Heinz Pitsch

List of Publications by Year
in descending order

404 papers	19,327 citations	12330 69 h-index	18647 119 g-index
414 all docs	414 docs citations	414 times ranked	7680 citing authors

#	Article	IF	Citations
1	Evaluation of partially premixed turbulent flame stability from mixture fraction statistics in a slot burner. Combustion Science and Technology, 2023, 195, 1-17.	2.3	5
2	Hybrid scheme for complex flows on staggered grids and application to multiphase flows. Journal of Computational Physics, 2023, 474, 108478.	3.8	3
3	Collaborative investigation of the internal flow and near-nozzle flow of an eight-hole gasoline injector (Engine Combustion Network Spray G). International Journal of Engine Research, 2023, 24, 2297-2314.	2.3	28
4	Analysis of a Quasi-Two-Dimensional Flamelet Model on a Three-Feed Non-premixed Oxy-Combustion Burner. Flow, Turbulence and Combustion, 2022, 108, 303-327.	2.6	6
5	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.	5.2	11
6	Numerical modeling of single droplet flash boiling behavior of e-fuels considering internal and external vaporization. Fuel, 2022, 308, 121934.	6.4	9
7	A reduced-order model for multiphase simulation of transient inert sprays in the context of compression ignition engines. International Journal of Multiphase Flow, 2022, 147, 103872.	3.4	3
8	A reduced-order model for turbulent reactive sprays in compression ignition engines. Combustion and Flame, 2022, 236, 111751.	5.2	2
9	Data reduction considerations for spherical R-32(CH2F2)-air flame experiments. Combustion and Flame, 2022, 237, 111806.	5.2	7
10	The influence of adversarial training on turbulence closure modeling. , 2022, , .		0
11	A new detailed kinetic model for surrogate fuels: C3MechV3.3. Applications in Energy and Combustion Science, 2022, 9, 100043.	1.5	15
12	Intrinsic instabilities in premixed hydrogen flames: Parametric variation of pressure, equivalence ratio, and temperature. Part 1 - Dispersion relations in the linear regime. Combustion and Flame, 2022, 240, 111935.	5.2	19
13	HÈ®2Â+ÂHÈ®2: High level theory and the role of singlet channels. Combustion and Flame, 2022, 243, 111975.	5.2	23
14	Intrinsic instabilities in premixed hydrogen flames: parametric variation of pressure, equivalence ratio, and temperature. Part 2 â€“ Nonâ€linear regime and flame speed enhancement. Combustion and Flame, 2022, 240, 111936.	5.2	33
15	Quantitative measurement of mixture fraction in counterflow diffusion flames by laser-induced breakdown spectroscopy. Combustion and Flame, 2022, 241, 112130.	5.2	11
16	Experimental Investigation of the Pressure Dependence of Iso-Octane Combustion. Frontiers in Energy Research, 2022, 10, .	2.3	1
17	Low temperature oxidation of toluene in an n-heptane/toluene mixture. Combustion and Flame, 2022, 242, 112200.	5.2	3
18	Effect of methyl substituents, ring size, and oxygen on bond dissociation energies and ring-opening kinetics of five- and six-membered cyclic acetals. Combustion and Flame, 2022, 242, 112211.	5.2	7

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19	A three-dimensional cell-based volume-of-fluid method for conservative simulations of primary atomization. Journal of Computational Physics, 2022, 465, 111374.	3.8	3
20	Synergistic interactions of thermodiffusive instabilities and turbulence in lean hydrogen flames. Combustion and Flame, 2022, 244, 112254.	5.2	43
21	A Methane Mechanism for Oxy-Fuel Combustion: Extinction Experiments, Model Validation, and Kinetic Analysis. Flow, Turbulence and Combustion, 2021, 106, 499-514.	2.6	5
22	Combined isochoric and isobaric acquisition methodology for accurate flame speed measurements from ambient to high pressures and temperatures. Proceedings of the Combustion Institute, 2021, 38, 2185-2193.	3.9	7
23	Low- and high-temperature study of n-heptane combustion chemistry. Proceedings of the Combustion Institute, 2021, 38, 405-413.	3.9	9
24	The effect of pressure on the hydrodynamic stability limit of premixed flames. Proceedings of the Combustion Institute, 2021, 38, 1973-1981.	3.9	28
