

Matthias Ihme

List of Publications by Year in descending order

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203
papers

5,456
citations

94269

37
h-index

110170

64
g-index

204
all docs

204
docs citations

204
times ranked

2570
citing authors

#	ARTICLE	IF	CITATIONS
1	Interaction of preferential evaporation and low-temperature chemistry in multicomponent counterflow spray flames. Proceedings of the Combustion Institute, 2023, 39, 2565-2573.	2.4	3
2	Towards the Suitability of Information Entropy as an LES Quality Indicator. Flow, Turbulence and Combustion, 2022, 108, 353-385.	1.4	4
3	General Drag Coefficient for Flow over Spherical Particles. AIAA Journal, 2022, 60, 587-597.	1.5	23
4	Structural analysis of biomass pyrolysis and oxidation using in-situ X-ray computed tomography. Combustion and Flame, 2022, 235, 111737.	2.8	16
5	Interpretable data-driven methods for subgrid-scale closure in LES for transcritical LOX/GCH4 combustion. Combustion and Flame, 2022, 239, 111758.	2.8	9
6	Development of a Fidelity-Adaptive Combustion Modeling Framework in a Rule-Based All-Speed Implicit Flow Solver. , 2022, , .		0
7	An Enrichment Wall Model for the Spectral Element Method. , 2022, , .		2
8	Structure of the thermal boundary layer in turbulent channel flows at transcritical conditions. Journal of Fluid Mechanics, 2022, 934, .	1.4	11
9	Quail: A lightweight open-source discontinuous Galerkin code in Python for teaching and prototyping. SoftwareX, 2022, 17, 100982.	1.2	3
10	Parametric analysis of core-noise from a realistic gas-turbine combustor for cruise and take-off conditions. Applications in Energy and Combustion Science, 2022, 9, 100045.	0.9	2
11	A TensorFlow simulation framework for scientific computing of fluid flows on tensor processing units. Computer Physics Communications, 2022, 274, 108292.	3.0	11
12	On the hot surface ignition of a wall-stagnating spray flame. Combustion and Flame, 2022, 240, 111988.	2.8	5
13	Combustion machine learning: Principles, progress and prospects. Progress in Energy and Combustion Science, 2022, 91, 101010.	15.8	77
14	Turbulence-induced bias in time-averaged laser absorption tomography of correlated concentration and temperature fields with a first-order correction. Combustion and Flame, 2022, 242, 112210.	2.8	6
15	Pareto-efficient combustion framework for predicting transient ignition dynamics in turbulent flames: Application to a pulsed jet-in-hot-coflow flame. Combustion and Flame, 2021, 223, 153-165.	2.8	8
16	Investigation of CO recombination in the boundary layer of CH4/O2 rocket engines. Proceedings of the Combustion Institute, 2021, 38, 6403-6411.	2.4	8
17	Simultaneous in-situ measurements of gas temperature and pyrolysis of biomass smoldering via X-ray computed tomography. Proceedings of the Combustion Institute, 2021, 38, 3899-3907.	2.4	15
18	Experimental feasibility of tailored porous media burners enabled via additive manufacturing. Proceedings of the Combustion Institute, 2021, 38, 6713-6722.	2.4	13

