Yuri M. Wright

List of Publications by Year
in descending order

92 papers	1,850 citations	361296 20 h-index	414303 32 g-index
95 all docs	95 docs citations	95 times ranked	851 citing authors

#	Article	IF	Citations
1	Simulations of spray autoignition and flame establishment with two-dimensional CMC. Combustion and Flame, 2005, 143, 402-419.	2.8	117
2	Soot Formation Modeling ofn-Heptane Sprays Under Diesel Engine Conditions Using the Conditional Moment Closure Approach. Combustion Science and Technology, 2013, 185, 766-793.	1.2	73
3	Diesel Engine Simulations with Multi-Dimensional Conditional Moment Closure. Combustion Science and Technology, 2008, 180, 883-899.	1.2	69
4	Experiments and Simulations of n-Heptane Spray Auto-Ignition in a Closed Combustion Chamber at Diesel Engine Conditions. Flow, Turbulence and Combustion, 2010, 84, 49-78.	1.4	68
5	Experimental and numerical investigations of the unscavenged prechamber combustion in a rapid compression and expansion machine under engine-like conditions. Combustion and Flame, 2019, 204, 68-84.	2.8	61
6	N-heptane micro pilot assisted methane combustion in a Rapid Compression Expansion Machine. Fuel, 2016, 179, 339-352.	3.4	60
7	The autoignition of practical fuels at HCCI conditions: High-pressure shock tube experiments and phenomenological modeling. Fuel, 2012, 93, 492-501.	3.4	59
8	A Progress Review on Soot Experiments and Modeling in the Engine Combustion Network (ECN). SAE International Journal of Engines, 0, 9, 883-898.	0.4	58
9	Influence of turbulenceâ€“chemistry interaction forn-heptane spray combustion under diesel engine conditions with emphasis on soot formation and oxidation. Combustion Theory and Modelling, 2014, 18, 330-360.	1.0	55
10	Effect of methane on pilot-fuel auto-ignition in dual-fuel engines. Proceedings of the Combustion Institute, 2019, 37, 4741-4749.	2.4	55
11	Experimental and numerical assessment of impingement and mixing of ureaâ€“water sprays for nitric oxide reduction in diesel exhaust. Applied Energy, 2015, 157, 824-837.	5.1	54
12	Fundamental Aspects of Jet Ignition for Natural Gas Engines. SAE International Journal of Engines, 0, 10, 2429-2438.	0.4	50
13	Experimental Study of Ignition and Combustion Characteristics of a Diesel Pilot Spray in a Lean Premixed Methane/Air Charge using a Rapid Compression Expansion Machine. , 0, , .		49
14	Modeling Split Injections of ECN â€œSpray Aâ€•Using a Conditional Moment Closure Combustion Model with RANS and LES. SAE International Journal of Engines, 0, 9, 2107-2119.	0.4	42
15	LES Multi-Cycle Analysis of the Combustion Process in a Small SI Engine. SAE International Journal of Engines, 0, 7, 269-285.	0.4	39
16	Direct numerical simulation of multiple cycles in a valve/piston assembly. Physics of Fluids, 2014, 26, .	1.6	39
17	Direct numerical simulation of the effect of compression on the flow, temperature and composition under engine-like conditions. Proceedings of the Combustion Institute, 2015, 35, 3069-3077.	2.4	39
18	Modelling of soot formation in a heavy-duty diesel engine with conditional moment closure. Fuel, 2014, 117, 309-325.	3.4	38