25	The effect of fuel composition and Reynolds number on soot formation processes in turbulent non-premixed toluene jet flames. Proceedings of the Combustion Institute, 2021, 38, 1395-1402.	3.9	5
26	The role of resonance-stabilized radical chain reactions in polycyclic aromatic hydrocarbon growth: Theoretical calculation and kinetic modeling. Proceedings of the Combustion Institute, 2021, 38, 1459-1466.	3.9	22
27	Turbulent flame speed and reaction layer thickening in premixed jet flames at constant Karlovitz and increasing Reynolds numbers. Proceedings of the Combustion Institute, 2021, 38, 2939-2947.	3.9	23
28	Adjoint sensitivity analysis of kinetic, thermochemical, and transport data of nitrogen and ammonia chemistry. Proceedings of the Combustion Institute, 2021, 38, 777-785.	3.9	11
29	Highly radiating hydrogen flames: Effect of toluene concentration and phase. Proceedings of the Combustion Institute, 2021, 38, 1099-1106.	3.9	14
30	Simultaneous production of ketohydroperoxides from low temperature oxidation of a gasoline primary reference fuel mixture. Fuel, 2021, 288, 119737.	6.4	7
31	A property database of fuel compounds with emphasis on spark-ignition engine applications. Applications in Energy and Combustion Science, 2021, 5, 100018.	1.5	17
32	Modeling subfilter soot-turbulence interactions in Large Eddy Simulation: An a priori study. Proceedings of the Combustion Institute, 2021, 38, 2783-2790.	3.9	8
33	Low global-warming-potential refrigerant CH2F2 (R-32): Integration of a radiation heat loss correction method to accurately determine experimental flame speed metrics. Proceedings of the Combustion Institute, 2021, 38, 4665-4672.	3.9	9
34	Flame synthesis of carbon metal-oxide nanocomposites in a counterflow burner. Proceedings of the Combustion Institute, 2021, 38, 1269-1277.	3.9	11
35	Experimental and theoretical evidence for the temperature-determined evolution of PAH functional groups. Proceedings of the Combustion Institute, 2021, 38, 1467-1475.	3.9	9
36	Unimolecular reactions of the resonance-stabilized cyclopentadienyl radicals and their role in the polycyclic aromatic hydrocarbon formation. Proceedings of the Combustion Institute, 2021, 38, 729-737.	3.9	9

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37	Adjoint-based sensitivity analysis of steady char burnout. Combustion Theory and Modelling, 2021, 25, 96-120.	1.9	8
38	Iterative model-based experimental design for efficient uncertainty minimization of chemical mechanisms. Proceedings of the Combustion Institute, 2021, 38, 1033-1042.	3.9	11
39	Investigation of nitric oxide formation in methane, methane/propane, and methane/hydrogen flames under condensing gas boiler conditions. Applications in Energy and Combustion Science, 2021, 5, 100014.	1.5	5
40	A new modeling approach for mixture fraction statistics based on dissipation elements. Proceedings of the Combustion Institute, 2021, 38, 2681-2689.	3.9	10
41	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.	3.9	9
42	Oxymethylene ether â€“ n-dodecane blend spray combustion: Experimental study and large-eddy simulations. Proceedings of the Combustion Institute, 2021, 38, 3417-3425.	3.9	16
43	On the use of oscillating jet flames in a coflow to develop soot models for practical applications. Proceedings of the Combustion Institute, 2021, 38, 1309-1317.	3.9	0
44	Updated thermochemistry for renewable transportation fuels: New groups and group values for acetals and ethers, their radicals, and peroxy species. International Journal of Chemical Kinetics, 2021, 53, 299-307.	1.6	9
45	A-priori and a-posteriori studies of a direct moment closure approach for turbulent combustion using DNS data of a premixed flame. Proceedings of the Combustion Institute, 2021, 38, 3003-3011.	3.9	4
46	Numerical Simulations and Experiments of Ignition of Solid Particles in a Laminar Burner: Effects of Slip Velocity and Particle Swelling. Flow, Turbulence and Combustion, 2021, 106, 515-531.	2.6	2
