Christian Hasse

List of Publications by Year
in descending order

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204	4,790	109137	155451
papers	citations	35 h-index	55 g-index

208	208	208	2158
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	IJER editorial: The future of the internal combustion engine. International Journal of Engine Research, 2020, 21, 3-10.	1.4	457
2	A two mixture fraction flamelet model applied to split injections in a DI Diesel engine. Proceedings of the Combustion Institute, 2005, 30, 2755-2762.	2.4	145
3	Towards Comprehensive Coal Combustion Modelling for LES. Flow, Turbulence and Combustion, 2013, 90, 859-884.	1.4	117
4	Simulation of combustion in direct injection diesel engines using a eulerian particle flamelet model. Proceedings of the Combustion Institute, 2000, 28, 1161-1168.	2.4	111
5	Simulation of entrained flow gasification with advanced coal conversion submodels. Part 1: Pyrolysis. Fuel, 2013, 113, 654-669.	3.4	97
6	Quenching of laminar iso-octane flames at cold walls. Combustion and Flame, 2000, 122, 117-129.	2.8	96
7	The role of hydrogen for future internal combustion engines. International Journal of Engine Research, 2022, 23, 529-540.	1.4	95
8	Computational fluid dynamics modelling of non-premixed combustion in direct injection diesel engines. International Journal of Engine Research, 2000, 1, 249-267.	1.4	88
9	Flamelet modeling of coal particle ignition. Proceedings of the Combustion Institute, 2013, 34, 2445-2452.	2.4	85
10	Numerical investigation of cyclic variations in gasoline engines using a hybrid URANS/LES modeling approach. Computers and Fluids, 2010, 39, 25-48.	1.3	79
11	Development of an Ethanol Combustion Mechanism Based on a Hierarchical Optimization Approach. International Journal of Chemical Kinetics, 2016, 48, 423-441.	1.0	77
12	An extended flamelet model for multiple injections in DI Diesel engines. Proceedings of the Combustion Institute, 2009, 32, 2775-2783.	2.4	72
13	Large Eddy Simulation of coal combustion in a large-scale laboratory furnace. Proceedings of the Combustion Institute, 2015, 35, 3609-3617.	2.4	71
14	Modeling soot formation in premixed flames using an Extended Conditional Quadrature Method of Moments. Combustion and Flame, 2015, 162, 2529-2543.	2.8	62
15	The influence of non-ideal vaporâ€“liquid equilibrium on the evaporation of ethanol/iso-octane droplets. International Journal of Heat and Mass Transfer, 2013, 64, 547-558.	2.5	60
16	Resolved flow simulation of pulverized coal particle devolatilization and ignition in air- and O 2 /CO 2 -atmospheres. Fuel, 2016, 186, 285-292.	3.4	59
17	Identification of Large-Scale Structure Fluctuations in IC Engines using POD-Based Conditional Averaging. Oil and Gas Science and Technology, 2016, 71, 1.	1.4	55
18	Wall heat fluxes and CO formation/oxidation during laminar and turbulent side-wall quenching of methane and DME flames. International Journal of Heat and Fluid Flow, 2018, 70, 181-192.	1.1	55

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19	LES flamelet-progress variable modeling and measurements of a turbulent partially-premixed dimethyl ether jet flame. Combustion and Flame, 2015, 162, 3016-3029.	2.8	54
20	From laboratory-scale experiments to industrial-scale CFD simulations of entrained flow coal gasification. Fuel, 2015, 152, 58-73.	3.4	53
21	Probability density function approach coupled with detailed chemical kinetics for the prediction of knock in turbocharged direct injection spark ignition engines. Combustion and Flame, 2014, 161, 997-1014.	2.8	52
22	Detached eddy simulation of cyclic large scale fluctuations in a simplified engine setup. International Journal of Heat and Fluid Flow, 2009, 30, 32-43.	1.1	47
23	Simulation of entrained flow gasification with advanced coal conversion submodels. Part 2: Char conversion. Fuel, 2014, 118, 369-384.	3.4	47
24	Laminar burning velocity measurements using the Heat Flux method and numerical predictions of iso-octane/ethanol blends for different preheat temperatures. Fuel, 2015, 140, 10-16.	3.4	47
