

# Hu Wang

## List of Publications by Year in descending order

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79  
papers

3,459  
citations

230014

27  
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190340

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docs citations

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times ranked

2145  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of scavenging port angle and combustion chamber geometry on combustion and emission of a high-pressure direct-injection natural gas marine engine. <i>International Journal of Green Energy</i> , 2023, 20, 616-628.	2.1	4
2	Thermodynamic modeling of trans/supercritical fuel sprays in internal combustion engines based on a generalized cubic equation of state. <i>Fuel</i> , 2022, 307, 121894.	3.4	11
3	Effects of charge motion on knocking combustion under boosted high load condition of a medium-duty gasoline engine. <i>Fuel</i> , 2022, 326, 125040.	3.4	8
4	Investigation of the Combustion Kinetics Process in a High-Pressure Direct Injection Natural Gas Marine Engine. <i>Energy &amp; Fuels</i> , 2021, 35, 6785-6797.	2.5	13
5	Numerical investigation on combustion system optimization of stoichiometric operation natural gas engine based on knocking boundary extension. <i>Fuel</i> , 2021, 290, 120092.	3.4	18
6	Effects of flame propagation speed on knocking and knock-limited combustion in a downsized spark ignition engine. <i>Fuel</i> , 2021, 293, 120407.	3.4	17
7	Numerical investigation on the combustion and emission characteristics of a heavy-duty natural gas-diesel dual-fuel engine. <i>Fuel</i> , 2021, 300, 120998.	3.4	22
8	Experimental and kinetic modeling studies of polyoxymethylene dimethyl ether (PODE) pyrolysis in jet stirred reactor. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 159, 105332.	2.6	10
9	Development of a reduced primary reference fuel-PODE3-methanol-ethanol-n-butanol mechanism for dual-fuel engine simulations. <i>Energy</i> , 2021, 235, 121439.	4.5	13
10	Influence of thermal barrier coating on partially premixed combustion in internal combustion engine. <i>Fuel</i> , 2021, 303, 121259.	3.4	9
11	Development of a simplified n-heptane/methane model for high-pressure direct-injection natural gas marine engines. <i>Frontiers in Energy</i> , 2021, 15, 405-420.	1.2	14
12	Study on the influence mechanism of mixture stratification on GCI combustion and the compound injection strategy under high load operation. <i>Energy Science and Engineering</i> , 2021, 9, 2434.	1.9	1
13	Numerical investigation on the combustion characteristics of PODE3/gasoline RCCI and high load extension. <i>Fuel</i> , 2020, 263, 116366.	3.4	29
14	Combined effects of fuel reactivity and intake thermodynamic conditions on heat release and emissions of compression ignition combustion. <i>Fuel</i> , 2020, 282, 118859.	3.4	3
15	Investigation on the dual-fuel active-thermal atmosphere combustion strategy based on optical diagnostics and numerical simulations. <i>Fuel</i> , 2020, 276, 118023.	3.4	21
16	Numerical investigation on low octane gasoline-like fuel compression ignition combustion at high load. <i>Fuel</i> , 2020, 270, 117532.	3.4	12
17	Investigation of the chemical kinetics process of diesel combustion in a compression ignition engine using the large eddy simulation approach. <i>Fuel</i> , 2020, 270, 117544.	3.4	17
18	Kinetic Study of the Ignition Process of Methane/n-Heptane Fuel Blends under High-Pressure Direct-Injection Natural Gas Engine Conditions. <i>Energy &amp; Fuels</i> , 2020, 34, 14796-14813.	2.5	15