47	Higher Alcohol and Ether Biofuels for Compression-Ignition Engine Application: A Review with Emphasis on Combustion Kinetics. Energy & Fuels, 2021, 35, 1890-1917.	5.1	42
48	Using physics-informed enhanced super-resolution generative adversarial networks for subfilter modeling in turbulent reactive flows. Proceedings of the Combustion Institute, 2021, 38, 2617-2625.	3.9	59
49	On Parallelization Strategies for Multiple Representative Interactive Flamelets Combustion Models. , 2021, , 279-293.		0
50	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.	3.9	15
51	Understanding the antagonistic effect of methanol as a component in surrogate fuel models: A case study of methanol/n-heptane mixtures. Combustion and Flame, 2021, 226, 229-242.	5.2	129
52	Data-driven subfilter modelling of thermo-diffusively unstable hydrogenâ€“air premixed flames. Combustion Theory and Modelling, 2021, 25, 1064-1085.	1.9	8
53	Homogeneous ignition and volatile combustion of single solid fuel particles in air and oxy-fuel conditions. Fuel, 2021, 291, 120101.	6.4	21
54	Laminar burning velocities, CO, and NOx emissions of premixed polyoxymethylene dimethyl ether flames. Fuel, 2021, 293, 120321.	6.4	38

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55	Effects of C1-C3 hydrocarbon blending on aromatics formation in 1-butene counterflow flames. Combustion and Flame, 2021, 230, 111427.	5.2	3
56	Development of a Modified Jobackâ€“Reid Group Contribution Method to Predict the Sooting Tendency of Oxygenated Fuels. Energy & Fuels, 2021, 35, 13144-13158.	5.1	3
57	A Comprehensive Experimental and Kinetic Modeling Study of the Combustion Chemistry of Diethoxymethane. Energy & Fuels, 2021, 35, 16086-16100.	5.1	11
58	3D modeling framework and investigation of pollutant formation in a condensing gas boiler. Fuel, 2021, 300, 120916.	6.4	6
59	Furan formation pathways exploration in low temperature oxidation of 1,3-butadiene, trans-2-butene, and cis-2-butene. Combustion and Flame, 2021, 232, 111519.	5.2	9
60	Exploring the fuel structure dependence of laminar burning velocity: A machine learning based group contribution approach. Combustion and Flame, 2021, 232, 111525.	5.2	28
61	Chemical insights into the multi-regime low-temperature oxidation of di-n-propyl ether: Jet-stirred reactor experiments and kinetic modeling. Combustion and Flame, 2021, 233, 111592.	5.2	9
62	Unsupervised Data Analysis of Direct Numerical Simulation of a Turbulent Flame via Local Principal Component Analysis and Procustes Analysis. Advances in Intelligent Systems and Computing, 2021, , 460-469.	0.6	1
63	Oxygenated PAH Formation Chemistry Investigation in Anisole Jet Stirred Reactor Oxidation by a Thermodynamic Approach. Energy & Fuels, 2021, 35, 1535-1545.	5.1	8
64	Exploring the combustion chemistry of anisole in laminar counterflow diffusion-flames under oxy-fuel conditions. Combustion and Flame, 2021, , 111929.	5.2	6
65	DNS study of the global heat release rate during early flame kernel development under engine conditions. Combustion and Flame, 2020, 213, 455-466.	5.2	22
66	Investigating the impacts of thermochemical group additivity values on kinetic model predictions through sensitivity and uncertainty analyses. Combustion and Flame, 2020, 213, 394-408.	5.2	23
67	Analysis of premixed flame kernel/turbulence interactions under engine conditions based on direct numerical simulation data. Journal of Fluid Mechanics, 2020, 885, .	3.4	8
68	A quasi-one-dimensional model for an outwardly opening poppet-type direct gas injector for internal combustion engines. International Journal of Engine Research, 2020, 21, 1493-1519.	2.3	4
69	Laminar premixed and non-premixed flame investigation on the influence of dimethyl ether addition on n-heptane combustion. Combustion and Flame, 2020, 212, 323-336.	5.2	28
70	Auto-ignition of oxymethylene ethers (OMEn, nÂ=Â2â€“4) as promising synthetic e-fuels from renewable electricity: shock tube experiments and automatic mechanism generation. Fuel, 2020, 264, 116711.	6.4	75
