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List of Publications by Year
in descending order

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Version: 2024-02-01

71 papers	3,617 citations	126907 33 h-index	155660 55 g-index
71 all docs	71 docs citations	71 times ranked	1528 citing authors

#	Article	IF	Citations
1	Construction and derivation of a series of skeletal chemical mechanisms for n-alkanes with uniform and decoupling structure based on reaction rate rules. Combustion and Flame, 2022, 236, 111785.	5.2	18
2	Collaborative optimization of fuel composition and operating parameters of gasoline compression ignition (GCI) engine in a wide load range. Fuel, 2022, 310, 122366.	6.4	11
3	Construction of reduced chemical mechanisms orientated toward specific applications: a case study of primary reference fuel. Combustion Theory and Modelling, 2022, 26, 560-589.	1.9	4
4	Development of a 5-component gasoline surrogate model using recent advancements in the detailed H2/O2/CO/C1-C3 mechanism for decoupling methodology. Fuel, 2021, 283, 118793.	6.4	12
5	Feasibility study of the combustion strategy of n-butanol/diesel dual direct injection (DI2) in a compression-ignition engine. Fuel, 2021, 289, 119865.	6.4	21
6	Novel Method for Quantitative Assessment of Reduced Chemical Mechanisms Based on the Inherent Similarity Evaluation: Case Study of n-Heptane. Energy & Fuels, 2021, 35, 4478-4492.	5.1	3
7	Towards a comprehensive optimization of engine efficiency and emissions by coupling artificial neural network (ANN) with genetic algorithm (GA). Energy, 2021, 225, 120331.	8.8	82
8	Sprayâ€“turbulenceâ€“chemistry interactions under engine-like conditions. Progress in Energy and Combustion Science, 2021, 86, 100939.	31.2	22
9	Construction of reduced oxidation mechanisms of polyoxymethylene dimethyl ethers (PODE1â€“6) with consistent structure using decoupling methodology and reaction rate rule. Combustion and Flame, 2021, 232, 111534.	5.2	20
10	Computational optimization of the piston bowl geometry for the different combustion regimes of the dual-mode dual-fuel (DMDF) concept through an improved genetic algorithm. Energy Conversion and Management, 2021, 246, 114658.	9.2	13
11	Mechanism of micro-explosion of water-in-oil emulsified fuel droplet and its effect on soot generation. Energy, 2020, 191, 116488.	8.8	41
12	Reduction of large-scale chemical mechanisms using global sensitivity analysis on reaction class/sub-mechanism. Combustion and Flame, 2020, 212, 355-366.	5.2	29
13	Multiple-objective optimization of methanol/diesel dual-fuel engine at low loads: A comparison of reactivity controlled compression ignition (RCCI) and direct dual fuel stratification (DDFS) strategies. Fuel, 2020, 262, 116673.	6.4	80
14	Construction of a Skeletal Oxidation Mechanism for 2,5-Dimethylfuran Using Decoupling Methodology and Reaction Class-Based Global Sensitivity Analysis. Energy & Fuels, 2020, 34, 16654-16665.	5.1	4
15	Kinetic Modeling Study of Polycyclic Aromatic Hydrocarbon Formation and Oxidation for Oxygenated Fuels including Methanol, n-Butanol, Methyl Butanoate, and Dimethyl Ether. Energy & Fuels, 2020, 34, 4882-4898.	5.1	16
16	Computational optimization of the dual-mode dual-fuel concept through genetic algorithm at different engine loads. Energy Conversion and Management, 2020, 208, 112577.	9.2	20
17	Development of a practical reaction model of polycyclic aromatic hydrocarbon (PAH) formation and oxidation for diesel surrogate fuel. Fuel, 2020, 267, 117159.	6.4	25
18	Influence of the functional group of fuels on the construction of skeletal chemical mechanisms: A case study of 1-hexane, 1-hexene, and 1-hexanol. Combustion and Flame, 2020, 221, 120-135.	5.2	17