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19	Pore-resolved simulations of porous media combustion with conjugate heat transfer. Proceedings of the Combustion Institute, 2021, 38, 2127-2134.	2.4	17
20	Analysis of low-temperature chemistry in a turbulent swirling spray flame near lean blow-out. Proceedings of the Combustion Institute, 2021, 38, 3435-3443.	2.4	13
21	Analysis of core-noise contributions in a realistic gas-turbine combustor operated near lean blow-out. Proceedings of the Combustion Institute, 2021, 38, 6203-6211.	2.4	5
22	Kinetics for the hydrolysis of Ti(OC ₃ H ₇) ₄ : A molecular dynamics simulation study. Proceedings of the Combustion Institute, 2021, 38, 1433-1440.	2.4	7
23	Structural analysis and regime diagrams of laminar counterflow spray flames with low-temperature chemistry. Proceedings of the Combustion Institute, 2021, 38, 3193-3200.	2.4	8
24	Development of a discontinuous Galerkin solver using Legion for heterogeneous high-performance computing architectures. , 2021, , .		1
25	Using adjoint-based optimization to enhance ignition in non-premixed jets. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20200472.	1.0	4
26	Discontinuous Galerkin simulations of dusty flows over a full-scale capsule during Mars atmospheric entry. , 2021, , .		2
27	Time integration considerations for the solution of reacting flows using discontinuous Galerkin methods. , 2021, , .		0
28	Toward Numerical Investigation of Ignition and Combustion Transition in a Subscale LOX/Methane Rocket Combustor. , 2021, , .		0
29	Limitations of flamelet formulation for modeling turbulent pool fires. Combustion and Flame, 2021, 227, 346-358.	2.8	4
30	A discontinuous Galerkin method for wall-modeled large-eddy simulations. Computers and Fluids, 2021, 222, 104933.	1.3	4
31	Data-assisted combustion simulations with dynamic submodel assignment using random forests. Combustion and Flame, 2021, 227, 172-185.	2.8	24
32	Sensitivity of Hypersonic Dusty Flows to Physical Modeling of the Particle Phase. Journal of Spacecraft and Rockets, 2021, 58, 653-667.	1.3	11
33	Hot surface ignition of a wall-impinging fuel spray: Modeling and analysis using large-eddy simulation. Combustion and Flame, 2021, 228, 443-456.	2.8	11
34	Efficient projection kernels for discontinuous Galerkin simulations of disperse multiphase flows on arbitrary curved elements. Journal of Computational Physics, 2021, 435, 110266.	1.9	11
35	Analysis of droplet evaporation in isotropic turbulence through droplet-resolved DNS. International Journal of Heat and Mass Transfer, 2021, 172, 121157.	2.5	29
36	Effects of evaporation on chemical reactions in counterflow spray flames. Physics of Fluids, 2021, 33, .	1.6	14

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37	Development of a particle collision algorithm for discontinuous Galerkin simulations of compressible multiphase flows. <i>Journal of Computational Physics</i> , 2021, 436, 110319.	1.9	4
38	Infrasound Radiation From Impulsive Volcanic Eruptions: Nonlinear Aeroacoustic 2D Simulations. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB021940.	1.4	11
39	Heat transfer augmentation by recombination reactions in turbulent reacting boundary layers at elevated pressures. <i>International Journal of Heat and Mass Transfer</i> , 2021, 178, 121628.	2.5	1
40	Imaging the short-lived hydroxyl-hydronium pair in ionized liquid water. <i>Science</i> , 2021, 374, 92-95.	6.0	36
41	Stability diagram and blow-out mechanisms of turbulent non-premixed combustion. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 6337-6344.	2.4	2
42	Quantitative X-ray computed tomography: Prospects for detailed in-situ imaging in bench-scale fire measurements. <i>Fire Safety Journal</i> , 2021, 126, 103476.	1.4	4
43	Examination of diesel spray combustion in supercritical ambient fluid using large-eddy simulations. <i>International Journal of Engine Research</i> , 2020, 21, 122-133.	1.4	13
44	Experimental investigation of lean premixed pre-vaporized liquid-fuel combustion in porous media burners at elevated pressures up to 20 Åbar. <i>Combustion and Flame</i> , 2020, 212, 123-134.	2.8	25
45	Comparison of algorithms for simulating multi-component reacting flows using high-order discontinuous Galerkin methods. , 2020, , .		4
46	An Enriched Basis Discontinuous Galerkin Method for Shocks and High-Gradient Features in Fluid Mechanics. , 2020, , .		0
47	Ensemble Kalman Filter for Assimilating Experimental Data into Large-Eddy Simulations of Turbulent Flows. <i>Flow, Turbulence and Combustion</i> , 2020, 104, 861-893.	1.4	10
48	A two-way coupled Euler-Lagrange method for simulating multiphase flows with discontinuous Galerkin schemes on arbitrary curved elements. <i>Journal of Computational Physics</i> , 2020, 405, 109096.	1.9	29
49	StanShock: a gas-dynamic model for shock tube simulations with non-ideal effects and chemical kinetics. <i>Shock Waves</i> , 2020, 30, 425-438.	1.0	16
50	Carbon oxidation in turbulent premixed jet flames: A comparative experimental and numerical study of ethylene, n-heptane, and toluene. <i>Combustion and Flame</i> , 2020, 221, 371-383.	2.8	14
51	Modeling Adsorption in Silica Pores via Minkowski Functionals and Molecular Electrostatic Moments. <i>Energies</i> , 2020, 13, 5976.	1.6	2
52	Modeling Heat-Shield Erosion due to Dust Particle Impacts for Martian Entries. <i>Journal of Spacecraft and Rockets</i> , 2020, 57, 857-875.	1.3	26
53	Additive Manufacturing of Tailored Macroporous Ceramic Structures for High-temperature Applications. <i>Advanced Engineering Materials</i> , 2020, 22, 2070035.	1.6	5
54	Additive Manufacturing of Tailored Macroporous Ceramic Structures for High-temperature Applications. <i>Advanced Engineering Materials</i> , 2020, 22, 2000158.	1.6	16