71	Dissipation element analysis of non-premixed jet flames. Journal of Fluid Mechanics, 2020, 905, .	3.4	8
72	Theoretical analysis and kinetic modeling of hydrogen abstraction and addition of 1,3-cyclopentadiene and associated reactions on the C5H7 potential energy surface. Combustion and Flame, 2020, 222, 423-433.	5.2	13

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73	A Review of Terminology Used to Describe Soot Formation and Evolution under Combustion and Pyrolytic Conditions. ACS Nano, 2020, 14, 12470-12490.	14.6	122
74	The role of differential diffusion during early flame kernel development under engine conditions - part I: Analysis of the heat-release-rate response. Combustion and Flame, 2020, 221, 502-515.	5.2	12
75	The role of differential diffusion during early flame kernel development under engine conditions â€“ partÂII: Effect of flame structure and geometry. Combustion and Flame, 2020, 221, 516-529.	5.2	9
76	Using machine learning with target-specific feature sets for structure-property relationship modeling of octane numbers and octane sensitivity. Fuel, 2020, 281, 118772.	6.4	31
77	Gradient Trajectory Analysis of the Burning Rate in Turbulent Premixed Jet Flames. Combustion Science and Technology, 2020, 192, 2189-2207.	2.3	1
78	Validation of a RANS 3D-CFD Gaseous Emission Model with Space-, Species-, and Cycle-Resolved Measurements from an SI DI Engine. Energies, 2020, 13, 4287.	3.1	9
79	An experimental and computational study on multicomponent evaporation of diesel fuel droplets. Fuel, 2020, 275, 117727.	6.4	14
80	Effects of stretch and radiation on the laminar burning velocity of R-32/air flames. Science and Technology for the Built Environment, 2020, 26, 599-609.	1.7	8
81	DNS-driven analysis of the Flamelet/Progress Variable model assumptions on soot inception, growth, and oxidation in turbulent flames. Combustion and Flame, 2020, 214, 437-449.	5.2	14
82	Experimental and numerical studies on electric field distribution of a premixed stagnation flame under DC power supply. Combustion and Flame, 2020, 215, 103-112.	5.2	11
83	Experimental comparison of combustion and emission characteristics between a market gasoline and its surrogate. Combustion and Flame, 2020, 214, 306-322.	5.2	19
84	A DNS study of the impact of gravity on spherically expanding laminar premixed flames. Combustion and Flame, 2020, 216, 412-425.	5.2	16
85	Systematic assessment of the Method of Moments with Interpolative Closure and guidelines for its application to soot particle dynamics in laminar and turbulent flames. Combustion and Flame, 2020, 214, 450-463.	5.2	7
86	Role of ring-enlargement reactions in the formation of aromatic hydrocarbons. Physical Chemistry Chemical Physics, 2020, 22, 4699-4714.	2.8	29
87	Pressure-induced Hydrodynamic Instability in Premixed Methane-Air Slot Flames. Combustion Science and Technology, 2020, 192, 1998-2009.	2.3	14
88	Potential analysis and virtual development of SI engines operated with DMC+. Proceedings, 2020, , 423-436.	0.3	0
89	Potential analysis and virtual development of SI Engines operated with DMC+. Proceedings, 2020, , 49-74.	0.3	1
90	Numerical study of coal particle ignition in air and oxy-atmosphere. Proceedings of the Combustion Institute, 2019, 37, 2867-2874.	3.9	34

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91	Sensitivity analysis, uncertainty quantification, and optimization for thermochemical properties in chemical kinetic combustion models. Proceedings of the Combustion Institute, 2019, 37, 771-779.	3.9	41
92	Predicting kinetic parameters for coal devolatilization by means of Artificial Neural Networks. Proceedings of the Combustion Institute, 2019, 37, 2943-2950.	3.9	40
93	Unraveling the high reactivity of 3-methyltetrahydrofuran over 2-methyltetrahydrofuran through kinetic modeling and experiments. Proceedings of the Combustion Institute, 2019, 37, 221-230.	3.9	7
