

Boru Jia

List of Publications by Year in descending order

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Version: 2024-02-01

46
papers

1,325
citations

430874

18
h-index

361022

35
g-index

46
all docs

46
docs citations

46
times ranked

327
citing authors

#	ARTICLE	IF	CITATIONS
1	Development and validation of a free-piston engine generator numerical model. Energy Conversion and Management, 2015, 91, 333-341.	9.2	118
2	An experimental investigation into the starting process of free-piston engine generator. Applied Energy, 2015, 157, 798-804.	10.1	106
3	A study and comparison of frictional losses in free-piston engine and crankshaft engines. Applied Thermal Engineering, 2018, 140, 217-224.	6.0	92
4	Design and simulation of a two- or four-stroke free-piston engine generator for range extender applications. Energy Conversion and Management, 2016, 111, 289-298.	9.2	85
5	Research on combustion process of a free piston diesel linear generator. Applied Energy, 2016, 161, 395-403.	10.1	76
6	Piston motion control of a free-piston engine generator: A new approach using cascade control. Applied Energy, 2016, 179, 1166-1175.	10.1	72
7	A fast response free-piston engine generator numerical model for control applications. Applied Energy, 2016, 162, 321-329.	10.1	60
8	Effect of closed-loop controlled resonance based mechanism to start free piston engine generator: Simulation and test results. Applied Energy, 2016, 164, 532-539.	10.1	60
9	Experimental study of the operation characteristics of an air-driven free-piston linear expander. Applied Energy, 2017, 195, 93-99.	10.1	52
10	Review of recent advances of free-piston internal combustion engine linear generator. Applied Energy, 2020, 269, 115084.	10.1	47
11	Research on the intermediate process of a free-piston linear generator from cold start-up to stable operation: Numerical model and experimental results. Energy Conversion and Management, 2016, 122, 153-164.	9.2	46
12	Research on the Combustion Characteristics of a Free-Piston Gasoline Engine Linear Generator during the Stable Generating Process. Energies, 2016, 9, 655.	3.1	40
13	Application of Miller cycle with turbocharger and ethanol to reduce NOx and particulates emissions from diesel engine – A numerical approach with model validations. Applied Thermal Engineering, 2019, 150, 904-911.	6.0	35
14	Investigation of the Starting Process of Free-piston Engine Generator by Mechanical Resonance. Energy Procedia, 2014, 61, 572-577.	1.8	34
15	Effect of fuel injection characteristics on the performance of a free-piston diesel engine linear generator: CFD simulation and experimental results. Energy Conversion and Management, 2018, 160, 302-312.	9.2	32
16	Development Approach of a Spark-Ignited Free-Piston Engine Generator. , 0, , .		30
17	Research on the operation characteristics of a free-piston linear generator: Numerical model and experimental results. Energy Conversion and Management, 2017, 131, 32-43.	9.2	30
18	Disturbance analysis of a free-piston engine generator using a validated fast-response numerical model. Applied Energy, 2017, 185, 440-451.	10.1	29