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55	Between supercritical liquids and gases – Reconciling dynamic and thermodynamic state transitions. <i>Journal of Supercritical Fluids</i> , 2020, 165, 104895.	1.6	50
56	Thermodynamic cycle analysis of superadiabatic matrix-stabilized combustion for gas turbine engines. <i>Energy</i> , 2020, 207, 118171.	4.5	5
57	Smooth projection kernels for Euler-Lagrange simulations on arbitrary elements computed with discontinuous Galerkin schemes. , 2020, , .		2
58	Uncertainty quantification of combustion noise by generalized polynomial chaos and state-space models. <i>Combustion and Flame</i> , 2020, 217, 113-130.	2.8	9
59	Numerical study of the ignition behavior of a post-discharge kernel in a turbulent stratified crossflow. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 5065-5072.	2.4	18
60	Modulation of heat transfer for extended flame stabilization in porous media burners via topology gradation. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 5697-5704.	2.4	26
61	Data assimilation using high-speed measurements and LES to examine local extinction events in turbulent flames. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2259-2266.	2.4	26
62	Large-eddy simulations of transcritical injection and auto-ignition using diffuse-interface method and finite-rate chemistry. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 3303-3310.	2.4	34
63	Coupling of turbulence on the ignition of multicomponent sprays. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 3295-3302.	2.4	14
64	Functionalization of 2D materials for enhancing OER/ORR catalytic activity in Li–oxygen batteries. <i>Communications Chemistry</i> , 2019, 2, .	2.0	61
65	Closure of the scalar dissipation rate in the spray flamelet equations through a transport equation for the gradient of the mixture fraction. <i>Combustion and Flame</i> , 2019, 208, 330-350.	2.8	7
66	Molecular diffusion and phase stability in high-pressure combustion. <i>Combustion and Flame</i> , 2019, 210, 302-314.	2.8	13
67	On the numerical behavior of diffuse-interface methods for transcritical real-fluids simulations. <i>International Journal of Multiphase Flow</i> , 2019, 113, 231-249.	1.6	38
68	A regularized deconvolution model for sub-grid dispersion in large eddy simulation of turbulent spray flames. <i>Combustion and Flame</i> , 2019, 207, 89-100.	2.8	12
69	Efficient time-stepping techniques for simulating turbulent reactive flows with stiff chemistry. <i>Computer Physics Communications</i> , 2019, 243, 81-96.	3.0	44
70	A regularized deconvolution method for turbulent closure modeling in implicitly filtered large-eddy simulation. <i>Combustion and Flame</i> , 2019, 204, 341-355.	2.8	12
71	A new ignition time model applied to super knock. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 3487-3494.	2.4	6
72	Shock capturing for discontinuous Galerkin methods with application to predicting heat transfer in hypersonic flows. <i>Journal of Computational Physics</i> , 2019, 376, 54-75.	1.9	57

