

# Hai-Wen Ge

## List of Publications by Year in descending order

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67  
papers

1,142  
citations

623574

14  
h-index

580701

25  
g-index

78  
all docs

78  
docs citations

78  
times ranked

772  
citing authors

#	ARTICLE	IF	CITATIONS
1	Simulation of a turbulent spray flame using coupled PDF gas phase and spray flamelet modeling. <i>Combustion and Flame</i> , 2008, 153, 173-185.	2.8	78
2	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.	1.0	69
3	Computational Optimization of Internal Combustion Engines. , 2011, , .		65
4	Automatic Chemistry Mechanism Reduction of Hydrocarbon Fuels for HCCI Engines Based on DRGEP and PCA Methods with Error Control. <i>Energy &amp; Fuels</i> , 2010, 24, 1646-1654.	2.5	63
5	Twist engineering of the two-dimensional magnetism in double bilayer chromium triiodide homostructures. <i>Nature Physics</i> , 2022, 18, 30-36.	6.5	62
6	Experimental and numerical characterization of a turbulent spray flame. <i>Proceedings of the Combustion Institute</i> , 2007, 31, 2247-2255.	2.4	51
7	Validation of Mesh- and Timestep- Independent Spray Models for Multi-Dimensional Engine CFD Simulation. <i>SAE International Journal of Fuels and Lubricants</i> , 0, 3, 277-302.	0.2	42
8	Efficient Simulation of Diesel Engine Combustion Using Realistic Chemical Kinetics in CFD. , 2010, , .		37
9	reactingFoam-SCI: An open source CFD platform for reacting flow simulation. <i>Computers and Fluids</i> , 2019, 190, 114-127.	1.3	37
10	Laser-Based Experimental and Monte Carlo PDF Numerical Investigation of an Ethanol/Air Spray Flame. <i>Combustion Science and Technology</i> , 2008, 180, 1529-1547.	1.2	35
11	PROBABILITY DENSITY FUNCTION (PDF) SIMULATION OF TURBULENT SPRAY FLOWS. , 2006, 16, 531-542.		30
12	Experimental Investigation of the Flame Front Propagation Characteristic During Light-round Ignition in an Annular Combustor. <i>Flow, Turbulence and Combustion</i> , 2019, 103, 247-269.	1.4	30
13	Insights into engine autoignition: Combining engine thermodynamic trajectory and fuel ignition delay iso-contour. <i>Combustion and Flame</i> , 2019, 200, 207-218.	2.8	29
14	Engine Development Using Multi-dimensional CFD and Computer Optimization. , 0, , .		25
15	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> , 0, 2, 691-713.	0.4	24
16	A kinetic modeling study on octane rating and fuel sensitivity in advanced compression ignition engines. <i>Combustion and Flame</i> , 2017, 185, 234-244.	2.8	22
17	Manifestation of octane rating, fuel sensitivity, and composition effects for gasoline surrogates under advanced compression ignition conditions. <i>Combustion and Flame</i> , 2018, 192, 238-249.	2.8	22
18	Heavy-Duty Diesel Combustion Optimization Using Multi-Objective Genetic Algorithm and Multi-Dimensional Modeling. , 0, , .		21

#	ARTICLE	IF	CITATIONS
19	Large eddy simulation of flame propagation during the ignition process in an annular multiple-injector combustor. <i>Fuel</i> , 2020, 263, 116402.	3.4	21
20	Modeling the Effects of In-Cylinder Flows on HSDI Diesel Engine Performance and Emissions. <i>SAE International Journal of Fuels and Lubricants</i> , 0, 1, 293-311.	0.2	20
21	Investigation of airflow field in the upper airway under unsteady respiration pattern using large eddy simulation method. <i>Respiratory Physiology and Neurobiology</i> , 2020, 279, 103468.	0.7	20
22	Numerical Simulation of Ignition Mechanism in the Main Chamber of Turbulent Jet Ignition System. , 2018, , .		19
23	Raman spectroscopy of diesel and gasoline engine-out soot using different laser power. <i>Journal of Environmental Sciences</i> , 2019, 79, 74-80.	3.2	19
24	Large-eddy simulation of droplet-laden cough jets with a realistic manikin model. <i>Indoor and Built Environment</i> , 2022, 31, 1271-1286.	1.5	17
25	Fuel wall film effects on premixed flame propagation, quenching and emission. <i>International Journal of Engine Research</i> , 2020, 21, 1055-1066.	1.4	16
26	Optimization of a high-speed direct-injection diesel engine at low-load operation using computational fluid dynamics with detailed chemistry and a multi-objective genetic algorithm. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2010, 224, 547-563.	1.1	14
27	Simulations of flame propagation during the ignition process in an annular multiple-injector combustor. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2019, 29, 1947-1964.	1.6	14
28	A comparison of computational fluid dynamics predicted initial liquid penetration using rate of injection profiles generated using two different measurement techniques. <i>International Journal of Engine Research</i> , 2019, 20, 226-235.	1.4	14
29	Efficient Multidimensional Simulation of HCCI and DI Engine Combustion with Detailed Chemistry. , 2009, , .		13
30	CFD Optimization of the Pre-Chamber Geometry for a Gasoline Spark Ignition Engine. <i>Frontiers in Mechanical Engineering</i> , 2021, 6, .	0.8	12
31	Hybrid Unsteady RANS and PDF Method for Turbulent Non-Reactive and Reactive Flows. <i>Flow, Turbulence and Combustion</i> , 2007, 78, 91-109.	1.4	10
32	Validation of Advanced Combustion Models Applied to Two-Stage Combustion in a Heavy Duty Diesel Engine. , 0, , .		10
33	Joint Gas-Phase Velocity-Scalar PDF Modeling for Turbulent Evaporating Spray Flows. <i>Combustion Science and Technology</i> , 2012, 184, 1664-1679.	1.2	10
34	PIV measurement and numerical simulation of fan-driven flow in a constant volume combustion vessel. <i>Applied Thermal Engineering</i> , 2014, 64, 19-31.	3.0	10
35	Numerical study of a rotating liquid jet impingement cooling system. <i>International Journal of Heat and Mass Transfer</i> , 2020, 163, 120446.	2.5	10
36	Molecular Dynamics Simulations of Vapor-Liquid Interface Properties of <i>n</i> -Heptane/Nitrogen at Subcritical and Transcritical Conditions. <i>Journal of Physical Chemistry B</i> , 2021, 125, 6968-6985.	1.2	10