25	Scale-resolving simulations in engine combustion process design based on a systematic approach for model development. International Journal of Engine Research, 2016, 17, 44-62.	1.4	46
26	Flame structure analysis and flamelet progress variable modelling of strained coal flames. Combustion Theory and Modelling, 2017, 21, 700-721.	1.0	45
27	Advanced modeling approaches for CFD simulations of coal combustion and gasification. Progress in Energy and Combustion Science, 2021, 86, 100938.	15.8	45
28	Iron as a sustainable chemical carrier of renewable energy: Analysis of opportunities and challenges for retrofitting coal-fired power plants. Renewable and Sustainable Energy Reviews, 2022, 165, 112579.	8.2	45
29	A Combined Numerical and Experimental Study of the 3D Tumble Structure and Piston Boundary Layer Development During the Intake Stroke of a Gasoline Engine. Flow, Turbulence and Combustion, 2017, 98, 579-600.	1.4	43
30	Local flame structure analysis in turbulent CH4/air flames with multi-regime characteristics. Combustion and Flame, 2019, 210, 426-438.	2.8	43
31	Development of adaptive kinetics for application in combustion systems. Proceedings of the Combustion Institute, 2002, 29, 1403-1410.	2.4	42
32	Regime identification from Raman/Rayleigh line measurements in partially premixed flames. Combustion and Flame, 2018, 189, 126-141.	2.8	41
33	Detailed analysis of reacting particles in an entrained-flow gasifier. Fuel Processing Technology, 2016, 144, 95-108.	3.7	40
34	Fully-resolved simulations of coal particle combustion using a detailed multi-step approach for heterogeneous kinetics. Fuel, 2019, 240, 75-83.	3.4	40
35	Large eddy simulation/dynamic thickened flame modeling of a high Karlovitz number turbulent premixed jet flame. Proceedings of the Combustion Institute, 2019, 37, 2555-2563.	2.4	38
36	Numerical Study of Quenching Distances for Side-Wall Quenching Using Detailed Diffusion and Chemistry. Flow, Turbulence and Combustion, 2021, 106, 649-679.	1.4	38

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37	Experimental and numerical study of rich inverse diffusion flame structure. Proceedings of the Combustion Institute, 2013, 34, 1045-1055.	2.4	37
38	Numerical Simulation of Pulverized Coal MILD Combustion Using a New Heterogeneous Combustion Submodel. Flow, Turbulence and Combustion, 2014, 92, 319-345.	1.4	37
39	Effect of Flame-Wall Interaction on Local Heat Release of Methane and DME Combustion in a Side-Wall Quenching Geometry. Flow, Turbulence and Combustion, 2020, 104, 1029-1046.	1.4	37
40	A multi-scale asymptotic scaling and regime analysis of flamelet equations including tangential diffusion effects for laminar and turbulent flames. Combustion and Flame, 2015, 162, 1507-1529.	2.8	36
41	Modelling of ignition mechanisms and pollutant formation in direct-injection diesel engines with multiple injections. International Journal of Engine Research, 2005, 6, 231-246.	1.4	35
42	Experimental and numerical study on the effect of oxymethylene ether-3 (OME3) on soot particle formation. Fuel, 2021, 286, 119353.	3.4	34
43	Numerical study of the partial oxidation of a coal particle in steam and dry air atmospheres. IMA Journal of Applied Mathematics, 2012, 77, 32-46.	0.8	33
44	Simulation of bubbly flows with special numerical treatments of the semi-conservative and fully conservative two-fluid model. Chemical Engineering Science, 2017, 174, 25-39.	1.9	33
45	A comparative study of intake and exhaust port modeling strategies for scale-resolving engine simulations. International Journal of Engine Research, 2018, 19, 282-292.	1.4	33
46	A flamelet/progress variable approach for modeling coal particle ignition. Fuel, 2017, 201, 29-38.	3.4	32
47	A Constrained Control Approach for the Automated Choice of an Optimal Progress Variable for Chemistry Tabulation. Flow, Turbulence and Combustion, 2015, 94, 593-617.	1.4	31
48	Detailed radiation modeling of a partial-oxidation flame. International Journal of Thermal Sciences, 2015, 87, 68-84.	2.6	31
49	Evaluation of a flamelet/progress variable approach for pulverized coal combustion in a turbulent mixing layer. Proceedings of the Combustion Institute, 2019, 37, 2927-2934.	2.4	31