94	Adjoint-based sensitivity analysis of quantities of interest of complex combustion models. Combustion Theory and Modelling, 2019, 23, 180-196.	1.9	27
95	Characteristic patterns of thermodiffusively unstable premixed lean hydrogen flames. Proceedings of the Combustion Institute, 2019, 37, 1879-1886.	3.9	60
96	Deactivation reactions on a commercial lean nox-trap - Effect of hydrocarbon nature, concentration and operation temperature. Applied Catalysis A: General, 2019, 585, 117178.	4.3	3
97	Axisymmetric Linear Hyperspectral Absorption Spectroscopy and Residuum-Based Parameter Selection on a Counter Flow Burner. Energies, 2019, 12, 2786.	3.1	16
98	Towards Clean Propulsion with Synthetic Fuels: Computational Aspects and Analysis. , 2019, , 185-207.		7
99	Impact of thermochemistry on optimized kinetic model predictions: Auto-ignition of diethyl ether. Combustion and Flame, 2019, 210, 454-466.	5.2	32
100	Symposium for combustion control 2017 and 2018 special issue. International Journal of Engine Research, 2019, 20, 1003-1004.	2.3	1
101	Exploring the combustion chemistry of a novel lignocellulose-derived biofuel: cyclopentanol. Part I: quantum chemistry calculation and kinetic modeling. Combustion and Flame, 2019, 210, 490-501.	5.2	17
102	Experimental and numerical study of soot formation in counterflow diffusion flames of gasoline surrogate components. Combustion and Flame, 2019, 210, 159-171.	5.2	40
103	Exploring the combustion chemistry of a novel lignocellulose-derived biofuel: cyclopentanol. Part II: experiment, model validation, and functional group analysis. Combustion and Flame, 2019, 210, 134-144.	5.2	16
104	Mechanistic Understanding of Cu-CHA Catalyst as Sensor for Direct NH₃-SCR Monitoring: The Role of Cu Mobility. ACS Applied Materials & Interfaces, 2019, 11, 8097-8105.	8.0	30
105	Flame propagation speed and Markstein length of spherically expanding flames: Assessment of extrapolation and measurement techniques. Proceedings of the Combustion Institute, 2019, 37, 1521-1528.	3.9	20
106	The C5 chemistry preceding the formation of polycyclic aromatic hydrocarbons in a premixed 1-pentene flame. Combustion and Flame, 2019, 206, 411-423.	5.2	23
107	Model reduction and lumping procedures. Computer Aided Chemical Engineering, 2019, , 799-827.	0.5	10
108	Dissipation Element Analysis of Turbulent Premixed Jet Flames. Combustion Science and Technology, 2019, 191, 1677-1692.	2.3	7

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109	Detailed kinetic modeling of dimethoxymethane. Part II: Experimental and theoretical study of the kinetics and reaction mechanism. Combustion and Flame, 2019, 205, 522-533.	5.2	76
110	Effects of injection strategy on performance and emissions metrics in a diesel/methane dual-fuel single-cylinder compression ignition engine. International Journal of Engine Research, 2019, 20, 1059-1072.	2.3	12
111	Investigating the effect of oxy-fuel combustion and light coal volatiles interaction: A mass spectrometric study. Combustion and Flame, 2019, 204, 320-330.	5.2	23
112	Adaptive chemistry lookup tables for combustion simulations using optimal B-spline interpolants. Combustion Theory and Modelling, 2019, 23, 674-699.	1.9	20
113	Laminar flow reactor experiments for ignition delay time and species measurements at low temperatures: Linear alkanes and dimethyl ether. Combustion and Flame, 2019, 202, 347-361.	5.2	10
114	Unsupervised learning and nonlinear identification for in-cylinder pressure prediction of diesel combustion rate shaping process. IFAC-PapersOnLine, 2019, 52, 199-203.	0.9	5
115	Impact of exhaust gas recirculation on ignition delay times of gasoline fuel: An experimental and modeling study. Proceedings of the Combustion Institute, 2019, 37, 639-647.	3.9	69
116	Experimental investigation of soot evolution in a turbulent non-premixed prevaporized toluene flame. Proceedings of the Combustion Institute, 2019, 37, 849-857.	3.9	19
