

Rolf D Reitz

List of Publications by Year in Descending Order

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Version: 2024-04-10

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

174 papers	10,684 citations	52 h-index	99 g-index
178 ext. papers	12,220 ext. citations	3.8 avg, IF	6.92 L-index

#	Paper	IF	Citations
174	Multi-dimensional Modelling of Diesel Combustion: A Review. <i>Mechanical Engineering Series</i> , 2022 , 279-319		319
173	Multi-dimensional Modelling of Diesel Combustion: Applications. <i>Mechanical Engineering Series</i> , 2022 , 321-358	0.3	
172	Reactivity controlled compression ignition engine: Pathways towards commercial viability. <i>Applied Energy</i> , 2021 , 282, 116174	10.7	18
171	Meeting EURO6 emission regulations by multi-objective optimization of the injection strategy of two direct injectors in a DDFS engine. <i>Energy</i> , 2021 , 229, 120737	7.9	5
170	A study of using E10 and E85 under direct dual fuel stratification (DDFS) strategy: Exploring the effects of the reactivity-stratification and diffusion-limited injection on emissions and performance in an E10/diesel DDFS engine. <i>Fuel</i> , 2020 , 275, 117870	7.1	16
169	Simulation of the High-Pressure Combustion Process in Diesel Engines 2020 , 731-768		
168	Application of an Equilibrium-Phase Spray Model to Multicomponent Gasoline Direct Injection. <i>Energy & Fuels</i> , 2019 , 33, 3565-3575	4.1	9
167	Modeling of High-Pressure Fuel Injection in Internal Combustion Engines. <i>Energy, Environment, and Sustainability</i> , 2019 , 109-143	0.8	
166	Numerical investigation of radiative heat transfer in internal combustion engines. <i>Applied Energy</i> , 2019 , 235, 147-163	10.7	19
165	An equilibrium phase spray model for high-pressure fuel injection and engine combustion simulations. <i>International Journal of Engine Research</i> , 2019 , 20, 203-215	2.7	13
164	Comprehensive analysis of exergy destruction sources in different engine combustion regimes. <i>Energy</i> , 2018 , 149, 697-708	7.9	29
163	Investigation of real gas effects on combustion and emissions in internal combustion engines and implications for development of chemical kinetics mechanisms. <i>International Journal of Engine Research</i> , 2018 , 19, 269-281	2.7	12
162	A Triangulated Lagrangian Ignition Kernel Model with Detailed Kinetics for Modeling Spark Ignition with the G-Equation-Part I: Geometric Aspects 2018 ,		1
161	Piston geometry effects in a light-duty, swirl-supported diesel engine: Flow structure characterization. <i>International Journal of Engine Research</i> , 2018 , 19, 1079-1098	2.7	27
160	Bowl Geometry Effects on Turbulent Flow Structure in a Direct Injection Diesel Engine 2018 ,		6
159	A numerical study of the effects of using hydrogen, reformer gas and nitrogen on combustion, emissions and load limits of a heavy duty natural gas/diesel RCCI engine. <i>Applied Energy</i> , 2017 , 193, 182-198	10.7	58
158	Comparison of Linear, Non-Linear and Generalized RNG-Based k-epsilon Models for Turbulent Diesel Engine Flows 2017 ,		11