50	A quasi-dimensional model of turbulence and global charge motion for spark ignition engines with fully variable valvetrains. International Journal of Engine Research, 2014, 15, 805-816.	1.4	30
51	Spatially Resolved Experimental and Numerical Investigation of the Flow through the Intake Port of an Internal Combustion Engine. Oil and Gas Science and Technology, 2016, 71, 2.	1.4	30
52	A consistent flamelet formulation for a reacting char particle considering curvature effects. Combustion and Flame, 2013, 160, 2540-2558.	2.8	28
53	Determination of laminar burning velocities for lean low calorific H2/N2 and H2/CO/N2 gas mixtures. International Journal of Hydrogen Energy, 2014, 39, 19810-19817.	3.8	28
54	Speciation data for fuel-rich methane oxy-combustion and reforming under prototypical partial oxidation conditions. Chemical Engineering Science, 2016, 139, 249-260.	1.9	26

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55	A numerically robust method of moments with number density function reconstruction and its application to soot formation, growth and oxidation. Journal of Aerosol Science, 2019, 128, 34-49.	1.8	26
56	Combustion regime identification from machine learning trained by Raman/Rayleigh line measurements. Combustion and Flame, 2020, 219, 268-274.	2.8	26
57	Hybrid URANS/LES Turbulence Simulation of Vortex Shedding Behind a Triangular Flameholder. Flow, Turbulence and Combustion, 2009, 83, 1-20.	1.4	25
58	Evaluation of radiation modeling approaches for non-premixed flamelets considering a laminar methane air flame. Combustion and Flame, 2013, 160, 251-264.	2.8	25
59	Modelling the Effect of Split Injections in Diesel Engines Using Representative Interactive Flamelets. , 0, , .		24
60	An experimental and numerical investigation of turbulent flame propagation and flame structure in a turbo-charged direct injection gasoline engine. Combustion Theory and Modelling, 2009, 13, 167-188.	1.0	24
61	Development of an inverse diffusion partial oxidation flame and model burner contributing to the development of 3rd generation coal gasifiers. Fuel Processing Technology, 2013, 110, 33-45.	3.7	24
62	Experimental and numerical analysis of iso-octane/ethanol sprays under gasoline engine conditions. International Journal of Heat and Mass Transfer, 2015, 84, 497-510.	2.5	24
63	Comparative study of turbulence models for scale-resolving simulations of internal combustion engine flows. Computers and Fluids, 2017, 156, 66-80.	1.3	24
64	Assessment of differential diffusion effects in flamelet modeling of oxy-fuel flames. Combustion and Flame, 2018, 197, 134-144.	2.8	23
65	Detailed modeling of soot particle formation and comparison to optical diagnostics and size distribution measurements in premixed flames using a method of moments. Fuel, 2018, 222, 287-293.	3.4	22
66	Flamelet-Based Time-Scale Analysis of a High-Pressure Gasifier. Energy & Fuels, 2011, 25, 3892-3899.	2.5	21
67	The influence of intra-droplet heat and mass transfer limitations in evaporation of binary hydrocarbon mixtures. International Journal of Heat and Mass Transfer, 2013, 67, 1191-1207.	2.5	21
68	In-situ tracking of mixture fraction gradient trajectories and unsteady flamelet analysis in turbulent non-premixed combustion. Combustion and Flame, 2017, 175, 243-258.	2.8	21
69	Assessing multi-regime combustion in a novel burner configuration with large eddy simulations using tabulated chemistry. Proceedings of the Combustion Institute, 2021, 38, 2551-2558.	2.4	21
70	Modeling DI-Diesel Combustion using the Eulerian Particle Flamelet Model (EPFM). , 2000, , .		20
71	Model-based virtual engine calibration with the help of phenomenological methods for spark-ignited engines. Applied Thermal Engineering, 2017, 121, 190-199.	3.0	20
72	A self-contained progress variable space solution method for thermochemical variables and flame speed in freely-propagating premixed flamelets. Proceedings of the Combustion Institute, 2019, 37, 1529-1536.	2.4	20

