactions in highly turbulent premixed methane/air flames. Combustion and Flame, 2015, 162, 2937-2953.	5.2	117
117	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
118	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
119	Diesel flame lift-off stabilization in the presence of laser-ignition: a numerical study. Combustion Theory and Modelling, 2015, 19, 696-713.	1.9	13
120	Effect of Pore Size on the Gasification of Biomass Char. Energy Procedia, 2015, 75, 779-785.	1.8	15
121	Mixing in Wall-Jets in a Heavy-Duty Diesel Engine: A LES Study. , 2014, , .		3
122	Transport of Pulverized Wood Particles in Turbulent Flow: Numerical and Experimental Studies. Energy Procedia, 2014, 61, 1540-1543.	1.8	12
123	Three-dimensional direct numerical simulation study of conditioned moments associated with front propagation in turbulent flows. Physics of Fluids, 2014, 26, .	4.0	19
124	DNS of H ₂ /air Combustion in a Constant Volume Enclosure Relevant to HCCI Engines. Energy Procedia, 2014, 61, 1536-1539.	1.8	4
125	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
126	Direct numerical simulation of lean premixed CH ₄ /air and H ₂ /air flames at high Karlovitz numbers. International Journal of Hydrogen Energy, 2014, 39, 20216-20232.	7.1	54

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127	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
128	Large eddy simulation of n-Dodecane spray combustion in a high pressure combustion vessel. Applied Energy, 2014, 136, 373-381.	10.1	100
129	A Comprehensive Mathematical Model for Biomass Combustion. Combustion Science and Technology, 2014, 186, 574-593.	2.3	50
130	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
131	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
132	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
133	A semi-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
134	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
135	Tubulent Methane/Air Premixed Flame Structure at High Karlovitz Numbers. Flow, Turbulence and Combustion, 2013, 90, 325-341.	2.6	22
136	Development of Chemistry Coordinate Mapping Approach for Turbulent Partially Premixed Combustion. Flow, Turbulence and Combustion, 2013, 90, 285-299.	2.6	17
137	Onset of cellular flame instability in adiabatic CH ₄ /O ₂ /CO ₂ and CH ₄ /air laminar premixed flames stabilized on a flat-flame burner. Combustion and Flame, 2013, 160, 1276-1286.	5.2	44
138	Effects of EGR on the structure and emissions of diesel combustion. Proceedings of the Combustion Institute, 2013, 34, 3091-3098.	3.9	43
139	Simultaneous visualization of OH, CH, CH ₂ O 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
140	Swirling turbulent flows in a combustion chamber with and without heat release. Fuel, 2013, 104, 133-146.	6.4	31
141	Pure rotational CARS measurements of temperature and relative O ₂ -concentration in a low swirl turbulent premixed flame. Proceedings of the Combustion Institute, 2013, 34, 3629-3636.	3.9	38
142	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
143	Pulverised wood combustion in a vertical furnace: Experimental and computational analyses. Applied Energy, 2013, 112, 454-464.	10.1	41
144	Onset of cellular instability in adiabatic H ₂ /O ₂ /N ₂ premixed flames anchored to a flat-flame heat-flux burner. International Journal of Hydrogen Energy, 2013, 38, 14866-14878.	7.1	15

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145	Direct numerical simulation of lean hydrogen/air auto-ignition in a constant volume enclosure. Combustion and Flame, 2013, 160, 1706-1716.	5.2	63
146	Multidimensional chemistry coordinate mapping approach for combustion modelling with finite-rate chemistry. Combustion Theory and Modelling, 2012, 16, 1109-1132.	1.9	50
147	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
148	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
149	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
150	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
151	Detailed numerical simulation of syngas combustion under partially premixed combustion engine conditions. International Journal of Hydrogen Energy, 2012, 37, 17285-17293.	7.1	22
152	Characteristics of oxy-fuel combustion in gas turbines. Applied Energy, 2012, 89, 387-394.	10.1	117
153	Structure and stabilization mechanism of a stratified premixed low swirl flame. Proceedings of the Combustion Institute, 2011, 33, 1567-1574.	3.9	51
154	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
155	Assessment and modification of sub-cell-fix method for re-initialization of level-set distance function. International Journal for Numerical Methods in Fluids, 2010, 62, 211-236.	1.6	1
156	Numerical computations and optical diagnostics of unsteady partially premixed methane/air flames. Combustion and Flame, 2010, 157, 915-924.	5.2	24
157	Structures and burning velocity of biomass derived gas flames. International Journal of Hydrogen Energy, 2010, 35, 542-555.	7.1	55
158	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
159	Turbulence and combustion interaction: High resolution local flame front structure visualization using simultaneous single-shot PLIF imaging of CH, OH, and CH ₂ O in a piloted premixed jet flame. Combustion and Flame, 2010, 157, 1087-1096.	5.2	156
160	Flow and Temperature Distribution in an Experimental Engine: LES Studies and Thermographic Imaging. , 2010, , .		5
161	Effects of Negative Valve Overlap on the Auto-ignition Process of Lean Ethanol/Air Mixture in HCCI-Engines. , 2010, , .		4
162	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