157	A numerical study of the effects of reformer gas composition on the combustion and emission characteristics of a natural gas/diesel RCCI engine enriched with reformer gas. <i>Fuel</i> , 2017 , 209, 742-753	7.1	33
156	The role of the diffusion-limited injection in direct dual fuel stratification. <i>International Journal of Engine Research</i> , 2017 , 18, 351-365	2.7	22
155	Progress and recent trends in reactivity-controlled compression ignition engines. <i>International Journal of Engine Research</i> , 2016 , 17, 481-524	2.7	109
154	Development of a combined reduced primary reference fuel-alcohols (methanol/ethanol/propanols/butanols/n-pentanol) mechanism for engine applications. <i>Energy</i> , 2016 , 114, 542-558	7.9	64
153	An Efficient Level-Set Flame Propagation Model for Hybrid Unstructured Grids Using the G-Equation. <i>SAE International Journal of Engines</i> , 2016 , 9, 1409-1424	2.4	16
152	Investigation of Cold Starting and Combustion Mode Switching as Methods to Improve Low Load RCCI Operation. <i>Journal of Engineering for Gas Turbines and Power</i> , 2016 , 138,	1.7	5
151	Development of a reduced tri-propylene glycol monomethyl ether-hexadecane-poly-aromatic hydrocarbon mechanism and its application for soot prediction. <i>International Journal of Engine Research</i> , 2016 , 17, 969-982	2.7	3
150	Modeling of combustion phasing of a reactivity-controlled compression ignition engine for control applications. <i>International Journal of Engine Research</i> , 2016 , 17, 421-435	2.7	40
149	Development of a reduced toluene reference fuel (TRF)-2,5-dimethylfuran-polycyclic aromatic hydrocarbon (PAH) mechanism for engine applications. <i>Combustion and Flame</i> , 2016 , 165, 453-465	5.3	49
148	Effect of biodiesel saturation on soot formation in diesel engines. <i>Fuel</i> , 2016 , 175, 240-248	7.1	41
147	Improved atomization, collision and sub-grid scale momentum coupling models for transient vaporizing engine sprays. <i>International Journal of Multiphase Flow</i> , 2016 , 79, 107-123	3.6	30
146	Effects of late intake valve closing (LIVC) and rebreathing valve strategies on diesel engine performance and emissions at low loads. <i>Applied Thermal Engineering</i> , 2016 , 98, 310-319	5.8	30
145	A Progress Review on Soot Experiments and Modeling in the Engine Combustion Network (ECN). <i>SAE International Journal of Engines</i> , 2016 , 9, 883-898	2.4	45
144	Experimental investigations of gasoline partially premixed combustion with an exhaust rebreathing valve strategy at low loads. <i>Applied Thermal Engineering</i> , 2016 , 103, 832-841	5.8	22
143	Exploring the Role of Reactivity Gradients in Direct Dual Fuel Stratification. <i>SAE International Journal of Engines</i> , 2016 , 9, 1036-1048	2.4	29
142	Evaluating temperature and fuel stratification for heat-release rate control in a reactivity-controlled compression-ignition engine using optical diagnostics and chemical kinetics modeling. <i>Combustion and Flame</i> , 2015 , 162, 2729-2742	5.3	108
141	Development of a skeletal mechanism for diesel surrogate fuel by using a decoupling methodology. <i>Combustion and Flame</i> , 2015 , 162, 3785-3802	5.3	109
140	Effects of Exhaust Gas Recirculation and Boost Pressure on Reactivity Controlled Compression Ignition Engine at High Load Operating Conditions. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2015 , 137,	2.6	23