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19	Investigation of wall heat transfer and thermal stratification under engine-relevant conditions using DNS. International Journal of Engine Research, 2016, 17, 63-75.	1.4	38
20	Characterization of combustion in a gas engine ignited using a small un-scavenged pre-chamber. International Journal of Engine Research, 2020, 21, 1085-1106.	1.4	38
21	Direct numerical simulation of the compression stroke under engine-relevant conditions: Evolution of the velocity and thermal boundary layers. International Journal of Heat and Mass Transfer, 2015, 91, 948-960.	2.5	37
22	Prechamber ignition: An exploratory 2-D DNS study of the effects of initial temperature and main chamber composition. Combustion and Flame, 2020, 215, 10-27.	2.8	33
23	Multiple Cycle LES Simulations of a Direct Injection Natural Gas Engine. Flow, Turbulence and Combustion, 2015, 95, 645-668.	1.4	32
24	Comparative Study of Ignition Systems for Lean Burn Gas Engines in an Optically Accessible Rapid Compression Expansion Machine. , 0, , .		31
25	Multi-dimensional Conditional Moment Closure Modelling Applied to a Heavy-duty Common-rail Diesel Engine. SAE International Journal of Engines, 0, 2, 714-726.	0.4	27
26	Onset and progression of soot in high-pressure n-dodecane sprays under diesel engine conditions. International Journal of Engine Research, 2017, 18, 436-452.	1.4	25
27	Flow and thermal field effects on cycle-to-cycle variation of combustion: scale-resolving simulation in a spark ignited simplified engine configuration. Applied Energy, 2018, 230, 486-505.	5.1	25
28	Numerical Modelling and Experimental Characterization of a Pressure-Assisted Multi-Stream Injector for SCR Exhaust Gas After-Treatment. SAE International Journal of Engines, 0, 7, 2012-2021.	0.4	23
29	Investigation of cycle-to-cycle variations in an engine-like geometry. Physics of Fluids, 2014, 26, .	1.6	22
30	Unstructured LES-CMC modelling of turbulent premixed bluff body flames close to blow-off. Proceedings of the Combustion Institute, 2017, 36, 1977-1985.	2.4	22
31	Numerical investigation of the flow characteristics of underexpanded methane jets. Physics of Fluids, 2019, 31, .	1.6	22
32	Direct numerical simulation of the compression stroke under engine relevant conditions: Local wall heat flux distribution. International Journal of Heat and Mass Transfer, 2016, 92, 718-731.	2.5	18
33	Simulations of Diesel Sprays Using the Conditional Moment Closure Model. SAE International Journal of Engines, 0, 6, 1249-1261.	0.4	17
34	Influence of Injector Diameter (0.2-1.2 mm range) on Diesel Spray Combustion: Measurements and CFD Simulations. , 2014, , .		17
35	Predicting In-Cylinder Soot in a Heavy-Duty Diesel Engine for Variations in SOI and TDC Temperature Using the Conditional Moment Closure Model. SAE International Journal of Engines, 0, 6, 1580-1593.	0.4	16
36	A phenomenological HCCI combustion model in 0D and 3D-CFD. Fuel, 2018, 226, 365-380.	3.4	16

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37	Determination of Supersonic Inlet Boundaries for Gaseous Engines Based on Detailed RANS and LES Simulations. SAE International Journal of Engines, 0, 6, 1532-1543.	0.4	15
38	Evaporating and non-evaporating diesel spray simulation: comparison between the ETAB and wave breakup model. International Journal of Vehicle Design, 2007, 45, 80.	0.1	14
39	Transient simulation of NO_xreduction over a Fe-Zeolite catalyst in an NH₃-SCR system and study of the performance under different operating conditions. SAE International Journal of Fuels and Lubricants, 0, 5, 370-379.	0.2	14
40	Ignition Delays of Different Homogeneous Fuel-air Mixtures in a Rapid Compression Expansion Machine and Comparison with a 3-Stage-ignition Model Parameterized on Shock Tube Data. SAE International Journal of Engines, 0, 6, 1934-1952.	0.4	14
41	Experimental and Numerical Investigation of the Engine Operational Conditionsâ€™ Influences on a Small Un-Scavenged Pre-Chamberâ€™s Behavior. SAE International Journal of Engines, 0, 10, 2414-2428.	0.4	14
42	A LES-CMC formulation for premixed flames including differential diffusion. Combustion Theory and Modelling, 2018, 22, 411-431.	1.0	14
43	Comparison of Direct and Large Eddy Simulations of the Turbulent Flow in a Valve/Piston Assembly. Flow, Turbulence and Combustion, 2015, 95, 461-480.	1.4	13
44	A Zero Dimensional Turbulence and Heat Transfer Phenomenological Model for Pre-Chamber Gas Engines. , 0, , .		12
45	Influence of EGR on Post-Injection Effectiveness in a Heavy-Duty Diesel Engine Fuelled with n-Heptane. SAE International Journal of Engines, 2014, 7, 1851-1862.	0.4	11
46	Experimental investigation of pilot-fuel combustion in dual-fuel engines, Part 2: Understanding the underlying mechanisms by means of optical diagnostics. Fuel, 2019, 255, 115766.	3.4	11
47	Phenomenological micro-pilot ignition model for medium-speed dual-fuel engines. Fuel, 2021, 285, 118955.	3.4	11
48	Analysis of Averaging Methods for Large Eddy Simulations of Diesel Sprays. SAE International Journal of Fuels and Lubricants, 0, 8, 568-580.	0.2	10
49	CFD-Simulation of Ignition and Combustion in Lean Burn Gas Engines. , 0, , .		10
50	Hybrid LES/RANS with wall treatment in tangential and impinging flow configurations. International Journal of Heat and Fluid Flow, 2017, 65, 141-158.	1.1	10
51	Generation of Turbulence in a RCEM towards Engine Relevant Conditions for Premixed Combustion Based on CFD and PIV Investigations. SAE International Journal of Engines, 2017, 10, 2176-2190.	0.4	10
52	The effect of high-pressure injection variations on the mixing state of underexpanded methane jets. International Journal of Engine Research, 2021, 22, 2900-2918.	1.4	10
53	Numerical Study of the Influence of EGR on In-Cylinder Soot Characteristics in a Heavy-Duty Diesel Engine using CMC. SAE International Journal of Engines, 2014, 7, 256-268.	0.4	9
54	Development and Experimental Validation of a Fast Spray Ignition Model for Diesel Engines Using Insights from CFD Spray Calculations. SAE International Journal of Fuels and Lubricants, 2017, 10, 304-317.	0.2	8