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73	Pareto-efficient combustion modeling for improved CO-emission prediction in LES of a piloted turbulent dimethyl ether jet flame. Proceedings of the Combustion Institute, 2019, 37, 2267-2276.	2.4	16
74	Assessment of spray combustion models in large-eddy simulations of a polydispersed acetone spray flame. Proceedings of the Combustion Institute, 2019, 37, 3335-3344.	2.4	13
75	Analysis of transient blow-out dynamics in a swirl-stabilized combustor using large-eddy simulations. Proceedings of the Combustion Institute, 2019, 37, 5073-5082.	2.4	26
76	Large eddy simulations of diesel-fuel injection and auto-ignition at transcritical conditions. International Journal of Engine Research, 2019, 20, 58-68.	1.4	19
77	Sensitivity study of high-speed dusty flows over blunt bodies simulated using a discontinuous Galerkin method. , 2019, , .		5
78	Requirements Towards Predictive Simulations of Turbulent Combustion. , 2019, , .		2
79	Compressible Flamelet Model with Thickened Flame Closure in an All-Speed Combustion Solver. , 2019, , .		0
80	Error-controlled kinetics reduction based on non-linear optimization and sensitivity analysis. Combustion and Flame, 2019, 200, 192-206.	2.8	10
81	X-ray computed tomography for flame-structure analysis of laminar premixed flames. Combustion and Flame, 2019, 200, 142-154.	2.8	9
82	Numerical Analysis of Heat and Mass Transfer Coupled With Gaseous Fuel Injection in Reactive Porous Media. Journal of Heat Transfer, 2019, 141, .	1.2	10
83	Data Assimilation and Optimal Calibration in Nonlinear Models of Flame Dynamics. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	0.5	9
84	Phase transitions of ordered ice in graphene nanocapillaries and carbon nanotubes. Scientific Reports, 2018, 8, 3851.	1.6	43
85	Nonadiabatic Flamelet Formulation for Predicting Wall Heat Transfer in Rocket Engines. AIAA Journal, 2018, 56, 2336-2349.	1.5	36
86	Application of Pareto-efficient combustion modeling framework to large eddy simulations of turbulent reacting flows. , 2018, , .		4
87	Numerical analysis on mixing processes for transcritical real-fluid simulations. , 2018, , .		3
88	Atomistic and continuum scale modeling of functionalized graphyne membranes for water desalination. Nanoscale, 2018, 10, 3969-3980.	2.8	37
89	Modeling of sub-grid dispersion in large-eddy simulation using regularized deconvolution method. , 2018, , .		0
90	Direct numerical simulations of turbulent channel flow under transcritical conditions. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
91	Efficient time stepping for reactive turbulent simulations with stiff chemistry. , 2018, , .		6
92	Development of a Lagrangian Particle Tracking Method for High-Order Discontinuous Galerkin Schemes. , 2018, , .		0
93	Lyapunov exponent and Wasserstein metric as validation tools for assessing short-time dynamics and quantitative model evaluation of large-eddy simulation. , 2018, , .		5
94	Effects of Nozzle Helmholtz Number on Indirect Combustion Noise by Compositional Perturbations. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	10
95	On underresolved simulations of compressible turbulence using an entropy-bounded DG method: Solution stabilization, scheme optimization, and benchmark against a finite-volume solver. Computers and Fluids, 2018, 161, 89-106.	1.3	13
96	Formulation of optimal surrogate descriptions of fuels considering sensitivities to experimental uncertainties. Combustion and Flame, 2018, 188, 337-356.	2.8	10
97	Transcritical mixing and auto-ignition of n-dodecane fuel using a diffuse interface method. , 2018, , .		0
98	Identification of governing physical processes of irregular combustion through machine learning. Shock Waves, 2018, 28, 941-954.	1.0	7
99	Thermodynamic structure of supercritical LOXâ€“GH2 diffusion flames. Combustion and Flame, 2018, 196, 364-376.	2.8	27
100	Assessment of differential diffusion effects in flamelet modeling of oxy-fuel flames. Combustion and Flame, 2018, 197, 134-144.	2.8	23
101	Structure of wall-bounded flows at transcritical conditions. Physical Review Fluids, 2018, 3, .	1.0	33
102	Development and Analysis of Wall Models for Internal Combustion Engine Simulations Using High-speed Micro-PIV Measurements. Flow, Turbulence and Combustion, 2017, 98, 283-309.	1.4	38
103	Multiple-scale thermo-acoustic stability analysis of a coaxial jet combustor. Proceedings of the Combustion Institute, 2017, 36, 3863-3871.	2.4	11
104	Instability Analysis of the Separated Boundary Layer in Shock Tubes. , 2017, , .		0
105	Seven questions about supercritical fluids - towards a new fluid state diagram. , 2017, , .		33
106	Numerical framework for transcritical real-fluid reacting flow simulations using the flamelet progress variable approach. , 2017, , .		16
107	Development of Discontinuous Galerkin method for Hypersonic Heating Prediction. , 2017, , .		5
108	Large-Eddy Simulations of Fuel Effect on Gas Turbine Lean Blow-out. , 2017, , .		8