139	A combustion model for multi-component fuels using a physical surrogate group chemistry representation (PSGCR). <i>Combustion and Flame</i> , 2015 , 162, 3456-3481	5.3	50
138	An investigation of thermodynamic states during high-pressure fuel injection using equilibrium thermodynamics. <i>International Journal of Multiphase Flow</i> , 2015 , 72, 24-38	3.6	62
137	Effects of diesel injection strategy on natural gas/diesel reactivity controlled compression ignition combustion. <i>Energy</i> , 2015 , 90, 814-826	7.9	97
136	Modeling soot emissions from wall films in a direct-injection spark-ignition engine. <i>International Journal of Engine Research</i> , 2015 , 16, 994-1013	2.7	25
135	Application of a semi-detailed soot modeling approach for conventional and low temperature diesel combustion [Part II: Model sensitivity. <i>Fuel</i> , 2015 , 139, 771-779	7.1	11
134	Application of a semi-detailed soot modeling approach for conventional and low temperature diesel combustion [Part I: Model performance. <i>Fuel</i> , 2015 , 139, 757-770	7.1	39
133	Review of high efficiency and clean reactivity controlled compression ignition (RCCI) combustion in internal combustion engines. <i>Progress in Energy and Combustion Science</i> , 2015 , 46, 12-71	33.6	732
132	Natural Gas for High Load Dual-Fuel Reactivity Controlled Compression Ignition in Heavy-Duty Engines. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2015 , 137,	2.6	34
131	Grand Challenges in Engine and Automotive Engineering. <i>Frontiers in Mechanical Engineering</i> , 2015 , 1,	2.6	7
130	Reaction Mechanisms and HCCI Combustion Processes of Mixtures of n-Heptane and the Butanols. <i>Frontiers in Mechanical Engineering</i> , 2015 , 1,	2.6	12
129	Isobutanol as Both Low Reactivity and High Reactivity Fuels with Addition of Di-Tert Butyl Peroxide (DTBP) in RCCI Combustion. <i>SAE International Journal of Fuels and Lubricants</i> , 2015 , 8, 329-343	1.8	35
128	Measured and Predicted Soot Particle Emissions from Natural Gas Engines 2015 ,		16
127	A reduced toluene reference fuel chemical kinetic mechanism for combustion and polycyclic-aromatic hydrocarbon predictions. <i>Combustion and Flame</i> , 2015 , 162, 2390-2404	5.3	126
126	Computational study of a two-stroke direct-injection reactivity-controlled compression ignition engine. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2015 , 229, 980-991	1.4	5
125	Direct Dual Fuel Stratification, a Path to Combine the Benefits of RCCI and PPC. <i>SAE International Journal of Engines</i> , 2015 , 8, 878-889	2.4	75
124	Numerical Study of RCCI and HCCI Combustion Processes Using Gasoline, Diesel, iso-Butanol and DTBP Cetane Improver. <i>SAE International Journal of Engines</i> , 2015 , 8, 831-845	2.4	32
123	Improving the Efficiency of Low Temperature Combustion Engines Using a Chamfered Ring-Land. <i>Journal of Engineering for Gas Turbines and Power</i> , 2015 , 137,	1.7	5
122	Investigating Fuel Condensation Processes in Low Temperature Combustion Engines. <i>Journal of Engineering for Gas Turbines and Power</i> , 2015 , 137,	1.7	5