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73	Numerical simulation and laser-based imaging of mixture formation, ignition, and soot formation in a diesel spray. Proceedings of the Combustion Institute, 2005, 30, 2029-2036.	2.4	19
74	An abstraction layer for efficient memory management of tabulated chemistry and flamelet solutions. Combustion Theory and Modelling, 2013, 17, 411-430.	1.0	19
75	Evaluation of scale resolving turbulence generation methods for Large Eddy Simulation of turbulent flows. Computers and Fluids, 2014, 93, 116-128.	1.3	19
76	The analysis of chemical time scales in a partial oxidation flame. Combustion and Flame, 2014, 161, 416-426.	2.8	19
77	Assessing the relative importance of flame regimes in Raman/Rayleigh line measurements of turbulent lifted flames. Proceedings of the Combustion Institute, 2019, 37, 2297-2305.	2.4	19
78	A self-contained composition space solution method for strained and curved premixed flamelets. Combustion and Flame, 2019, 207, 342-355.	2.8	19
79	Flamelet/progress variable modeling of partial oxidation systems: From laboratory flames to pilot-scale reactors. Chemical Engineering Science, 2015, 134, 694-707.	1.9	18
80	Detailed particle nucleation modeling in a sooting ethylene flame using a Conditional Quadrature Method of Moments (CQMOM). Proceedings of the Combustion Institute, 2017, 36, 771-779.	2.4	18
81	Large Eddy Simulation of a laboratory-scale gas-assisted pulverized coal combustion chamber under oxy-fuel atmospheres using tabulated chemistry. Fuel, 2020, 272, 117683.	3.4	18
82	Numerical Investigation of Local Heat-Release Rates and Thermo-Chemical States in Side-Wall Quenching of Laminar Methane and Dimethyl Ether Flames. Flow, Turbulence and Combustion, 2021, 106, 681-700.	1.4	18
83	Flamelet-Modeling of Inverse Rich Diffusion Flames. Flow, Turbulence and Combustion, 2013, 90, 833-857.	1.4	17
84	A systematic study on the applicability and limits of detailed chemistry based NO x models for simulations of the entire engine operating map of spark-ignition engines. Applied Thermal Engineering, 2016, 98, 910-923.	3.0	17
85	Flamelet tabulation methods for solid fuel combustion with fuel-bound nitrogen. Combustion and Flame, 2019, 209, 155-166.	2.8	17
86	Thermal and chemical effects of differential diffusion in turbulent non-premixed H2 flames. Proceedings of the Combustion Institute, 2021, 38, 2627-2634.	2.4	17
87	Comparative flame structure investigation of normal and inverse turbulent non-premixed oxy-fuel flames using experimentally recorded and numerically predicted Rayleigh and OH-PLIF signals. Proceedings of the Combustion Institute, 2017, 36, 1713-1720.	2.4	16
88	A comprehensive study of flamelet tabulation methods for pulverized coal combustion in a turbulent mixing layer â€" Part I: A priori and budget analyses. Combustion and Flame, 2020, 216, 439-452.	2.8	16
89	Reducing the memory footprint in Large Eddy Simulations of reactive flows. Parallel Computing, 2015, 49, 50-65.	1.3	15
90	On the impact of the turbulent/non-turbulent interface on differential diffusion in a turbulent jet flow. Journal of Fluid Mechanics, 2016, 802, .	1.4	15

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91	Machine learning for predictive coal combustion CFD simulationsâ€"From detailed kinetics to HDMR Reduced-Order models. Fuel, 2020, 274, 117720.	3.4	15
92	Flamelet LES of a swirl-stabilized multi-stream pulverized coal burner in air and oxy-fuel atmospheres with pollutant formation. Proceedings of the Combustion Institute, 2021, 38, 4141-4149.	2.4	15
93	Large Eddy Simulation with tabulated chemistry of an experimental sidewall quenching burner. International Journal of Heat and Fluid Flow, 2018, 71, 95-110.	1.1	14
94	The role of tangential diffusion in evaluating the performance of flamelet models. Proceedings of the Combustion Institute, 2019, 37, 1767-1774.	2.4	14
95	Detailed assessment of the thermochemistry in a side-wall quenching burner by simultaneous quantitative measurement of CO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si7.svg"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>, CO and temperature using laser diagnostics. Combustion and Flame, 2022, 235, 111707.	2.8	14