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19	Construction and assessment of reduced oxidation mechanisms using global sensitivity analysis and uncertainty analysis. Proceedings of the Combustion Institute, 2019, 37, 751-761.	3.9	16
20	Reduction of Detailed Chemical Mechanisms Using Reaction Class-Based Global Sensitivity and Path Sensitivity Analyses. Energy & Fuels, 2019, 33, 9289-9301.	5.1	4
21	Experimental study on the influence of low-temperature combustion (LTC) mode and fuel properties on cyclic variations in a compression-ignition engine. Fuel, 2019, 256, 115907.	6.4	26
22	Flash boiling explosion model of dimethyl ether (DME)/n-pentane bi-component droplet under gasoline engine conditions. Fuel, 2019, 243, 240-250.	6.4	8
23	Establishment of an improved heat transfer model based on an enhanced thermal wall function for internal combustion engines operated under different combustion modes. Energy Conversion and Management, 2019, 195, 748-759.	9.2	26
24	Numerical analysis of jet breakup based on a modified compressible two-fluid-LES model. Fuel, 2019, 254, 115608.	6.4	9
25	Evaluation of variable compression ratio (VCR) and variable valve timing (VVT) strategies in a heavy-duty diesel engine with reactivity controlled compression ignition (RCCI) combustion under a wide load range. Fuel, 2019, 253, 114-128.	6.4	40
26	Numerical investigation into primary breakup of diesel spray with residual bubbles in the nozzle. Fuel, 2019, 250, 265-276.	6.4	14
27	Understanding of the Ignition Behavior of n-Heptane Spray in Constant Volume Combustion Bombs Focusing on Chemical Kinetics. Energy & Fuels, 2019, 33, 12830-12838.	5.1	2
28	Construction of a decoupling physicalâ€“chemical surrogate (DPCS) for practical diesel fuel. Applied Thermal Engineering, 2019, 149, 536-547.	6.0	14
29	Development of a decoupling physical-chemical surrogate (DPCS) model for simulation of the spray and combustion of multi-component biodiesel fuels. Fuel, 2019, 240, 16-30.	6.4	15
30	Comprehensive analysis of exergy destruction sources in different engine combustion regimes. Energy, 2018, 149, 697-708.	8.8	47
31	Principle of determining the optimal operating parameters based on fuel properties and initial conditions for RCCI engines. Fuel, 2018, 216, 284-295.	6.4	41
32	Efficient Approach for the Optimization of Skeletal Chemical Mechanisms with Multiobjective Genetic Algorithm. Energy & Fuels, 2018, 32, 7086-7102.	5.1	32
33	Construction of a skeletal oxidation mechanism of n-pentanol by integrating decoupling methodology, genetic algorithm, and uncertainty quantification. Combustion and Flame, 2018, 194, 15-27.	5.2	45
34	Numerical optimization and comparative study of n-butanol concentration stratification combustion and n-butanol/diesel reactivity stratification combustion for advanced compression ignition (CI) engine. Fuel, 2018, 213, 83-97.	6.4	24
35	An improved method for coupling the in-nozzle cavitation with Multi-fluid-quasi-VOF model for diesel spray. Computers and Fluids, 2018, 177, 20-32.	2.5	29
36	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

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37	Potential of reactivity controlled compression ignition (RCCI) combustion coupled with variable valve timing (VVT) strategy for meeting Euro 6 emission regulations and high fuel efficiency in a heavy-duty diesel engine. Energy Conversion and Management, 2018, 171, 683-698.	9.2	42
38	Computational optimization of fuel supply, syngas composition, and intake conditions for a syngas/diesel RCCI engine. Fuel, 2018, 234, 120-134.	6.4	49
39	Multi-objective optimization of the combustion of a heavy-duty diesel engine with low temperature combustion under a wide load range: (I) Computational method and optimization results. Energy, 2017, 126, 707-719.	8.8	31
40	Multi-objective optimization of the combustion of a heavy-duty diesel engine with low temperature combustion (LTC) under a wide load range: (II) Detailed parametric, energy, and exergy analysis. Energy, 2017, 139, 247-261.	8.8	23
41	An efficient liquid film vaporization model for multi-component fuels considering thermal and mass diffusions. Applied Thermal Engineering, 2017, 112, 534-548.	6.0	48
42	Simulations of gasoline engine combustion and emissions using a chemical-kinetics-based turbulent premixed combustion modeling approach. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2017, 231, 743-765.	1.9	11
43	Construction of a skeletal mechanism for butanol isomers based on the decoupling methodology. Energy Conversion and Management, 2016, 128, 250-260.	9.2	33
44	Thermodynamic energy and exergy analysis of three different engine combustion regimes. Applied Energy, 2016, 180, 849-858.	10.1	117
45	Towards a comprehensive understanding of the influence of fuel properties on the combustion characteristics of a RCCI (reactivity controlled compression ignition) engine. Energy, 2016, 99, 69-82.	8.8	86
46	Development of a quasi-dimensional vaporization model for multi-component fuels focusing on forced convection and high temperature conditions. International Journal of Heat and Mass Transfer, 2016, 97, 130-145.	4.8	51
47	Development of an improved liquid film model for spray/wall interaction under engine-relevant conditions. International Journal of Multiphase Flow, 2016, 79, 74-87.	3.4	59
48	Effect of combustion regime on in-cylinder heat transfer in internal combustion engines. International Journal of Engine Research, 2016, 17, 331-346.	2.3	51
49	Application of the Optimized Decoupling Methodology for the Construction of a Skeletal Primary Reference Fuel Mechanism Focusing on Engine-Relevant Conditions. Frontiers in Mechanical Engineering, 2015, 1, .	1.8	53
50	A reduced toluene reference fuel chemical kinetic mechanism for combustion and polycyclic-aromatic hydrocarbon predictions. Combustion and Flame, 2015, 162, 2390-2404.	5.2	171
51	Construction of Skeletal Oxidation Mechanisms for the Saturated Fatty Acid Methyl Esters from Methyl Butanoate to Methyl Palmitate. Energy & Fuels, 2015, 29, 1076-1089.	5.1	15
52	Development of a skeletal mechanism for diesel surrogate fuel by using a decoupling methodology. Combustion and Flame, 2015, 162, 3785-3802.	5.2	162
53	Understanding the Relationship between Cetane Number and the Ignition Delay in Shock Tubes for Different Fuels Based on a Skeletal Primary Reference Fuel (n-Hexadecane/Iso-cetane) Mechanism. Energy & Fuels, 2015, 29, 3413-3427.	5.1	23
54	Evaluation of the necessity of exhaust gas recirculation employment for a methanol/diesel reactivity controlled compression ignition engine operated at medium loads. Energy Conversion and Management, 2015, 101, 40-51.	9.2	57