121	Comparison of Low Temperature Combustion Strategies for Advanced Compression Ignition Engines with a Focus on Controllability. <i>Combustion Science and Technology</i> , 2014 , 186, 210-241	1.5	139
120	Simulation of supercritical fuel injection with condensation. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 79, 1070-1086	4.9	33
119	Development of a reduced n-dodecane-PAH mechanism and its application for n-dodecane soot predictions. <i>Fuel</i> , 2014 , 136, 25-36	7.1	86
118	Kinetic and Numerical Study on the Effects of Di-tert-butyl Peroxide Additive on the Reactivity of Methanol and Ethanol. <i>Energy & Fuels</i> , 2014 , 28, 5480-5488	4.1	26
117	An Experimental and Numerical Study on the Effects of Fuel Properties on the Combustion and Emissions of Low-Temperature Combustion Diesel Engines. <i>Combustion Science and Technology</i> , 2014 , 186, 1795-1815	1.5	18
116	A comprehensive modeling study of in-cylinder fluid flows in a high-swirl, light-duty optical diesel engine. <i>Computers and Fluids</i> , 2014 , 105, 113-124	2.8	42
115	Condensation processes in a motoring engine. <i>Journal of Supercritical Fluids</i> , 2014 , 90, 84-100	4.2	12
114	A study of direct and Krylov iterative sparse solver techniques to approach linear scaling of the integration of chemical kinetics with detailed combustion mechanisms. <i>Combustion and Flame</i> , 2014 , 161, 1180-1195	5.3	39
113	Improving the Efficiency of Low Temperature Combustion Engines Using a Chamfered Ring-Land 2014 ,		2
112	Multidimensional Simulation 2014 , 1-19		
111	Reciprocating Engines: Diesel and Gas 2014 , 1507-1517		
110	A CFD Study of Post Injection Influences on Soot Formation and Oxidation under Diesel-Like Operating Conditions. <i>SAE International Journal of Engines</i> , 2014 , 7, 694-713	2.4	32
109	Improved Chemical Kinetics Numerics for the Efficient Simulation of Advanced Combustion Strategies. <i>SAE International Journal of Engines</i> , 2014 , 7, 243-255	2.4	3
108	Computationally Efficient Simulation of Multicomponent Fuel Combustion Using a Sparse Analytical Jacobian Chemistry Solver and High-Dimensional Clustering. <i>Journal of Engineering for Gas Turbines and Power</i> , 2014 , 136,	1.7	4
107	Experimental Investigation of Piston Heat Transfer in a Light Duty Engine Under Conventional Diesel, Homogeneous Charge Compression Ignition, and Reactivity Controlled Compression Ignition Combustion Regimes. <i>SAE International Journal of Engines</i> , 2014 , 7, 375-386	2.4	29
106	Multiphase dynamic flash simulations using entropy maximization and application to compressible flow with phase change. <i>AIChE Journal</i> , 2014 , 60, 3013-3024	3.6	13
105	Investigating Fuel Condensation Processes in Low Temperature Combustion Engines 2014 ,		1
104	On regular and retrograde condensation in multiphase compressible flows. <i>International Journal of Multiphase Flow</i> , 2014 , 64, 85-96	3.6	7

103	Simulating cavitating liquid jets using a compressible and equilibrium two-phase flow solver. <i>International Journal of Multiphase Flow</i> , 2014 , 63, 52-67	3.6	32
102	Development of a thermodynamically consistent, robust and efficient phase equilibrium solver and its validations. <i>Fuel</i> , 2014 , 115, 1-16	7.1	31
101	Development of a Reduced Primary Reference Fuel Mechanism for Internal Combustion Engine Combustion Simulations. <i>Energy & Fuels</i> , 2013 , 27, 7843-7853	4.1	133
100	Reactivity controlled compression ignition and conventional diesel combustion: A comparison of methods to meet light-duty NOx and fuel economy targets. <i>International Journal of Engine Research</i> , 2013 , 14, 452-468	2.7	60
99	Directions in internal combustion engine research. <i>Combustion and Flame</i> , 2013 , 160, 1-8	5.3	422
98	A generalized renormalization group turbulence model and its application to a light-duty diesel engine operating in a low-temperature combustion regime. <i>International Journal of Engine Research</i> , 2013 , 14, 279-292	2.7	44
97	Development of an n-heptane/toluene/polyaromatic hydrocarbon mechanism and its application for combustion and soot prediction. <i>International Journal of Engine Research</i> , 2013 , 14, 434-451	2.7	52
96	Application of Generalized RNG Turbulence Model to Flow in Motored Single-Cylinder PFI Engine. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2013 , 7, 486-495	4.5	16
95	A Comprehensive Combustion Model for Biodiesel-Fueled Engine Simulations 2013 ,		37
94	Pressure Oscillation and Chemical Kinetics Coupling during Knock Processes in Gasoline Engine Combustion. <i>Energy & Fuels</i> , 2012 , 26, 7107-7119	4.1	38
93	An Analytical Jacobian Approach to Sparse Reaction Kinetics for Computationally Efficient Combustion Modeling with Large Reaction Mechanisms. <i>Energy & Fuels</i> , 2012 , 26, 4804-4822	4.1	97
92	Comparison of Diesel Combustion CFD Models and Evaluation of the Effects of Model Constants 2012 ,		15
91	Reactivity Controlled Compression Ignition Using Premixed Hydrated Ethanol and Direct Injection Diesel. <i>Journal of Engineering for Gas Turbines and Power</i> , 2012 , 134,	1.7	52
90	Computational Optimization of Internal Combustion Engines 2011 ,		46
89	Combustion and emission characteristics of converging group-hole nozzle under lean engine operating conditions. <i>Fuel</i> , 2011 , 90, 3259-3267	7.1	8
88	A combustion model for IC engine combustion simulations with multi-component fuels. <i>Combustion and Flame</i> , 2011 , 158, 69-90	5.3	191
87	Investigation of the Roles of Flame Propagation, Turbulent Mixing, and Volumetric Heat Release in Conventional and Low Temperature Diesel Combustion. <i>Journal of Engineering for Gas Turbines and Power</i> , 2011 , 133,	1.7	32
86	Improving Diesel Engine Performance Using Low and High Pressure Split Injections for Single Heat Release and Two-Stage Combustion 2010 ,		8