#	ARTICLE	IF	CITATIONS
109	MVP-Workshop Contribution: Modeling of Volvo bluff body flame experiment. , 2017, , .		17
110	Non-equilibrium wall-modeling for internal combustion engine simulations with wall heat transfer. International Journal of Engine Research, 2017, 18, 15-25.	1.4	33
111	High-order discontinuous Galerkin method for applications to multicomponent and chemically reacting flows. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 486-499.	1.5	16
112	A general probabilistic approach for the quantitative assessment of LES combustion models. Combustion and Flame, 2017, 183, 88-101.	2.8	28
113	An entropy-stable hybrid scheme for simulations of transcritical real-fluid flows. Journal of Computational Physics, 2017, 340, 330-357.	1.9	128
114	Fuel effects on lean blow-out in a realistic gas turbine combustor. Combustion and Flame, 2017, 181, 82-99.	2.8	143
115	Species Dependency of the Compositional Indirect Noise Mechanism. , 2017, , .		1
116	Effects of Nozzle Helmholtz Number on Indirect Combustion Noise by Compositional Perturbations. , 2017, , .		2
117	Investigation of Lean Combustion Stability, Pressure Drop, and Material Durability in Porous Media Burners. , 2017, , .		5
118	Flamelet regime characterization for non-premixed turbulent combustion simulations. Combustion and Flame, 2017, 186, 220-235.	2.8	3
119	Similarity law for Widom lines and coexistence lines. Physical Review E, 2017, 95, 052120.	0.8	55
120	Phase separation analysis in supercritical injection using large-eddy-simulation and vapor-liquid-equilibrium. , 2017, , .		9
121	A Flamelet Model with Heat-Loss Effects for Predicting Wall-Heat Transfer in Rocket Engines. , 2017, , .		11
122	Widom Lines in Binary Mixtures of Supercritical Fluids. Scientific Reports, 2017, 7, 3027.	1.6	71
123	Regularized deconvolution method for turbulent combustion modeling. Combustion and Flame, 2017, 176, 125-142.	2.8	32
124	Numerical investigation of soot-flame-vortex interaction. Proceedings of the Combustion Institute, 2017, 36, 753-761.	2.4	10
125	An investigation of internal flame structure in porous media combustion via X-ray Computed Tomography. Proceedings of the Combustion Institute, 2017, 36, 4399-4408.	2.4	38
126	The role of preferential evaporation on the ignition of multicomponent fuels in a homogeneous spray/air mixture. Proceedings of the Combustion Institute, 2017, 36, 2483-2491.	2.4	48