96	Modeling of HCCI Combustion Using Adaptive Chemical Kinetics. , 0, , .		13
97	Application of a Phenomenological Model for the Engine-Out Emissions of Unburned Hydrocarbons in Driving Cycles. Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, .	1.4	13
98	Numerical investigation of pulverized coal particle group combustion using tabulated chemistry. Proceedings of the Combustion Institute, 2021, 38, 4033-4041.	2.4	13
99	Flame structure analysis of turbulent premixed/stratified flames with H2 addition considering differential diffusion and stretch effects. Proceedings of the Combustion Institute, 2021, 38, 2993-3001.	2.4	13
100	Carrier-phase DNS of detailed NOx formation in early-stage pulverized coal combustion with fuel-bound nitrogen. Fuel, 2021, 291, 119998.	3.4	13
101	Flamelet LES of turbulent premixed/stratified flames with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si10.svg"><mml:msub><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:math> addition. Combustion and Flame, 2021, 230, 111428.	2.8	13
102	Steady Flamelet Progress-Variable (FPV) Modeling and Simulation of a High-Pressure Gasifier. Energy & Fuels, 2013, 27, 7772-7777.	2.5	12
103	Bivariate extensions of the Extended Quadrature Method of Moments (EQMOM) to describe coupled droplet evaporation and heat-up. Journal of Aerosol Science, 2016, 92, 53-69.	1.8	12
104	Dissipation element analysis of a turbulent non-premixed jet flame. Physics of Fluids, 2017, 29, 085103.	1.6	12
105	Investigation of an IC Engine Intake Flow Based on Highly Resolved LES and PIV. Oil and Gas Science and Technology, 2017, 72, 15.	1.4	12
106	Experimental and numerical investigation of a stagnation pulverised coal flame. Proceedings of the Combustion Institute, 2019, 37, 2857-2866.	2.4	12
107	Comparison of Eulerian QBMM and classical Eulerianâ€"Eulerian method for the simulation of polydisperse bubbly flows. AICHE Journal, 2019, 65, e16732.	1.8	12
108	Influence of flow topology and scalar structure on flame-tangential diffusion in turbulent non-premixed combustion. Combustion and Flame, 2019, 206, 21-36.	2.8	12

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109	Premixed flames for arbitrary combinations of strain and curvature. Proceedings of the Combustion Institute, 2021, 38, 2031-2039.	2.4	12
110	Numerical investigation of swirl-stabilized pulverized coal flames in air and oxy-fuel atmospheres by means of large eddy simulation coupled with tabulated chemistry. Fuel, 2021, 287, 119429.	3.4	12
111	Effects of stretch-chemistry interaction on chemical pathways for strained and curved hydrogen/air premixed flames. Combustion and Flame, 2021, 232, 111532.	2.8	12
112	Vapor pressures and latent heats of vaporization of Poly(oxymethylene) Dimethyl Ethers (OME3 and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.4	12
113	Line segments in homogeneous scalar turbulence. Physics of Fluids, 2015, 27, .	1.6	11
114	Flamelet budget and regime analysis for non-premixed tubular flames. Proceedings of the Combustion Institute, 2017, 36, 1349-1356.	2.4	11
115	Assessing an experimental approach for chemical explosive mode and heat release rate using DNS data. Combustion and Flame, 2019, 209, 214-224.	2.8	11
116	Numerical and experimental investigation of the laminar burning velocity of biofuels at atmospheric and high-pressure conditions. Fuel, 2019, 247, 250-256.	3.4	11
117	A comprehensive study of flamelet tabulation methods for pulverized coal combustion in a turbulent mixing layerâ€”Part II: Strong heat losses and multi-mode combustion. Combustion and Flame, 2020, 216, 453-467.	2.8	11
118	Strain Rate Effects on Head-on Quenching of Laminar Premixed Methane-air flames. Flow, Turbulence and Combustion, 2021, 106, 631-647.	1.4	11
119	Numerical investigation and assessment of flamelet-based models for the prediction of pulverized solid fuel homogeneous ignition and combustion. Combustion and Flame, 2022, 235, 111693.	2.8	11