85	A Two-Zone Multigrid Model for SI Engine Combustion Simulation Using Detailed Chemistry. <i>Journal of Combustion</i> , 2010 , 2010, 1-12	0.8	2
84	Development of a Practical Soot Modeling Approach and Its Application to Low-Temperature Diesel Combustion. <i>Combustion Science and Technology</i> , 2010 , 182, 1050-1082	1.5	99
83	Validation of Mesh- and Timestep- Independent Spray Models for Multi-Dimensional Engine CFD Simulation. <i>SAE International Journal of Fuels and Lubricants</i> , 2010 , 3, 277-302	1.8	34
82	Acceleration of the chemistry solver for modeling DI engine combustion using dynamic adaptive chemistry (DAC) schemes. <i>Combustion Theory and Modelling</i> , 2010 , 14, 69-89	1.5	63
81	A Numerical Investigation of Transient Flow and Cavitation Within Minisac and Valve-Covered Orifice Diesel Injector Nozzles. <i>Journal of Engineering for Gas Turbines and Power</i> , 2010 , 132,	1.7	24
80	Reduction in NOx and CO Emissions in Stoichiometric Diesel Combustion Using a Three-Way Catalyst. <i>Journal of Engineering for Gas Turbines and Power</i> , 2010 , 132,	1.7	9
79	A Continuous Multicomponent Fuel Flame Propagation and Chemical Kinetics Model. <i>Journal of Engineering for Gas Turbines and Power</i> , 2010 , 132,	1.7	5
78	Multi-dimensional Modelling of Diesel Combustion: Review. <i>Mechanical Engineering Series</i> , 2010 , 207-246.	3	1
77	Multi-dimensional Modelling of Diesel Combustion: Applications. <i>Mechanical Engineering Series</i> , 2010 , 247-282	0.3	1
76	Automatic Chemistry Mechanism Reduction of Hydrocarbon Fuels for HCCI Engines Based on DRGEP and PCA Methods with Error Control. <i>Energy & Fuels</i> , 2010 , 24, 1646-1654	4.1	48
75	Diesel engine emissions and combustion predictions using advanced mixing models applicable to fuel sprays. <i>Combustion Theory and Modelling</i> , 2010 , 14, 715-746	1.5	7
74	Optimization of a heavy-duty compression ignition engine fueled with diesel and gasoline-like fuels. <i>Fuel</i> , 2010 , 89, 3416-3430	7.1	61
73	Simulation and analysis of group-hole nozzle sprays using a gas jet superposition model. <i>Fuel</i> , 2010 , 89, 3758-3772	7.1	13
72	Efficient Multidimensional Simulation of HCCI and DI Engine Combustion with Detailed Chemistry 2009 ,		10
71	Optimization of a HSDI Diesel Engine for Passenger Cars Using a Multi-Objective Genetic Algorithm and Multi-Dimensional Modeling. <i>SAE International Journal of Engines</i> , 2009 , 2, 691-713	2.4	22
70	Integration of a Continuous Multi-Component Fuel Evaporation Model with an Improved G-Equation Combustion and Detailed Chemical Kinetics Model with Application to GDI Engines 2009 ,		5
69	An adaptive multi-grid chemistry (AMC) model for efficient simulation of HCCI and DI engine combustion. <i>Combustion Theory and Modelling</i> , 2009 , 13, 83-104	1.5	42
68	Development of an Oil Gallery Cooling Model for Internal Combustion Engines Considering the Cocktail Shaker Effect. <i>Numerical Heat Transfer; Part A: Applications</i> , 2009 , 56, 563-578	2.3	12