#	ARTICLE	IF	CITATIONS
19	Design, modelling and validation of a linear Joule Engine generator designed for renewable energy sources. <i>Energy Conversion and Management</i> , 2018, 165, 25-34.	9.2	24
20	Evaluation of performance characteristics of a novel hydrogen-fuelled free-piston engine generator. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 33314-33324.	7.1	21
21	Investigation of the optimum operating condition of a dual piston type free piston engine generator during engine cold start-up process. <i>Applied Thermal Engineering</i> , 2021, 182, 116124.	6.0	19
22	Comparative analysis on friction characteristics between free-piston engine generator and traditional crankshaft engine. <i>Energy Conversion and Management</i> , 2021, 245, 114630.	9.2	18
23	The characteristics of a Linear Joule Engine Generator operating on a dry friction principle. <i>Applied Energy</i> , 2019, 237, 49-59.	10.1	17
24	Realization of a Novel Free-Piston Engine Generator for Hybrid-Electric Vehicle Applications. <i>Energy & Fuels</i> , 2020, 34, 12926-12939.	5.1	16
25	Influence of piston displacement profiles on the performance of a novel dual piston linear compressor. <i>International Journal of Refrigeration</i> , 2020, 117, 71-80.	3.4	16
26	Analysis of the Scavenging Process of a Two-Stroke Free-Piston Engine Based on the Selection of Scavenging Ports or Valves. <i>Energies</i> , 2018, 11, 324.	3.1	13
27	Dynamic and thermodynamic characteristics of a linear Joule engine generator with different operating conditions. <i>Energy Conversion and Management</i> , 2018, 173, 375-382.	9.2	13
28	The impact of disruptive powertrain technologies on energy consumption and carbon dioxide emissions from heavy-duty vehicles. <i>Energy Conversion and Management: X</i> , 2020, 6, 100030.	1.6	13
29	Research on the influence of dual spark ignition strategy at combustion process for dual cylinder free piston generator under direct injection. <i>Fuel</i> , 2021, 299, 120911.	6.4	13
30	Effect of the stroke-to-bore ratio on the performance of a dual-piston free piston engine generator. <i>Applied Thermal Engineering</i> , 2021, 185, 116456.	6.0	12
31	Research on the engine combustion characteristics of a free-piston diesel engine linear generator. <i>Energy Conversion and Management</i> , 2018, 168, 629-638.	9.2	11
32	Parametric analysis of a semi-closed-loop linear joule engine generator using argon and oxy-hydrogen combustion. <i>Energy</i> , 2021, 217, 119357.	8.8	10
33	Identification and analysis on the variation sources of a dual-cylinder free piston engine generator and their influence on system operating characteristics. <i>Energy</i> , 2022, 242, 123001.	8.8	9
34	Experimental analysis on the operation process of opposed-piston free piston engine generator. <i>Fuel</i> , 2022, 325, 124722.	6.4	9
35	Fundamental Analysis of Thermal Overload in Diesel Engines: Hypothesis and Validation. <i>Energies</i> , 2017, 10, 329.	3.1	6
36	Research on starting process and control strategy of opposed-piston free-piston engine generator _ Simulation and test results. <i>Energy Reports</i> , 2021, 7, 4977-4987.	5.1	6

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37	Investigation on the Effect of the Gas Exchange Process on the Diesel Engine Thermal Overload with Experimental Results. <i>Energies</i> , 2017, 10, 766.	3.1	5
38	Performance Analysis of a Flexi-Fuel Turbine-Combined Free-Piston Engine Generator. <i>Energies</i> , 2019, 12, 2657.	3.1	5
39	Parametric analysis of a dual-piston type free-piston gasoline engine linear generator. <i>Energy Procedia</i> , 2019, 158, 1431-1436.	1.8	5
40	A preliminary experimental study on a lab-scale Linear Joule Engine prototype. <i>Energy Procedia</i> , 2019, 158, 2244-2249.	1.8	5
41	A Decoupled Design Parameter Analysis for Free-Piston Engine Generators. <i>Energies</i> , 2017, 10, 486.	3.1	3
42	Development of a Diesel Engine Thermal Overload Monitoring System with Applications and Test Results. <i>Energies</i> , 2017, 10, 830.	3.1	3
43	Investigation of performance of free-piston engine generator with variable-scavenging-timing technology under unsteady operation condition. <i>Applied Thermal Engineering</i> , 2021, 196, 117288.	6.0	3
44	Operational optimisation of a novel dual-piston linear compressor: Simulation and experiment. <i>International Journal of Refrigeration</i> , 2021, 132, 82-91.	3.4	3
45	Research on the combustion and emission characteristics of homogeneous dual cylinder free piston generator by ignition strategy. <i>Journal of Cleaner Production</i> , 2021, 328, 129564.	9.3	2
46	A novel method to investigate the power generation characteristics of linear generator in full frequency operation range applied to opposed-piston free-piston engine generator _ Simulation and test results. <i>Energy</i> , 2022, 254, 124235.	8.8	1