#	ARTICLE	IF	CITATIONS
127	Combustion and Engine-Core Noise. Annual Review of Fluid Mechanics, 2017, 49, 277-310.	10.8	92
128	The cross-scale physical-space transfer of kinetic energy in turbulent premixed flames. Proceedings of the Combustion Institute, 2017, 36, 1967-1975.	2.4	53
129	Classification and lift-off height prediction of non-premixed MILD and autoignitive flames. Proceedings of the Combustion Institute, 2017, 36, 4297-4304.	2.4	37
130	Regimes describing shock boundary layer interaction and ignition in shock tubes. Proceedings of the Combustion Institute, 2017, 36, 2927-2935.	2.4	33
131	Lyapunov exponent as a metric for assessing the dynamic content and predictability of large-eddy simulations. Physical Review Fluids, 2017, 2, .	1.0	33
132	An entropy-residual shock detector for solving conservation laws using high-order discontinuous Galerkin methods. Journal of Computational Physics, 2016, 322, 448-472.	1.9	31
133	Compositional inhomogeneities as a source of indirect combustion noise. Journal of Fluid Mechanics, 2016, 799, .	1.4	58
134	Group contribution method for multicomponent evaporation with application to transportation fuels. International Journal of Heat and Mass Transfer, 2016, 102, 833-845.	2.5	23
135	Compliance of combustion models for turbulent reacting flow simulations. Fuel, 2016, 186, 853-863.	3.4	35
136	Spectral kinetic energy transfer in turbulent premixed reacting flows. Physical Review E, 2016, 93, 053115.	0.8	60
137	LES modeling of scalar transport based on high-order discontinuous finite-element method: Assessment of implicit LES and scalar variance modeling. , 2016, , .		0
138	Compressible Flamelet Model in a Rule-Based Turbulent Combustion Solver. , 2016, , .		1
139	Analysis of Combustion Closure Assumptions in a Dual-Mode Scramjet Combustor. , 2016, , .		4
140	Entropy Residual as a Feature-Based Adaptation Indicator for Simulations of Unsteady Flow
. , 2016, , .		7
141	Characterizing spray flame"vortex interaction: A spray spectral diagram for extinction. Combustion and Flame, 2016, 163, 100-114.	2.8	9
142	Investigation of the mechanisms of jet-engine core noise using large-eddy simulation. , 2016, , .		5
143	A Pareto-efficient combustion framework with submodel assignment for predicting complex flame configurations. Combustion and Flame, 2015, 162, 4208-4230.	2.8	60
144	A Fidelity Adaptive Modeling Framework for Combustion Systems Based on Model Trust-Region. , 2015, , .		0

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145	Characterization of scalar mixing in dense gaseous jets using X-ray computed tomography. <i>Experiments in Fluids</i> , 2015, 56, 1.	1.1	4
146	A general and robust high-order numerical framework for shock-capturing: entropy-bounding, shock detection and artificial viscosity. , 2015, , .		3
147	Coupling of flame geometry and combustion instabilities based on kilohertz formaldehyde PLIF measurements. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 3255-3262.	2.4	30
148	Entropy-bounded discontinuous Galerkin scheme for Euler equations. <i>Journal of Computational Physics</i> , 2015, 295, 715-739.	1.9	33
149	A multi-scale asymptotic scaling and regime analysis of flamelet equations including tangential diffusion effects for laminar and turbulent flames. <i>Combustion and Flame</i> , 2015, 162, 1507-1529.	2.8	36
150	Ignition regimes in rapid compression machines. <i>Combustion and Flame</i> , 2015, 162, 3071-3080.	2.8	80
151	An SMLD Joint PDF Model for Turbulent Non-Premixed Combustion Using the Flamelet Progress-Variable Approach. <i>Flow, Turbulence and Combustion</i> , 2015, 95, 97-119.	1.4	18
152	Quantitative model-based imaging of mid-infrared radiation from a turbulent nonpremixed jet flame and plume. <i>Combustion and Flame</i> , 2015, 162, 1275-1283.	2.8	12
153	On the generalisation of the mixture fraction to a monotonic mixing-describing variable for the flamelet formulation of spray flames. <i>Combustion Theory and Modelling</i> , 2015, 19, 773-806.	1.0	28
154	Analysis of segregation and bifurcation in turbulent spray flames: A 3D counterflow configuration. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 1675-1683.	2.4	57
155	Weak and strong ignition of hydrogen/oxygen mixtures in shock-tube systems. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2181-2189.	2.4	58
156	Large eddy simulation of a partially-premixed gas turbine model combustor. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 1225-1234.	2.4	64
157	Computational analysis of re-ignition and re-initiation mechanisms of quenched detonation waves behind a backward facing step. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 1963-1972.	2.4	27
158	Instability of elliptic liquid jets: Temporal linear stability theory and experimental analysis. <i>Physics of Fluids</i> , 2014, 26, .	1.6	26
159	Large Eddy Simulation of Supercritical Mixing and Combustion for Rocket Applications. , 2014, , .		5
160	Large-Eddy Simulations of a Dual-Mode Scramjet Combustor: Operating Point "A" of University of Virginia's Scramjet Experiments. , 2014, , .		4
161	LES Investigation of Flow Field Sensitivity in a Gas Turbine Model Combustor. , 2014, , .		4
162	Tabulated chemistry approach for diluted combustion regimes with internal recirculation and heat losses. <i>Combustion and Flame</i> , 2014, 161, 2120-2136.	2.8	52