67	Modeling Soot Formation Using Reduced Polycyclic Aromatic Hydrocarbon Chemistry in n-Heptane Lifted Flames With Application to Low Temperature Combustion. <i>Journal of Engineering for Gas Turbines and Power</i> , 2009 , 131,	1.7	40
66	Numerical Study of Fuel Composition Effects on Low Temperature Diesel Combustion With a Discrete Multi-Component Vaporization Model 2009 ,		1
65	Experimental Investigation of Intake Condition and Group-Hole Nozzle Effects on Fuel Economy and Combustion Noise for Stoichiometric Diesel Combustion in an HSDI Diesel Engine. <i>SAE International Journal of Engines</i> , 2009 , 2, 1054-1067	2.4	19
64	A gas jet superposition model for CFD modeling of group-hole nozzle sprays. <i>International Journal of Heat and Fluid Flow</i> , 2009 , 30, 1193-1201	2.4	15
63	A vaporization model for discrete multi-component fuel sprays. <i>International Journal of Multiphase Flow</i> , 2009 , 35, 101-117	3.6	251
62	Simulating low temperature diesel combustion with improved spray models. <i>International Journal of Thermal Sciences</i> , 2009 , 48, 1786-1799	4.1	17
61	Optimization of fuel/air mixture formation for stoichiometric diesel combustion using a 2-spray-angle group-hole nozzle. <i>Fuel</i> , 2009 , 88, 843-852	7.1	46
60	Evaluation of the effects of injection timing and rate-shape on diesel low temperature combustion using advanced CFD modeling. <i>Fuel</i> , 2009 , 88, 1235-1244	7.1	49
59	Nine-step phenomenological diesel soot model validated over a wide range of engine conditions. <i>International Journal of Thermal Sciences</i> , 2009 , 48, 1223-1234	4.1	94
58	Effect of Radiation on Diesel Engine Combustion and Heat Transfer. <i>Journal of Thermal Science and Technology</i> , 2009 , 4, 86-97	0.6	20
57	Reduction of NOx and CO Emissions in Stoichiometric Diesel Combustion Using a 3-Way Catalyst 2009 ,		4
56	MODELING OF GROUP-HOLE-NOZZLE SPRAYS USING GRID-SIZE-, HOLE-LOCATION-, AND TIME-STEP-INDEPENDENT MODELS. <i>Small Group Research</i> , 2009 , 19, 567-582	2.5	16
55	COMPREHENSIVE COLLISION MODEL FOR MULTIDIMENSIONAL ENGINE SPRAY COMPUTATIONS. <i>Small Group Research</i> , 2009 , 19, 597-619	2.5	55
54	Reduction of Numerical Parameter Dependencies in Diesel Spray Models. <i>Journal of Engineering for Gas Turbines and Power</i> , 2008 , 130,	1.7	104
53	Modeling the Effect of Injector Nozzle-Hole Layout on Diesel Engine Fuel Consumption and Emissions. <i>Journal of Engineering for Gas Turbines and Power</i> , 2008 , 130,	1.7	28
52	An Improved Spray Model for Reducing Numerical Parameter Dependencies in Diesel Engine CFD Simulations 2008 ,		98
51	Adaptive Injection Strategies (AIS) for Ultra-Low Emissions Diesel Engines 2008 ,		18
50	Development of an Improved NOx Reaction Mechanism for Low Temperature Diesel Combustion Modeling. <i>SAE International Journal of Engines</i> , 2008 , 1, 1105-1117	2.4	12