120	Experimental and modeling assessment of sulfur release from coal under low and high heating rates. Proceedings of the Combustion Institute, 2021, 38, 4053-4061.	2.4	11
121	Soot particle size distribution reconstruction in a turbulent sooting flame with the split-based extended quadrature method of moments. Physics of Fluids, 2022, 34, .	1.6	11
122	A Quasi-dimensional Model of the Ignition Delay for Combustion Modeling in Spark-Ignition Engines. Journal of Engineering for Gas Turbines and Power, 2015, 137, .	0.5	10
123	A Large Eddy Simulation Study on the Effect of Devolatilization Modelling and Char Combustion Mode Modelling on the Structure of a Large-Scale, Biomass and Coal Co-Fired Flame. Journal of Combustion, 2018, 2018, 1-15.	0.5	10
124	An extended artificial thickening approach for strained premixed flames. Combustion and Flame, 2019, 206, 252-265.	2.8	10
125	Effects of Soret diffusion on turbulent non-premixed H2 jet flames. Combustion and Flame, 2020, 213, 39-51.	2.8	10
126	Numerical Analysis of a Turbulent Pulverized Coal Flame Using a Flamelet/Progress Variable Approach and Modeling Experimental Artifacts. Energy & Fuels, 2021, 35, 7133-7143.	2.5	10

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127	Non-equilibrium wall functions for large Eddy simulations of complex turbulent flows and heat transfer. International Journal of Heat and Fluid Flow, 2021, 88, 108758.	1.1	10
128	Development and Application of an Efficient Chemical Reactor Network Model for Oxy-fuel Combustion. Energy & Fuels, 2021, 35, 7121-7132.	2.5	10
129	Flame structure analysis and composition space modeling of thermodiffusively unstable premixed hydrogen flames â€" Part I: Atmospheric pressure. Combustion and Flame, 2022, 238, 111815.	2.8	10
130	Characterization of flow field and combustion dynamics in a novel pressurized side-wall quenching burner using high-speed PIV/OH-PLIF measurements. International Journal of Heat and Fluid Flow, 2022, 94, 108921.	1.1	10
131	Flamelet modeling of forced ignition and flame propagation in hydrogen-air mixtures. Combustion and Flame, 2022, 243, 112125.	2.8	10
132	Effect of oxymethylene ether-2-3-4 (OME2-4) on soot particle formation and chemical features. Fuel, 2022, 324, 124617.	3.4	10
133	Numerical study of natural gas reforming by non-catalytic partial oxidation based on the Virtuhcon Benchmark. Chemical Engineering Journal, 2017, 327, 307-319.	6.6	9
134	The impact of thermal diffusion on the structure of non-premixed flames. Combustion and Flame, 2018, 194, 352-362.	2.8	9
135	twoWayGPBEFoam: An open-source Eulerian QBMM solver for monokinetic bubbly flows. Computer Physics Communications, 2020, 250, 107036.	3.0	9
136	Detailed analysis of early-stage NO formation in turbulent pulverized coal combustion with fuel-bound nitrogen. Proceedings of the Combustion Institute, 2021, 38, 4111-4119.	2.4	9
137	A phenomenological modelling framework for particle emission simulation in a direct-injection gasoline engine. International Journal of Engine Research, 2021, 22, 1166-1179.	1.4	9
138	A Combined Experimental and Numerical Study of Laminar and Turbulent Non-piloted Oxy-fuel Jet Flames Using a Direct Comparison of the Rayleigh Signal. Flow, Turbulence and Combustion, 2016, 97, 231-262.	1.4	8
139	Can Small Polyaromatics Describe Their Larger Counterparts for Local Reactions? A Computational Study on the H-Abstraction Reaction by an H-Atom from Polyaromatics. Journal of Physical Chemistry A, 2020, 124, 9626-9637.	1.1	8
140	Chemistry effects in the wall quenching of laminar premixed DME flames. Combustion and Flame, 2021, 232, 111529.	2.8	8
141	Flame structure analysis and composition space modeling of thermodiffusively unstable premixed hydrogen flames â€" Part II: Elevated pressure. Combustion and Flame, 2022, 238, 111808.	2.8	8
142	Aggregate formation in sooting counterflow diffusion flames. Proceedings of the Combustion Institute, 2002, 29, 2383-2390.	2.4	7
143	Closure of the scalar dissipation rate in the spray flamelet equations through a transport equation for the gradient of the mixture fraction. Combustion and Flame, 2019, 208, 330-350.	2.8	7