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19	An Investigation of the Influence of Gas Injection Rate Shape on High-Pressure Direct-Injection Natural Gas Marine Engines. <i>Energies</i> , 2019, 12, 2571.	1.6	18
20	Analysis of near wall combustion and pollutant migration after spray impingement. <i>International Journal of Heat and Mass Transfer</i> , 2019, 141, 569-579.	2.5	24
21	Experimental study on the partially premixed combustion (PPC) fueled with n-butanol. <i>Fuel</i> , 2019, 257, 116000.	3.4	16
22	A Numerical Investigation on the Chemical Kinetics Process of a Reacting n-Dodecane Spray Flame under Compression Ignition Combustion Condition. <i>Energy &amp; Fuels</i> , 2019, 33, 11899-11912.	2.5	18
23	Effects of injection strategies on low-speed marine engines using the dual fuel of high-pressure direct-injection natural gas and diesel. <i>Energy Science and Engineering</i> , 2019, 7, 1994-2010.	1.9	34
24	A comparative numerical investigation of reactivity controlled compression ignition combustion using Large Eddy Simulation and Reynolds-Averaged Navier-Stokes approaches. <i>Fuel</i> , 2019, 257, 116023.	3.4	18
25	Effects of low-temperature reforming products of PRF50 on combustion and emission characteristics in an HCCI engine. <i>Applied Thermal Engineering</i> , 2019, 151, 451-458.	3.0	11
26	Spray characteristics of gasoline/PODE and diesel/PODE blends in a constant volume chamber. <i>Applied Thermal Engineering</i> , 2019, 159, 113850.	3.0	29
27	A comparison study on the combustion and sooting characteristics of base engine oil and n-dodecane in laminar diffusion flames. <i>Applied Thermal Engineering</i> , 2019, 158, 113812.	3.0	7
28	Thermal efficiency improvement of PODE/Gasoline dual-fuel RCCI high load operation with EGR and air dilution. <i>Applied Thermal Engineering</i> , 2019, 159, 113763.	3.0	26
29	Numerical investigation of reactivity controlled compression ignition (RCCI) using different multi-component surrogate combinations of diesel and gasoline. <i>Applied Energy</i> , 2019, 242, 462-479.	5.1	18
30	A numerical investigation of the combustion kinetics of reactivity controlled compression ignition (RCCI) combustion in an optical engine. <i>Fuel</i> , 2019, 241, 753-766.	3.4	42
31	A numerical study on the chemical kinetics process during auto-ignition of n-heptane in a direct injection compression ignition engine. <i>Applied Energy</i> , 2018, 212, 909-918.	5.1	22
32	A theoretical investigation of the effects of temperature, pressure, and equivalence ratio on the oxidation and reformed products of PRF90 under the flexible cylinder engine mode. <i>Applied Thermal Engineering</i> , 2018, 137, 513-520.	3.0	5
33	Laser diagnostics and chemical kinetic analysis of PAHs and soot in co-flow partially premixed flames using diesel surrogate and oxygenated additives of n-butanol and DMF. <i>Combustion and Flame</i> , 2018, 188, 129-141.	2.8	93
34	The effect of combustion chamber geometry on in-cylinder flow and combustion process in a stoichiometric operation natural gas engine with EGR. <i>Applied Thermal Engineering</i> , 2018, 129, 199-211.	3.0	39
35	The effects of DI fuel properties on the combustion and emissions characteristics of RCCI combustion. <i>Fuel</i> , 2018, 227, 457-468.	3.4	28
36	A theoretical study on the effects of thermal barrier coating on diesel engine combustion and emission characteristics. <i>Energy</i> , 2018, 162, 744-752.	4.5	25

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37	Improvement of high load performance in gasoline compression ignition engine with PODE and multiple-injection strategy. <i>Fuel</i> , 2018, 234, 1459-1468.	3.4	32
38	Experimental and modelling investigations of the diesel surrogate fuels in direct injection compression ignition combustion. <i>Applied Energy</i> , 2017, 189, 187-200.	5.1	44
39	Experimental and numerical studies on three gasoline surrogates applied in gasoline compression ignition (GCI) mode. <i>Applied Energy</i> , 2017, 192, 59-70.	5.1	20
40	A numerical study of spray/wall impingement based on droplet impact phenomenon. <i>International Journal of Heat and Mass Transfer</i> , 2017, 112, 401-412.	2.5	40
41	Experimental and numerical investigation of the effects of combustion chamber reentrant level on combustion characteristics and thermal efficiency of stoichiometric operation natural gas engine with EGR. <i>Applied Thermal Engineering</i> , 2017, 123, 1473-1483.	3.0	34
42	Soot reduction effects of the addition of four butanol isomers on partially premixed flames of diesel surrogates. <i>Combustion and Flame</i> , 2017, 177, 123-136.	2.8	103
43	Investigation on partially premixed combustion fueled with gasoline and PODE blends in a multi-cylinder heavy-duty diesel engine. <i>Fuel</i> , 2017, 193, 101-111.	3.4	73
44	Experimental and Modeling Investigations on Soot Formation of Ethanol, <i>n</i> -Butanol, 2,5-Dimethylfuran, and Biodiesel in Diesel Engines. <i>Energy &amp; Fuels</i> , 2017, 31, 12108-12119.	2.5	22
45	Effects of Pilot Injection Strategy on Combustion and Emission Characteristics in Gasoline Compression Ignition. <i>Energy Procedia</i> , 2017, 142, 1267-1273.	1.8	10
46	Experimental and Modelling Investigations of the Gasoline Compression Ignition Combustion in Diesel Engine. , 2017, , .		12
47	Effects of Different Turbocharging Systems on Performance in a HD Diesel Engine with Different Emission Control Technical Routes. , 2016, , .		7
48	Effects of diesel/PODE (polyoxymethylene dimethyl ethers) blends on combustion and emission characteristics in a heavy duty diesel engine. <i>Fuel</i> , 2016, 177, 206-216.	3.4	166
49	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.	3.0	32
50	Experimental study of RCCI combustion and load extension in a compression ignition engine fueled with gasoline and PODE. <i>Fuel</i> , 2016, 181, 878-886.	3.4	136
51	Development of a combined reduced primary reference fuel-alcohols (methanol/ethanol/propanols/butanols/ <i>n</i> -pentanol) mechanism for engine applications. <i>Energy</i> , 2016, 114, 542-558.	4.5	90
52	Prediction Accuracy and Efficiency of the <i>n</i> -Heptane Mechanism at Different Reduction Levels. <i>Energy &amp; Fuels</i> , 2016, 30, 6822-6827.	2.5	3
53	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.	2.8	58
54	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.	3.0	37