117	Numerical investigation of coal particle stream ignition in oxy-atmosphere. Fuel, 2019, 241, 477-487.	6.4	20
118	Simulation and Modeling of Direct Gas Injection through Poppet-type Outwardly-opening Injectors in Internal Combustion Engines. Energy, Environment, and Sustainability, 2019, , 65-115.	1.0	3
119	Magnetic control of flame stability: Application to oxygen-enriched and carbon dioxide-diluted sooting flames. Proceedings of the Combustion Institute, 2019, 37, 5637-5644.	3.9	7
120	Molecular-beam mass spectrometry study of oxy-combustion in a novel coal-plate experiment. Proceedings of the Combustion Institute, 2019, 37, 2801-2808.	3.9	1
121	Deep Learning at Scale for Subgrid Modeling in Turbulent Flows: Regression and Reconstruction. Lecture Notes in Computer Science, 2019, , 541-560.	1.3	12
122	Symposium for Combustion Control 2016. International Journal of Engine Research, 2018, 19, 151-152.	2.3	1
123	2-Methylfuran: A bio-derived octane booster for spark-ignition engines. Fuel, 2018, 225, 349-357.	6.4	26
124	Numerically accurate computational techniques for optimal estimator analyses of multi-parameter models. Combustion Theory and Modelling, 2018, 22, 480-504.	1.9	15
125	Understanding Ion Pairing in High-Salt Concentration Electrolytes Using Classical Molecular Dynamics Simulations and Its Implications for Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry C, 2018, 122, 8094-8101.	3.1	20
126	Triple-injection strategy for model-based control of premixed charge compression ignition diesel engine combustion. International Journal of Engine Research, 2018, 19, 230-240.	2.3	17

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127	A concentric flow slot burner for stabilizing turbulent partially premixed inhomogeneous flames of gaseous fuels. Experimental Thermal and Fluid Science, 2018, 91, 214-229.	2.7	21
128	Nonlinear Model Predictive Control for the Starting Process of a Free-Piston Linear Generator. IFAC-PapersOnLine, 2018, 51, 632-639.	0.9	9
129	The significance of beam steering on laser-induced incandescence measurements in laminar counterflow flames. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	15
130	Numerical and experimental investigation of pollutant formation and emissions in a full-scale cylindrical heating unit of a condensing gas boiler. Applied Energy, 2018, 229, 977-989.	10.1	28
131	Local dynamics of copper active sites in zeolite catalysts for selective catalytic reduction of NOx with NH3. Applied Catalysis B: Environmental, 2018, 237, 263-272.	20.2	35
132	Oxidation of 2-methylfuran and 2-methylfuran/n-heptane blends: An experimental and modeling study. Combustion and Flame, 2018, 196, 54-70.	5.2	32
133	Electrochemical and Electronic Charge Transport Properties of Ni-Doped LiMn2O4 Spinel Obtained from Polyol-Mediated Synthesis. Materials, 2018, 11, 806.	2.9	19
134	Towards Prediction of Turbulent Flows at High Reynolds Numbers Using High Performance Computing Data and Deep Learning. Lecture Notes in Computer Science, 2018, , 614-623.	1.3	4
135	Development of a Model for Predicting the Knock Boundary in Consideration of Cooled Exhaust Gas Recirculation at Full Load. , 2018, , 143-185.		3
136	The oxidation of the novel lignocellulosic biofuel Î³-valerolactone in a low pressure flame. Proceedings of the Combustion Institute, 2017, 36, 577-585.	3.9	8
137	Transient model for soot formation during the combustion of single coal particles. Proceedings of the Combustion Institute, 2017, 36, 2131-2138.	3.9	20
138	Streamline segment scaling behavior in a turbulent wavy channel flow. Experiments in Fluids, 2017, 58, 1.	2.4	3
139	Computational study of flame characteristics of a turbulent piloted jet burner with inhomogeneous inlets. Proceedings of the Combustion Institute, 2017, 36, 1747-1757.	3.9	33
140	Advanced Biofuels and Beyond: Chemistry Solutions for Propulsion and Production. Angewandte Chemie - International Edition, 2017, 56, 5412-5452.	13.8	224
141	Experimental and numerical study of a novel biofuel: 2-Butyltetrahydrofuran. Combustion and Flame, 2017, 178, 257-267.	5.2	26