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55	Reactive computational fluid dynamics modelling methaneâ€“hydrogen admixtures in internal combustion engines part II: Large eddy simulation. International Journal of Engine Research, 2021, 22, 2054-2068.	1.4	8
56	Development and validation of a novel quasi-dimensional combustion model for un-scavenged prechamber gas engines with numerical simulations and engine experiments. International Journal of Engine Research, 2021, 22, 3042-3061.	1.4	8
57	Global reaction mechanism for the auto-ignition of full boiling range gasoline and kerosene fuels. Combustion Theory and Modelling, 2013, 17, 1020-1052.	1.0	7
58	Integration of a Cool-Flame Heat Release Rate Model into a 3-Stage Ignition Model for HCCI Applications and Different Fuels. , 2014, , .		7
59	Comparison and Sensitivity Analysis of Turbulent Flame Speed Closures in the RANS G-Equation Context for Two Distinct Engines. SAE International Journal of Engines, 2016, 9, 2091-2106.	0.4	7
60	Wall Heat Flux and Thermal Stratification Investigations during the Compression Stroke of an engine-like Geometry: A comparison between LES and DNS. Flow, Turbulence and Combustion, 2018, 100, 769-795.	1.4	7
61	Numerical assessment of wall modelling approaches in scale-resolving in-cylinder simulations. International Journal of Heat and Fluid Flow, 2018, 74, 154-172.	1.1	7
62	3D-CFD Lagrangian Spray Simulations for Large Two Stroke Marine Diesel Engines Compared With Experimental Data of a Spray Combustion Chamber. , 2012, , .		6
63	Calibration of a model for selective catalytic reduction with ammonia, including NO oxidation, and simulation of NO‹sub›x‹/sub› reduction over an Feâ€“zeolite catalyst under highly transient conditions. International Journal of Engine Research, 2013, 14, 107-121.	1.4	6
64	CMC Model Applied to Marine Diesel Spray Combustion: Influence of Fuel Evaporation Terms. , 0, , .		6
65	Simulations of In-Cylinder Processes in a Diesel Engine Operated with Post-Injections Using an Extended CMC Model. , 0, , .		6
66	Spark Ignition Engine Simulation Using a Flamelet Based Combustion Model. , 2015, , .		6
67	Extension of the Phenomenological 3-Arrhenius Auto-Ignition Model for Six Surrogate Automotive Fuels. SAE International Journal of Engines, 0, 9, 1544-1558.	0.4	6
68	Development of an algebraic wall heat transfer model for LES in IC engines using DNS data. Proceedings of the Combustion Institute, 2021, 38, 5811-5819.	2.4	6
69	Flamelet Generated Manifolds Applied to Dual-Fuel Combustion of Lean Methane/Air Mixtures at Engine Relevant Conditions Ignited by n Dodecane Micro Pilot Sprays. , 0, , .		6
70	Simulation of NOx Reduction in an Ammonia-SCR System With an Fe-Zeolite Catalyst and Calibration of Related Parameters. , 2010, , .		5
71	Conditional Moment Closure Modelling for Dual-Fuel Combustion Engines with Pilot-Assisted Compression Ignition. , 0, , .		5
72	Systematic assessment of data-driven approaches for wall heat transfer modelling for LES in IC engines using DNS data. International Journal of Heat and Mass Transfer, 2022, 183, 122109.	2.5	5

