

# Xiongbo Duan

## List of Publications by Year in descending order

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48  
papers

1,807  
citations

236925

25  
h-index

276875

41  
g-index

49  
all docs

49  
docs citations

49  
times ranked

830  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of controlling strategies of the ignition timing and combustion phase in homogeneous charge compression ignition (HCCI) engine. <i>Fuel</i> , 2021, 285, 119142.	6.4	171
2	Experimental and numerical investigation of the effects of low-pressure, high-pressure and internal EGR configurations on the performance, combustion and emission characteristics in a hydrogen-enriched heavy-duty lean-burn natural gas SI engine. <i>Energy Conversion and Management</i> , 2019, 195, 1319-1333.	9.2	115
3	Effect of hydrogen enrichment on the flame propagation, emissions formation and energy balance of the natural gas spark ignition engine. <i>Fuel</i> , 2022, 307, 121843.	6.4	92
4	Experimental study the effects of various compression ratios and spark timing on performance and emission of a lean-burn heavy-duty spark ignition engine fueled with methane gas and hydrogen blends. <i>Energy</i> , 2019, 169, 558-571.	8.8	83
5	Effects of injection timing and EGR on combustion and emissions characteristics of the diesel engine fuelled with acetone-butanol-ethanol/diesel blend fuels. <i>Energy</i> , 2021, 231, 121069.	8.8	83
6	Microsimulation of electric vehicle energy consumption and driving range. <i>Applied Energy</i> , 2020, 267, 115081.	10.1	82
7	Multi-objective energy management for Atkinson cycle engine and series hybrid electric vehicle based on evolutionary NSGA-II algorithm using digital twins. <i>Energy Conversion and Management</i> , 2021, 230, 113788.	9.2	78
8	Experimental study on the energy flow of a gasoline-powered vehicle under the NEDC of cold starting. <i>Applied Thermal Engineering</i> , 2017, 115, 1173-1186.	6.0	63
9	Experimental study on the performance, combustion and emission characteristics of a high compression ratio heavy-duty spark-ignition engine fuelled with liquefied methane gas and hydrogen blend. <i>Applied Thermal Engineering</i> , 2017, 124, 585-594.	6.0	60
10	Experimental study the impacts of the key operating and design parameters on the cycle-to-cycle variations of the natural gas SI engine. <i>Fuel</i> , 2021, 290, 119976.	6.4	58
11	Influence of single injection and two-stagnation injection strategy on thermodynamic process and performance of a turbocharged direct-injection spark-ignition engine fuelled with ethanol and gasoline blend. <i>Applied Energy</i> , 2018, 228, 942-953.	10.1	53
12	Experimental investigation of the effects of injection strategies on cycle-to-cycle variations of a DISI engine fueled with ethanol and gasoline blend. <i>Energy</i> , 2018, 165, 455-470.	8.8	49
13	Effects of the continuous variable valve lift system and Miller cycle strategy on the performance behavior of the lean-burn natural gas spark ignition engine. <i>Fuel</i> , 2021, 297, 120762.	6.4	47
14	An experimental study the impact of the hydrogen enrichment on cycle-to-cycle variations of the large bore and lean burn natural gas spark-ignition engine. <i>Fuel</i> , 2020, 282, 118868.	6.4	46
15	Spray combustion and soot formation characteristics of the acetone-butanol-ethanol/diesel blends under diesel engine-relevant conditions. <i>Fuel</i> , 2020, 280, 118483.	6.4	46
16	Effects of natural gas composition and compression ratio on the thermodynamic and combustion characteristics of a heavy-duty lean-burn SI engine fueled with liquefied natural gas. <i>Fuel</i> , 2019, 254, 115733.	6.4	45
17	Performance, combustion and knock assessment of a high compression ratio and lean-burn heavy-duty spark-ignition engine fuelled with n-butane and liquefied methane gas blend. <i>Energy</i> , 2018, 158, 256-268.	8.8	42
18	Numerical investigation of water injection quantity and water injection timing on the thermodynamics, combustion and emissions in a hydrogen enriched lean-burn natural gas SI engine. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 17935-17952.	7.1	41