144	An experimental and numerical study on the combustion of lignites from different geographic origins. Fuel, 2020, 278, 118320.	3.4	7

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145	Derivation and analysis of two-dimensional composition space equations for multi-regime combustion using orthogonal coordinates. Combustion and Flame, 2020, 218, 205-217.	2.8	7
146	Catalytic influence of mineral compounds on the reactivity of cellulose-derived char in O2-, CO2-, and H2O-containing atmospheres. Fuel, 2021, 287, 119584.	3.4	7
147	Calibration and validation of a comprehensive kinetic model of coal conversion in inert, air and oxy-fuel conditions using data from multiple test rigs. Fuel, 2021, 290, 119682.	3.4	7
148	A Predictive Physico-chemical Model of Biochar Oxidation. Energy & Fuels, 2021, 35, 14894-14912.	2.5	7
149	Ignition under strained conditions: Unsteady flamelet progress variable modeling for diesel engine conditions in the transient counterflow configuration. Combustion and Flame, 2022, 240, 111841.	2.8	7
150	Two-Phase Flow Simulations of Liquid/Gas Transport in Radial Centrifugal Pumps With Special Emphasis on the Transition From Bubbles to Adherent Gas Accumulations. Journal of Fluids Engineering, Transactions of the ASME, 2022, 144, .	0.8	7
151	A Computationally Efficient Implementation of Tabulated Combustion Chemistry based on Polynomials and Automatic Source Code Generation. Flow, Turbulence and Combustion, 2018, 100, 119-146.	1.4	6
152	Multi-dimensional and transient effects on flamelet modeling for turbulent pulverized coal combustion. Fuel, 2019, 255, 115772.	3.4	6
153	Investigation of the ignition processes of a multi-injection flame in a Diesel engine environment using the flamelet model. Proceedings of the Combustion Institute, 2021, 38, 5605-5613.	2.4	6
154	Large-eddy simulation of a multi-injection flame in a diesel engine environment using an unsteady flamelet/progress variable approach. Physics of Fluids, 2021, 33, .	1.6	6
155	Flamelet LES of swirl-stabilized oxy-fuel flames using directly coupled multi-step solid fuel kinetics. Combustion and Flame, 2022, 241, 112062.	2.8	6
156	Implementation and Validation of the G-equation Model Coupled with Flamelet Libraries for Simulating Premixed Combustion in I.C. Engines. SAE International Journal of Engines, 2009, 2, 674-690.	0.4	5
157	Scale-resolving Simulations for Combustion Process Development. MTZ Worldwide, 2019, 80, 62-67.	0.1	5
158	Evaluation of Quadrature-based Moment Methods in turbulent premixed combustion. Proceedings of the Combustion Institute, 2021, 38, 2877-2884.	2.4	5
159	Characterization of multi-regime reaction zones in a piloted inhomogeneous jet flame with local extinction. Proceedings of the Combustion Institute, 2021, 38, 2571-2579.	2.4	5
160	Numerical Investigation on the Effect of the Oxymethylene Ether-3 (OME3) Blending Ratio in Premixed Sooting Ethylene Flames. Frontiers in Mechanical Engineering, 2021, 7, .	0.8	5
161	Investigation of Turbulent Pulverized Solid Fuel Combustion with Detailed Homogeneous and Heterogeneous Kinetics. Energy & Fuels, 2021, 35, 7077-7091.	2.5	5
162	Analysis of Gas-Assisted Pulverized Coal Combustion in Cambridge Coal Burner CCB1 Using FPV-LES. Energy & Fuels, 2020, 34, 7477-7489.	2.5	5

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163	A priori analysis of differential diffusion for model development for scale-resolving simulations. Physical Review Fluids, 2018, 3, .	1.0	5
164	Turbulent flame-wall interaction of premixed flames using Quadrature-based Moment Methods (QbMM) and tabulated chemistry: An a priori analysis. International Journal of Heat and Fluid Flow, 2022, 93, 108913.	1.1	5
165	Differences between Iso-Octane and Methane during Wall Quenching with Respect to HC Emissions. , 2000, , .		4
166	Applying Representative Interactive Flamelets (RIF) with Special Emphasis on Pollutant Formation to Simulate a DI Diesel Engine with Roof-Shaped Combustion Chamber and Tumble Charge Motion. , 0, , .		4
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