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55	Effect of combustion regime on in-cylinder heat transfer in internal combustion engines. International Journal of Engine Research, 2016, 17, 331-346.	1.4	51
56	Reaction Mechanisms and HCCI Combustion Processes of Mixtures of n-Heptane and the Butanols. Frontiers in Mechanical Engineering, 2015, 1, .	0.8	12
57	Combustion Mode Design with High Efficiency and Low Emissions Controlled by Mixtures Stratification and Fuel Reactivity. Frontiers in Mechanical Engineering, 2015, 1, .	0.8	6
58	A reduced toluene reference fuel chemical kinetic mechanism for combustion and polycyclic-aromatic hydrocarbon predictions. Combustion and Flame, 2015, 162, 2390-2404.	2.8	171
59	Construction of Skeletal Oxidation Mechanisms for the Saturated Fatty Acid Methyl Esters from Methyl Butanoate to Methyl Palmitate. Energy & Fuels, 2015, 29, 1076-1089.	2.5	15
60	Development of a skeletal mechanism for diesel surrogate fuel by using a decoupling methodology. Combustion and Flame, 2015, 162, 3785-3802.	2.8	162
61	The Potential of High-load Extension by Using Late Intake Valve Closing for a Diesel Premixed Charge Compression Ignition (PCCI) Engine. Energy Procedia, 2015, 66, 33-36.	1.8	16
62	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.	1.4	43
63	Experimental and Numerical Investigation on Soot Behavior of Soybean Biodiesel under Ambient Oxygen Dilution in Conventional and Low-Temperature Flames. Energy & Fuels, 2014, 28, 2663-2676.	2.5	21
64	Development of a reduced n-dodecane-PAH mechanism and its application for n-dodecane soot predictions. Fuel, 2014, 136, 25-36.	3.4	111
65	Experimental and simulation investigation of the combustion characteristics and emissions using n-butanol/biodiesel dual-fuel injection on a diesel engine. Energy, 2014, 74, 741-752.	4.5	140
66	Kinetic and Numerical Study on the Effects of Di- <i>tert</i> -butyl Peroxide Additive on the Reactivity of Methanol and Ethanol. Energy & Fuels, 2014, 28, 5480-5488.	2.5	41
67	An Experimental and Numerical Study on the Effects of Fuel Properties on the Combustion and Emissions of Low-Temperature Combustion Diesel Engines. Combustion Science and Technology, 2014, 186, 1795-1815.	1.2	21
68	Time-resolved spray, flame, soot quantitative measurement fueling n-butanol and soybean biodiesel in a constant volume chamber under various ambient temperatures. Fuel, 2014, 133, 317-325.	3.4	70
69	Development of a Reduced Primary Reference Fuel Mechanism for Internal Combustion Engine Combustion Simulations. Energy & Fuels, 2013, 27, 7843-7853.	2.5	172
70	Development of an n-heptane-n-butanol-PAH mechanism and its application for combustion and soot prediction. Combustion and Flame, 2013, 160, 504-519.	2.8	201
71	Development of an n-heptane/toluene/polyaromatic hydrocarbon mechanism and its application for combustion and soot prediction. International Journal of Engine Research, 2013, 14, 434-451.	1.4	59
72	Experimental study of n-butanol additive and multi-injection on HD diesel engine performance and emissions. Fuel, 2010, 89, 2191-2201.	3.4	329

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73	Comparison of Diesel Combustion CFD Models and Evaluation of the Effects of Model Constants. , 0, , .		18
74	Improved Chemical Kinetics Numerics for the Efficient Simulation of Advanced Combustion Strategies. SAE International Journal of Engines, 0, 7, 243-255.	0.4	8
75	Isobutanol as Both Low Reactivity and High Reactivity Fuels with Addition of Di-Tert Butyl Peroxide (DTBP) in RCCI Combustion. SAE International Journal of Fuels and Lubricants, 0, 8, 329-343.	0.2	47
76	Numerical Study of RCCI and HCCI Combustion Processes Using Gasoline, Diesel, iso-Butanol and DTBP Cetane Improver. SAE International Journal of Engines, 0, 8, 831-845.	0.4	45
77	A Numerical Study on Combustion and Emission Characteristics of Marine Engine through Miller Cycle Coupled with EGR and Water Emulsified Fuel. , 0, , .		13
78	Numerical Study of the RCCI Combustion Processes Fuelled with Methanol, Ethanol, n-Butanol and Diesel. , 0, , .		40
79	Experimental Study on High-Load Extension of Gasoline/PODE Dual-Fuel RCCI Operation Using Late Intake Valve Closing. SAE International Journal of Engines, 0, 10, 1482-1490.	0.4	18