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55	Development of a skeletal oxidation mechanism for biodiesel surrogate. Proceedings of the Combustion Institute, 2015, 35, 3037-3044.	3.9	69
56	Numerical simulation of cyclic variability in reactivity-controlled compression ignition combustion with a focus on the initial temperature at intake valve closing. International Journal of Engine Research, 2015, 16, 441-460.	2.3	43
57	Parametric study and optimization of a RCCI (reactivity controlled compression ignition) engine fueled with methanol and diesel. Energy, 2014, 65, 319-332.	8.8	173
58	Development of a reduced n-dodecane-PAH mechanism and its application for n-dodecane soot predictions. Fuel, 2014, 136, 25-36.	6.4	111
59	DEVELOPMENT OF A NEW SPRAY/WALL INTERACTION MODEL FOR DIESEL SPRAY UNDER PCCI-ENGINE RELEVANT CONDITIONS. Atomization and Sprays, 2014, 24, 41-80.	0.8	74
60	Numerical evaluation of the potential of late intake valve closing strategy for diesel PCCI (premixed) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	8.8	61
61	Numerical study on the combustion and emission characteristics of a methanol/diesel reactivity controlled compression ignition (RCCI) engine. Applied Energy, 2013, 106, 184-197.	10.1	237
62	Development of a new skeletal mechanism for n-decane oxidation under engine-relevant conditions based on a decoupling methodology. Combustion and Flame, 2013, 160, 1315-1332.	5.2	154
63	Application of a Decoupling Methodology for Development of Skeletal Oxidation Mechanisms for Heavy n-Alkanes from n-Octane to n-Hexadecane. Energy & Fuels, 2013, 27, 3467-3479.	5.1	62
64	Improvement on a skeletal chemical kinetic model of iso-octane for internal combustion engine by using a practical methodology. Fuel, 2013, 103, 884-891.	6.4	67
65	Development of a Phenomenological Soot Model Coupled with a Skeletal PAH Mechanism for Practical Engine Simulation. Energy & Fuels, 2013, 27, 1699-1711.	5.1	49
66	Development of a New Skeletal Chemical Kinetic Model of Toluene Reference Fuel with Application to Gasoline Surrogate Fuels for Computational Fluid Dynamics Engine Simulation. Energy & Fuels, 2013, 27, 4899-4909.	5.1	105
67	Enhancement on a Skeletal Kinetic Model for Primary Reference Fuel Oxidation by Using a Semidecoupling Methodology. Energy & Fuels, 2012, 26, 7069-7083.	5.1	260
68	The effect of injection timing and intake valve close timing on performance and emissions of diesel PCCI engine with a full engine cycle CFD simulation. Applied Energy, 2011, 88, 2967-2975.	10.1	126
69	Development of a Reduced Chemical Mechanism for Dimethyl Ether (DME) Using a Decoupling Methodology. , 0, , .		6
70	Comparing the Exergy Destruction of Methanol and Gasoline in Reactivity Controlled Compression Ignition (RCCI) Engine. , 0, , .		13
71	Numerical Optimization of the Piston Bowl Geometry and Investigation of the Key Geometric Parameters for the Dual-Mode Dual-Fuel (DMDF) Concept under a Wide Load Range. , 0, , .		1