142	Synthese, motorische Verbrennung, Emissionen: Chemische Aspekte des Kraftstoffdesigns. Angewandte Chemie, 2017, 129, 5500-5544.	2.0	43
143	Experimental Design for Discrimination of Chemical Kinetic Models for Oxy-Methane Combustion. Energy & Fuels, 2017, 31, 5533-5542.	5.1	17
144	Elucidation and Comparison of the Effect of LiTFSI and LiNO₃ Salts on Discharge Chemistry in Nonaqueous Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2017, 9, 19319-19325.	8.0	24

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145	Titelbild: Synthese, motorische Verbrennung, Emissionen: Chemische Aspekte des Kraftstoffdesigns (Angew. Chem. 20/2017). Angewandte Chemie, 2017, 129, 5457-5457.	2.0	0
146	Transient multiple particle simulations of char particle combustion. Fuel, 2017, 199, 289-298.	6.4	23
147	Resolved simulations of single char particle combustion in a laminar flow field. Fuel, 2017, 201, 15-28.	6.4	43
148	Experimental and Theoretical Understanding of Nitrogen-Doping-Induced Strong Metalâ€“Support Interactions in Pd/TiO₂ Catalysts for Nitrobenzene Hydrogenation. ACS Catalysis, 2017, 7, 1197-1206.	11.2	138
149	Large-Eddy Simulation and Detailed Modeling of Soot Evolution in a Model Aero Engine Combustor. , 2017, , .		3
150	Combustion instability mitigation by magnetic fields. Physical Review E, 2017, 95, 063113.	2.1	11
151	Ignition characteristics of 2-methyltetrahydrofuran: An experimental and kinetic study. Proceedings of the Combustion Institute, 2017, 36, 587-595.	3.9	32
152	A direct numerical simulation study on NO formation in lean premixed flames. Proceedings of the Combustion Institute, 2017, 36, 2033-2043.	3.9	20
153	Propagation speed and stability of spherically expanding hydrogen/air flames: Experimental study and asymptotics. Proceedings of the Combustion Institute, 2017, 36, 1531-1538.	3.9	64
154	Dual magnetic effects on soot production in partially premixed flames. Proceedings of the Combustion Institute, 2017, 36, 1377-1385.	3.9	11
155	Impact of acoustic forcing on soot evolution and temperature in ethylene-air flames. Proceedings of the Combustion Institute, 2017, 36, 781-788.	3.9	24
156	Scalar dissipation rate based multi-zone model for early-injected and conventional diesel engine combustion. Combustion and Flame, 2017, 175, 138-154.	5.2	13
157	Modeling soot oxidation with the Extended Quadrature Method of Moments. Proceedings of the Combustion Institute, 2017, 36, 789-797.	3.9	28
158	Modeling and Numerical Investigation of Auto-Ignition and Megaknock in Boosted Gasoline Engines. , 2017, , .		1
159	LES of n-Dodecane Spray Combustion Using a Multiple Representative Interactive Flamelets Model. Oil and Gas Science and Technology, 2017, 72, 29.	1.4	29
160	LES of Internal Combustion Engine Flows Using Cartesian Overset Grids. Oil and Gas Science and Technology, 2017, 72, 36.	1.4	6
161	Overlapping of Communication and Computation in nb3dfft for 3D Fast Fourier Transformations. Lecture Notes in Computer Science, 2017, , 151-159.	1.3	2
162	Multi-scale Coupling for Predictive Injector Simulations. Lecture Notes in Computer Science, 2017, , 96-108.	1.3	11

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163	Analysis of structure function equations up to the seventh order. Journal of Turbulence, 2017, 18, 1001-1032.	1.4	5
164	Effect of dynamic surface polarization on the oxidative stability of solvents in nonaqueous <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>Li</mml:mi><mml:mtext>â</mml:mtext><mml:mo>+</mml:mo></mml:mrow><mml:mrow><mml:mtext>â</mml:mtext><mml:mo>'</mml:mo></mml:mrow></mml:msub><mml:mtext>â</mml:mtext><mml:mo>'</mml:mo></mml:mrow><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> batteries. Physical Review Materials, 2017, 1, .	2.4	21
165	Ignition characteristics of saturated and unsaturated furans. Combustion and Flame, 2016, 171, 133-136.	5.2	29
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