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19	Experimental and numerical study the effect of combustion chamber shapes on combustion and emissions characteristics in a heavy-duty lean burn SI natural gas engine coupled with detail combustion mechanism. <i>Fuel</i> , 2019, 258, 116130.	6.4	39
20	Experimental investigation the impacts of injection strategies coupled with gasoline/ethanol blend on combustion, performance and emissions characteristics of a GDI spark-ignition engine. <i>Fuel</i> , 2019, 256, 115910.	6.4	38
21	Quantitative investigation the influences of the injection timing under single and double injection strategies on performance, combustion and emissions characteristics of a GDI SI engine fueled with gasoline/ethanol blend. <i>Fuel</i> , 2020, 260, 116363.	6.4	37
22	Dilution gas and hydrogen enrichment on the laminar flame speed and flame structure of the methane/air mixture. <i>Fuel</i> , 2020, 281, 118794.	6.4	36
23	Experimental investigation of the effects of CR, hydrogen addition strategies on performance, energy and exergy characteristics of a heavy-duty NGSi engine fueled with 99% methane content. <i>Fuel</i> , 2020, 259, 116212.	6.4	33
24	Numerical investigation the effects of the twin-spark plugs coupled with EGR on the combustion process and emissions characteristics in a lean burn natural gas SI engine. <i>Energy</i> , 2020, 206, 118181.	8.8	29
25	A comparative experimental study on emission characteristics of a turbocharged gasoline direct-injection (TGDI) engine fuelled with gasoline/ethanol blends under transient cold-start and steady-state conditions. <i>Fuel</i> , 2020, 277, 118153.	6.4	28
26	Comparative study on thermodynamics, combustion and emissions of turbocharged gasoline direct injection (GDI) engine under NEDC and steady-state conditions. <i>Energy Conversion and Management</i> , 2018, 169, 111-123.	9.2	27
27	Development of a method for on-board measurement of instant engine torque and fuel consumption rate based on direct signal measurement and RGF modelling under vehicle transient operating conditions. <i>Energy</i> , 2019, 189, 116218.	8.8	23
28	Effects of control strategies for mixture activity and chemical reaction pathway coupled with exhaust gas recirculation on the performance of hydrogen-enriched natural-gas fueled spark ignition engine. <i>Fuel</i> , 2022, 322, 124153.	6.4	23
29	Experimental and numerical study the effect of EGR strategies on in-cylinder flow, combustion and emissions characteristics in a heavy-duty higher CR lean-burn NGSi engine coupled with detail combustion mechanism. <i>Fuel</i> , 2020, 276, 118082.	6.4	22
30	Combustion and energy balance analysis of an unthrottled gasoline engine equipped with innovative variable valvetrain. <i>Applied Energy</i> , 2020, 268, 115051.	10.1	21
31	Visual experimental investigations of string cavitation and residual bubbles in the diesel nozzle and effects on initial spray structures. <i>International Journal of Engine Research</i> , 2020, 21, 437-447.	2.3	20
32	Optical experiment and Large Eddy Simulation on effects of in-nozzle stagnant air bubbles and diesel on near-nozzle spray structure variation in diesel injector. <i>Fuel</i> , 2019, 255, 115721.	6.4	18
33	Experimental and numerical research on the performance characteristics of OPLVCR engine based on the NSGA II algorithm using digital twins. <i>Energy Conversion and Management</i> , 2021, 236, 114052.	9.2	18
34	Impact of acetone-butanol-ethanol (ABE) and gasoline blends on the energy balance of a high-speed spark-ignition engine. <i>Applied Thermal Engineering</i> , 2021, 184, 116267.	6.0	16
35	Experimental study the effects of acetone-butanol-ethanol (ABE), spark timing and lambda on the performance and emissions characteristics of a high-speed SI engine. <i>Fuel</i> , 2020, 279, 118499.	6.4	15
36	The correlation between intake fluctuation and combustion CCV (cycle-to-cycle variations) on a high speed gasoline engine: A wide range operating condition study. <i>Fuel</i> , 2021, 304, 121336.	6.4	14

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37	Study of Energy-Saving Potential of Electronically Controlled Turbocharger for Internal Combustion Engine Exhaust Gas Energy Recovery. <i>Journal of Engineering for Gas Turbines and Power</i> , 2016, 138, .	1.1	13
38	Effects of water vapor on auto-ignition characteristics and laminar flame speed of methane/air mixture under engine-relevant conditions. <i>Fuel</i> , 2022, 315, 123169.	6.4	13
39	Dispersion behaviors of exhaust gases and nanoparticle of a passenger vehicle under simulated traffic light driving pattern. <i>Science of the Total Environment</i> , 2020, 740, 140090.	8.0	12
40	VISUALIZATION INVESTIGATIONS OF FLOW REGIMES IN DIFFERENT SIZES OF DIESEL INJECTOR NOZZLES AND THEIR EFFECTS ON SPRAY. <i>Atomization and Sprays</i> , 2018, 28, 547-563.	0.8	10
41	Influences of the control parameters and spark plug configurations on the performance of a natural gas spark-ignition engine. <i>Fuel</i> , 2022, 324, 124728.	6.4	10
42	Experimental investigation energy balance and distribution of a turbocharged GDI engine fuelled with ethanol and gasoline blend under transient and steady-state operating conditions. <i>Thermal Science</i> , 2020, 24, 243-257.	1.1	8
43	Kinematics analysis and design method of a new mechanical CVVL system with self-regulation of the valve timing. <i>Mechanism and Machine Theory</i> , 2020, 143, 103624.	4.5	7
44	Quantitative detection, sources exploration and reduction of in-cabin benzene series hazards of electric buses through climate chamber experiments. <i>Journal of Hazardous Materials</i> , 2021, 412, 125107.	12.4	7
45	Effect of a novel mechanical CVVL system on economic performance of a turbocharged spark-ignition engine fuelled with gasoline and ethanol blend. <i>Fuel</i> , 2020, 263, 116697.	6.4	6
46	Effect of the novel continuous variable compression ratio (CVCR) configuration coupled with spark assisted induced ignition (SAII) combustion mode on the performance behavior of the spark ignition engine. <i>Applied Thermal Engineering</i> , 2021, 197, 117410.	6.0	5
47	Optical experiments of string cavitation in diesel injector tapered nozzles. <i>Thermal Science</i> , 2020, 24, 193-201.	1.1	3
48	Effects of inhalation frequency on inhalation/exposure dose of hazardous nanoparticles and toxic gases during cigarette smoking. <i>Ecotoxicology and Environmental Safety</i> , 2022, 240, 113709.	6.0	0