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163	Effects of flow-field and mixture inhomogeneities on the ignition dynamics in continuous flow reactors. <i>Combustion and Flame</i> , 2014, 161, 2317-2326.	2.8	9
164	Discontinuous Galerkin method for multicomponent chemically reacting flows and combustion. <i>Journal of Computational Physics</i> , 2014, 270, 105-137.	1.9	63
165	Modeling of Non-Equilibrium Homogeneous Turbulence in Rapidly Compressed Flows. <i>Flow, Turbulence and Combustion</i> , 2014, 93, 93-124.	1.4	19
166	Assessment of model assumptions and budget terms of the unsteady flamelet equations for a turbulent reacting jet-in-cross-flow. <i>Combustion and Flame</i> , 2014, 161, 2601-2613.	2.8	35
167	Subgrid-scale backscatter in reacting and inert supersonic hydrogen-air turbulent mixing layers. <i>Journal of Fluid Mechanics</i> , 2014, 743, 554-584.	1.4	59
168	Effects of finite-rate chemistry and detailed transport on the instability of jet diffusion flames. <i>Journal of Fluid Mechanics</i> , 2014, 745, 647-681.	1.4	10
169	Acoustic characterization of a partially-premixed gas turbine model combustor: Syngas and hydrocarbon fuel comparisons. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 3145-3153.	2.4	49
170	Large-eddy simulation of a piloted premixed jet burner. <i>Combustion and Flame</i> , 2013, 160, 2896-2910.	2.8	32
171	Effect of gravity on capillary instability of liquid jets. <i>Physical Review E</i> , 2013, 87, 053017.	0.8	20
172	Large-Eddy Simulation of a Gas Turbine Model Combustor. , 2013, , .		1
173	Development of Discontinuous Galerkin Method for Detonation and Supersonic Combustion. , 2013, , .		3
174	Large Eddy Simulation of Shear Coaxial Rocket Injector: Real Fluid Effects. , 2013, , .		22
175	Parallel Compressible Solver for Unsteady Turbulent Combustion in Rocket Injectors Using Flamelet Models. , 2013, , .		4
176	Simulation of a Shear Coaxial GO ₂ /GH ₂ Rocket Injector with DES and LES Using Flamelet Models. , 2012, , .		3
177	On the Generation of Direct Combustion Noise in Turbulent Non-Premixed Flames. <i>International Journal of Aeroacoustics</i> , 2012, 11, 25-78.	0.8	29
178	Jet Noise Receptivity to Nozzle-upstream Perturbations in Compressible Heated Jets. , 2012, , .		2
179	Large-Eddy Simulation of a Jet-in-Hot-Coflow Burner Operating in the Oxygen-Diluted Combustion Regime. <i>Flow, Turbulence and Combustion</i> , 2012, 89, 449-464.	1.4	87
180	Regularization of reaction progress variable for application to flamelet-based combustion models. <i>Journal of Computational Physics</i> , 2012, 231, 7715-7721.	1.9	145

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181	On the role of turbulence and compositional fluctuations in rapid compression machines: Autoignition of syngas mixtures. <i>Combustion and Flame</i> , 2012, 159, 1592-1604.	2.8	33
182	Linear Stability Analysis of a Non-premixed Buoyant Jet Flame. , 2012, , .		0
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