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37	Simulation of bluff body stabilized flows with hybrid RANS and PDF method. Acta Mechanica Sinica/Lixue Xuebao, 2007, 23, 263-273.	1.5	9
38	Investigation of Diesel Liquid Spray Penetration Fluctuations under Vaporizing Conditions. , 2012, , .		9
39	Further study on wall film effects and flame quenching under engine thermodynamic conditions. Combustion and Flame, 2020, 216, 100-110.	2.8	9
40	Numerical study of the impact of glottis properties on the airflow field in the human trachea using V-LES. Respiratory Physiology and Neurobiology, 2022, 295, 103784.	0.7	9
41	Computational Optimization of a Down-Scaled Diesel Engine Operating in the Conventional Diffusion Combustion Regime Using a Multi-Objective Genetic Algorithm. Combustion Science and Technology, 2012, 184, 78-96.	1.2	8
42	Investigation of Key Mechanisms for Liquid Length Fluctuations in Transient Vaporizing Diesel Sprays. SAE International Journal of Engines, 0, 6, 1202-1212.	0.4	8
43	LES study of the respiratory airflow field in a whole-lung airway model considering steady respiration. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	0.8	8
44	Prediction of Autoignition and Flame Properties for Multicomponent Fuels Using Machine Learning Techniques. , 0, , .		8
45	Numerical Investigation of the Spark Plug Orientation Effects on Flame Kernel Growth. , 0, , .		6
46	Coupling of Scaling Laws and Computational Optimization to Develop Guidelines for Diesel Engine Down-sizing. , 0, , .		5
47	Two-stage autoignition and combustion mode evolution in boundary layer flows above a cold flat plate. Proceedings of the Combustion Institute, 2021, 38, 767-776.	2.4	5
48	Engine Cylinder Head Thermal-Mechanical Fatigue Evaluation Technology and Platform Application. SAE International Journal of Engines, 0, 13, 101-120.	0.4	5
49	A Two-Zone Multigrid Model for SI Engine Combustion Simulation Using Detailed Chemistry. Journal of Combustion, 2010, 2010, 1-12.	0.5	4
50	A Comprehensive Ignition System Model for Spark Ignition Engines. , 2018, , .		4
51	A Computational Study on Laminar Flame Propagation in Mixtures with Non-Zero Reaction Progress. , 0, , .		4
52	Initiation and propagation of one-dimensional planar flames in mixtures with variable reaction progress. Combustion and Flame, 2022, 236, 111765.	2.8	4
53	An efficient numerical solution scheme for the computation of the particle velocity in two-phase flows. Progress in Computational Fluid Dynamics, 2007, 7, 467.	0.1	3
54	A 1-D Platform to Simulate the Effects of Dedicated EGR on SI Engine Combustion. , 2017, , .		3

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55	Effects of Numerical Models on Prediction of Cylinder Pressure Ringing in a DI Diesel Engine. , 2018, , .		3
56	Optimization of Piston-Ring System for Reducing Lube Oil Consumption by CAE Approach. , 0, , .		3
57	Effects of face shield on an emitter during a cough process: A large-eddy simulation study. Science of the Total Environment, 2022, 831, 154856.	3.9	3
58	LES study on the impact of airway deformation on the airflow structures in the idealized mouth-throat model. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, 1.	0.8	3
59	Simulation of vortex shedding behind a bluff body flame stabilizer using a hybrid U-RANS/PDF method. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 348-358.	1.5	2
60	Assessment of Primary Atomization Models for Spray Simulation. , 2020, , .		2
61	CFD-guided development of a pre-chamber ignition system for internal combustion engines. International Journal of Powertrains, 2021, 10, 79.	0.1	1
62	CFD Simulation of a Premixed Spark Injection Hydrogen Engine. , 2019, , .		1
63	Effects of stratification and charge cooling on combustion in a gasoline direct-injection compression ignition (GDCI) engine. International Journal of Engine Research, 0, , 146808742210773.	1.4	1
64	Modeling and Simulation of Turbulent Non-Reacting and Reacting Spray Flows. , 2007, , 397-417.		0
65	Joint Gas-Phase Velocity-Scalar PDF Modeling of Turbulent Evaporating Spray Flows. , 2012, , .		0
66	A Two-Step Combustion Model of Iso-Octane for 3D CFD Combustion Simulation in SI Engines. , 0, , .		0
67	A Two-Layer Soot Model for Hydrocarbon Fuel Combustion. , 0, , .		0