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73	NOx emissions in direct injection diesel engines â€“ part 1: Development of a phenomenological NOx model using experiments and three-dimensional computational fluid dynamics. International Journal of Engine Research, 2018, 19, 308-328.	1.4	4
74	Assessment of Two Premixed LES Combustion Models in an Engine-Like Geometry. , 0, , .		4
75	Numerical Investigation of Nozzle-Geometry Variations and Back-Pressure Changes on High Pressure Gas Injections under Application-Relevant Conditions. , 0, , .		4
76	Experimental investigation of wall heat transfer due to spray combustion in a high-pressure/high-temperature vessel. International Journal of Engine Research, 2021, 22, 3489-3502.	1.4	4
77	MS3-2 Application of a Conditional Moment Closure Combustion model to a large two-stroke marine Diesel engine reference experiment(MS: Modeling and Simulation,General Session Papers). The Proceedings of the International Symposium on Diagnostics and Modeling of Combustion in Internal Combustion Engines, 2012, 2012.8, 560-566.	0.1	4
78	Reactive computational fluid dynamics modelling of methaneâ€“hydrogen admixtures in internal combustion engines: Part I â€“ RANS. International Journal of Engine Research, 2021, 22, 1525-1539.	1.4	3
79	A Novel One- and Zero-Dimensional Model for Turbulent Jet Ignition. Flow, Turbulence and Combustion, 2021, 107, 307-342.	1.4	3
80	Investigation of the Ignition Process of Pilot Injections Using CFD. , 0, , .		3
81	Reduction of RANS/LES combustion sub-models for quasi-dimensional spark ignition engine simulations and evaluation of the modelling assumptions with DNS. Combustion and Flame, 2020, 220, 189-202.	2.8	2
82	Large Eddy Simulations and Tracer-LIF Diagnostics of Wall Film Dynamics in an Optically Accessible GDI Research Engine. , 0, , .		2
83	Computational study of the Premixed Charge Compression Ignition combustion in a Rapid Compression Expansion Machine: Impact of multiple injection strategy on mixing, ignition and combustion processes. Fuel, 2022, 318, 123388.	3.4	2
84	Conditional moment closure for two-phase flows â€“ A review of recent developments and application to various spray combustion configurations. , 2015, , .		1
85	THE Post Injection: Coalescence of 3D CFD-CMC Simulation, 2D Visualizations in a Constant Volume Chamber and Application in a Modern Passenger Car Diesel Engine. , 2015, , .		1
86	Sensitivity of Flamelet Combustion Model to Flame Curvature for IC Engine Application. , 2017, , .		1
87	Numerical Investigation of Soot Dynamics at Engine-Relevant Conditions. , 0, , .		1
88	Numerical investigation of the autoignition of underexpanded methane jets. Fuel, 2021, 291, 120169.	3.4	1
89	Experimental and numerical investigation of evaporating fuel films in combustion. Applications in Energy and Combustion Science, 2021, 7, 100033.	0.9	1
90	Experimental Validation of a Global Reaction Model for a Range of Gasolines and Kerosenes under HCCI Conditions. , 2011, , .		0

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91	Novel Insight into Engine Near-Wall Flows and Wall Heat Transfer Using Direct Numerical Simulations and High-Fidelity Experiments. Proceedings, 2021, , 377-394.	0.2	0
92	Conditional Moment Closure Approaches for Simulating Soot and NOx in a Heavy-Duty Diesel Engine. , 0, , .		0