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163	Experimental and numerical study of a conical turbulent partially premixed flame. Proceedings of the Combustion Institute, 2009, 32, 1811-1818.	3.9	39
164	Large eddy simulation and laser diagnostic studies on a low swirl stratified premixed flame. Combustion and Flame, 2009, 156, 25-36.	5.2	109
165	Comparison of LES Models Applied to a Bluff Body Stabilized Flame. , 2009, , .		24
166	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
167	“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
168	Investigation of radiative heat transfer in fixed bed biomass furnaces. Fuel, 2008, 87, 2141-2153.	6.4	50
169	Modelling of pulverised wood combustion using a functional group model. Combustion Theory and Modelling, 2008, 12, 883-904.	1.9	24
170	Effect of Temperature Stratification on the Auto-ignition of Lean Ethanol/Air Mixture in HCCI engine. , 2008, , .		13
171	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
172	Numerical Simulation of Turbulent Biogas Combustion. , 2007, , 885.		0
173	Computational study of the combustion process and NO formation in a small-scale wood pellet furnace. Fuel, 2007, 86, 1465-1474.	6.4	74
174	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
175	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
176	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
177	Effect of Turbulence and Initial Temperature Inhomogeneity on Homogeneous Charge Compression Ignition Combustion. , 2006, , .		15
178	Combustion process in a biomass grate fired industry furnace: a CFD study. Progress in Computational Fluid Dynamics, 2006, 6, 278.	0.2	18
179	Modelling of pulverised wood combustion: a comparison of different models. Progress in Computational Fluid Dynamics, 2006, 6, 188.	0.2	19
180	Large eddy simulation of turbulent premixed flames using level-set G-equation. Proceedings of the Combustion Institute, 2005, 30, 583-591.	3.9	51

#	ARTICLE	IF	CITATIONS
181	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
182	Absorption of formaldehyde (H ₂ CO) in the band system at elevated temperatures and pressures. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 821-828.	3.9	14
183	Fluorescence lifetimes of formaldehyde (H ₂ CO) in the band system at elevated temperatures and pressures. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 1043-1053.	3.9	35
184	Large eddy simulation and experimental studies of a confined turbulent swirling flow. Physics of Fluids, 2004, 16, 3306-3324.	4.0	137
185	PDF of distance function for level-set flamelet library modelling. International Journal for Numerical Methods in Fluids, 2003, 41, 653-673.	1.6	4
186	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
187	Thermal Radiation Heat Transfer and Biomass Combustion in a Large-Scale Fixed Bed Boiler. , 2003, , 405.		1
188	Pressure effect on soot formation in turbulent diffusion flames. Chemosphere, 2001, 42, 811-821.	8.2	21
189	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
190	Asymptotic structure of rich methane-air flames. Combustion and Flame, 2001, 127, 2265-2277.	5.2	21
191	Laminar flamelet structure at low and vanishing scalar dissipation rate. Combustion and Flame, 2000, 120, 285-300.	5.2	23
192	Level-set flamelet library approach for premixed turbulent combustion. Experimental Thermal and Fluid Science, 2000, 21, 87-98.	2.7	30
193	Flame growth and wrinkling in a turbulent flow. Applied Physics B: Lasers and Optics, 2000, 71, 711-716.	2.2	23
194	Rate-ratio asymptotic analysis of non-premixed methane flames. Combustion Theory and Modelling, 1999, 3, 51-75.	1.9	15
195	Asymptotic Analysis of the Structure of Moderately Rich Methane-Air Flames. Combustion and Flame, 1998, 113, 589-602.	5.2	21
196	Detailed soot modeling in turbulent jet diffusion flames. Proceedings of the Combustion Institute, 1998, 27, 1623-1630.	0.3	52
197	Sensitivity study of turbulent reacting flow modeling in gas turbine combustors. AIAA Journal, 1995, 33, 1857-1864.	2.6	14
198	Modelling of turbulent reacting flows past a bluff body: assessment of accuracy and efficiency. Computers and Fluids, 1994, 23, 507-521.	2.5	31

#	ARTICLE	IF	CITATIONS
199	A Multi-Grid Method for Calculation of Turbulence and Combustion. , 1994, , 131-142.		4
200	Calculation of turbulent combustion of propane in furnaces. International Journal for Numerical Methods in Fluids, 1993, 17, 221-239.	1.6	14
201	FAST MULTIGRID METHOD FOR 3D TURBULENT INCOMPRESSIBLE FLOWS. International Journal of Numerical Methods for Heat and Fluid Flow, 1992, 2, 127-137.	2.8	6
202	The computation of transonic analysis and design. Acta Mechanica, 1989, 78, 81-94.	2.1	3
203	Numerical and Experimental Investigation of Turbulent Flows in a Diesel Engine. , 0, , .		15
204	Effect of Turbulence on HCCI Combustion. , 0, , .		27
205	Injection of Fuel at High Pressure Conditions: LES Study. , 0, , .		9
206	Numerical Simulation of the ECN Spray A Using Multidimensional Chemistry Coordinate Mapping: n-Dodecane Diesel Combustion. , 0, , .		11
207	Large Eddy Simulation of Partially Premixed Combustion in an Internal Combustion Engine. , 0, , .		10
208	Investigation of Chemical Kinetics on Soot Formation Event of n-Heptane Spray Combustion. , 0, , .		12
209	Transition from HCCI to PPC: the Sensitivity of Combustion Phasing to the Intake Temperature and the Injection Timing with and without EGR. , 0, , .		57
210	Numerical Estimation of Asymmetry of In-Cylinder Flow in a Light Duty Direct Injection Engine with Re-Entrant Piston Bowl. , 0, , .		1
211	The Effect of Injection Pressure on the NOx Emission Rates in a Heavy-Duty DICI Engine Running on Methanol.. , 0, , .		7
212	Numerical Investigation of Methanol Ignition Sequence in an Optical PPC Engine with Multiple Injection Strategies. , 0, , .		4
213	Rate-Ratio Asymptotic Analysis of Strained Premixed Laminar Methane Flame Under Nonadiabatic Conditions. Combustion Science and Technology, 0, , 1-25.	2.3	0