49	Numerical Predictions of Diesel Flame Lift-off Length and Soot Distributions under Low Temperature Combustion Conditions 2008 ,		34
48	Gradient effects on two-color soot optical pyrometry in a heavy-duty DI diesel engine. <i>Combustion and Flame</i> , 2008 , 153, 216-227	5.3	61
47	A reduced chemical kinetic model for IC engine combustion simulations with primary reference fuels. <i>Combustion and Flame</i> , 2008 , 155, 713-738	5.3	361
46	Investigation of Mixing and Temperature Effects on HC/CO Emissions for Highly Dilute Low Temperature Combustion in a Light Duty Diesel Engine 2007 ,		137
45	Effects of Engine Operating Parameters on near Stoichiometric Diesel Combustion Characteristics 2007 ,		31
44	Fuel Injection and Mean Swirl Effects on Combustion and Soot Formation in Heavy Duty Diesel Engines 2007 ,		9
43	A new predictive model for fragmenting and non-fragmenting binary droplet collisions. <i>International Journal of Multiphase Flow</i> , 2007 , 33, 873-896	3.6	70
42	Unsteady turbulent round jets and vortex motion. <i>Physics of Fluids</i> , 2007 , 19, 125102	4.4	60
41	Comparisons of Diesel PCCI Combustion Simulations Using a Representative Interactive Flamelet Model and Direct Integration of CFD With Detailed Chemistry. <i>Journal of Engineering for Gas Turbines and Power</i> , 2007 , 129, 252-260	1.7	28
40	Development of a Semi-implicit Solver for Detailed Chemistry in Internal Combustion Engine Simulations. <i>Journal of Engineering for Gas Turbines and Power</i> , 2007 , 129, 271-278	1.7	12
39	NUMERICAL STUDY ON THE LOW EMISSION WINDOW OF HOMOGENEOUS CHARGE COMPRESSION IGNITION DIESEL COMBUSTION. <i>Combustion Science and Technology</i> , 2007 , 179, 2279-2307	1.5	55
38	An Experimental Investigation on the Effect of Post-Injection Strategies on Combustion and Emissions in the Low-Temperature Diesel Combustion Regime. <i>Journal of Engineering for Gas Turbines and Power</i> , 2007 , 129, 279-286	1.7	38
37	An ignition and combustion model based on the level-set method for spark ignition engine multidimensional modeling. <i>Combustion and Flame</i> , 2006 , 145, 1-15	5.3	148
36	An Experimental Investigation of Partially Premixed Combustion Strategies Using Multiple Injections in a Heavy-Duty Diesel Engine 2006 ,		63
35	Modeling Diesel Engine NOx and Soot Reduction with Optimized Two-Stage Combustion 2006 ,		59
34	Stoichiometric Combustion in a HSDI Diesel Engine to Allow Use of a Three-way Exhaust Catalyst 2006 ,		20
33	Modeling Early Injection Processes in HSDI Diesel Engines 2006 ,		14
32	Modeling Combustion and Emissions of HSDI Diesel Engines Using Injectors with Different Included Spray Angles 2006 ,		7

31	Comparison of the Characteristic Time (CTC), Representative Interactive Flamelet (RIF), and Direct Integration with Detailed Chemistry Combustion Models against Optical Diagnostic Data for Multi-Mode Combustion in a Heavy-Duty DI Diesel Engine 2006 ,		83
30	Modeling the Effects of Variable Intake Valve Timing on Diesel HCCI Combustion at Varying Load, Speed and Boost Pressures 2005 , 1		2
29	Modeling the Effects of EGR and Injection Pressure on Soot Formation in a High-Speed Direct-Injection (HSDI) Diesel Engine Using a Multi-Step Phenomenological Soot Model 2005 ,		48
28	Application of A Multiple-Step Phenomenological Soot Model to HSDI Diesel Multiple Injection Modeling 2005 ,		41
27	Development and Validation of a Reduced Reaction Mechanism for HCCI Engine Simulations 2004 ,		227
26	Numerical Modeling of Diesel Engine Combustion and Emissions Under HCCI-Like Conditions With High EGR Levels 2003 ,		14
25	Optimization of a hydrocarbon fuel ignition model for two single component surrogates of diesel fuel. <i>Combustion and Flame</i> , 2003 , 132, 433-450	5:3	71
24	A model for high-pressure vaporization of droplets of complex liquid mixtures using continuous thermodynamics. <i>International Journal of Heat and Mass Transfer</i> , 2002 , 45, 495-507	4:9	74
23	Application of detailed chemistry and CFD for predicting direct injection HCCI engine combustion and emissions. <i>Proceedings of the Combustion Institute</i> , 2002 , 29, 663-669	5:9	104
22	Gas-phase unsteadiness and its influence on droplet vaporization in sub- and super-critical environments. <i>International Journal of Heat and Mass Transfer</i> , 2001 , 44, 3081-3093	4:9	37
21	High-Pressure Spray and Combustion Modeling Using Continuous Thermodynamics for Diesel Fuels 2001 ,		5
20	Modeling and Experiments of HCCI Engine Combustion Using Detailed Chemical Kinetics with Multidimensional CFD 2001 ,		144
19	MODELING SPRAY ATOMIZATION WITH THE KELVIN-HELMHOLTZ/RAYLEIGH-TAYLOR HYBRID MODEL. <i>Atomization and Sprays</i> , 1999 , 9, 623-650	1:2	713
18	Development of micro-machining techniques for air-assisted liquid atomization. <i>Experimental Thermal and Fluid Science</i> , 1999 , 20, 11-18	3	6
17	The effect of intake valve alignment on swirl generation in a DI diesel engine. <i>Experimental Thermal and Fluid Science</i> , 1999 , 20, 94-103	3	30
16	Direct droplet production from a liquid film: a new gas-assisted atomization mechanism. <i>Journal of Fluid Mechanics</i> , 1998 , 375, 363-381	3:7	9
15	Modeling the Effects of Fuel Spray Characteristics on Diesel Engine Combustion and Emission 1998 ,		302
14	Modeling of Multicomponent Fuels Using Continuous Distributions with Application to Droplet Evaporation and Sprays 1997 ,		78

13	A temperature wall function formulation for variable-density turbulent flows with application to engine convective heat transfer modeling. <i>International Journal of Heat and Mass Transfer</i> , 1997 , 40, 613-625	4.9	436
12	Mechanism of Soot and NOx Emission Reduction Using Multiple-injection in a Diesel Engine 1996 ,		249
11	Effect of Injector Nozzle Hole Size and Number on Spray Characteristics and the Performance of a Heavy Duty D.I. Diesel Engine 1996 ,		41
10	Effects of Injection Pressure and Nozzle Geometry on D.I. Diesel Emissions and Performance 1995 ,		89
9	A New High Pressure Droplet Vaporization Model for Diesel Engine Modeling 1995 ,		26
8	Effects of Injection Pressure and Nozzle Geometry on Spray SMD and D.I. Emissions 1995 ,		43
7	Modeling the Effects of Drop Drag and Breakup on Fuel Sprays 1993 ,		340
6	Modeling Engine Spray/Wall Impingement 1988 ,		211
5	Structure of High-Pressure Fuel Sprays 1987 ,		360
4	On the Dependence of Spray Angle and Other Spray Parameters on Nozzle Design and Operating Conditions 1979 ,		154
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