

Andrew Smallbone

List of Publications by Year in descending order

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68
papers

2,517
citations

257357

24
h-index

214721

47
g-index

69
all docs

69
docs citations

69
times ranked

2324
citing authors

#	ARTICLE	IF	CITATIONS
1	An overview of solutions for airborne viral transmission reduction related to HVAC systems including liquid desiccant air-scrubbing. <i>Energy</i> , 2022, 244, 122709.	4.5	6
2	The techno-economics potential of hydrogen interconnectors for electrical energy transmission and storage. <i>Journal of Cleaner Production</i> , 2022, 335, 130045.	4.6	19
3	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.	4.5	9
4	Evaluation of performance characteristics of a novel hydrogen-fuelled free-piston engine generator. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 33314-33324.	3.8	21
5	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.	3.0	12
6	Parametric analysis of a semi-closed-loop linear joule engine generator using argon and oxy-hydrogen combustion. <i>Energy</i> , 2021, 217, 119357.	4.5	10
7	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.	3.0	19
8	Hydrogen production via ammonia from methane integrated with enhanced oil recovery: A techno-economic analysis. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105050.	3.3	3
9	The Key Techno-Economic and Manufacturing Drivers for Reducing the Cost of Power-to-Gas and a Hydrogen-Enabled Energy System. <i>Hydrogen</i> , 2021, 2, 273-300.	1.7	29
10	The performance and efficiency of novel oxy-hydrogen-argon gas power cycles for zero emission power generation. <i>Energy Conversion and Management</i> , 2021, 244, 114510.	4.4	6
11	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.	3.0	3
12	Comparative analysis on friction characteristics between free-piston engine generator and traditional crankshaft engine. <i>Energy Conversion and Management</i> , 2021, 245, 114630.	4.4	18
13	A combined heat and green hydrogen (CHH) generator integrated with a heat network. <i>Energy Conversion and Management</i> , 2021, 246, 114686.	4.4	18
14	Realization of a Novel Free-Piston Engine Generator for Hybrid-Electric Vehicle Applications. <i>Energy & Fuels</i> , 2020, 34, 12926-12939.	2.5	16
15	The development of a screen valve for reciprocating heat pump/engine applications. <i>Journal of Renewable and Sustainable Energy</i> , 2020, 12, 054101.	0.8	2
16	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.	0.9	13
17	Comparative study of using multi-wall carbon nanotube and two different sizes of cerium oxide nanopowders as fuel additives under various diesel engine conditions. <i>Fuel</i> , 2019, 256, 115904.	3.4	47
18	Performance Analysis of a Flexi-Fuel Turbine-Combined Free-Piston Engine Generator. <i>Energies</i> , 2019, 12, 2657.	1.6	5

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19	The characteristics of a Linear Joule Engine Generator operating on a dry friction principle. Applied Energy, 2019, 237, 49-59.	5.1	17
20	Techno-economic analysis of the thermal energy saving options for high-voltage direct current interconnectors. Applied Energy, 2019, 247, 60-77.	5.1	11
21	Post-combustion CO ₂ capture from a natural gas combined cycle power plant using activated carbon adsorption. Applied Energy, 2019, 245, 1-15.	5.1	106
22	Lean ignition and blow-off behaviour of butyl butyrate and ethanol blends in a gas turbine combustor. Fuel, 2019, 239, 1351-1362.	3.4	14
23	Investigation of the macroscopic characteristics of Hydrotreated Vegetable Oil (HVO) spray using CFD method. Fuel, 2019, 237, 28-39.	3.4	6
24	Thermodynamics and economics of liquid desiccants for heating, ventilation and air-conditioning "An overview". Applied Energy, 2018, 220, 455-479.	5.1	81
25	Design, modelling and validation of a linear Joule Engine generator designed for renewable energy sources. Energy Conversion and Management, 2018, 165, 25-34.	4.4	24
26	Particulate number and NO trade-off comparisons between HVO and mineral diesel in HD applications. Fuel, 2018, 215, 90-101.	3.4	45
27	Use Cases with Economics and Simulation for Thermo-Chemical District Networks. Sustainability, 2018, 10, 599.	1.6	9
28	Analysis of the Scavenging Process of a Two-Stroke Free-Piston Engine Based on the Selection of Scavenging Ports or Valves. Energies, 2018, 11, 324.	1.6	13
29	A hybrid reverse osmosis/adsorption desalination plant for irrigation and drinking water. Desalination, 2018, 444, 44-52.	4.0	53
30	A study and comparison of frictional losses in free-piston engine and crankshaft engines. Applied Thermal Engineering, 2018, 140, 217-224.	3.0	92
31	Dynamic and thermodynamic characteristics of a linear Joule engine generator with different operating conditions. Energy Conversion and Management, 2018, 173, 375-382.	4.4	13
32	Screening and techno-economic assessment of biomass-based power generation with CCS technologies to meet 2050 CO ₂ targets. Applied Energy, 2017, 190, 481-489.	5.1	126
33	The first carbon atlas of the state of Kuwait. Energy, 2017, 133, 317-326.	4.5	13
34	Disturbance analysis of a free-piston engine generator using a validated fast-response numerical model. Applied Energy, 2017, 185, 440-451.	5.1	29
35	Levelised Cost of Storage for Pumped Heat Energy Storage in comparison with other energy storage technologies. Energy Conversion and Management, 2017, 152, 221-228.	4.4	166
36	Parametric study for small scale engine coolant and exhaust heat recovery system using different Organic Rankine cycle layouts. Applied Thermal Engineering, 2017, 127, 1252-1266.	3.0	40

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37	Macroscopic spray characteristics of next-generation bio-derived diesel fuels in comparison to mineral diesel. <i>Applied Energy</i> , 2017, 186, 562-573.	5.1	61
38	Experimental and Numerical Investigation on the Macroscopic Characteristics of Hydrotreated Vegetable Oil (HVO) Spray. <i>Energy Procedia</i> , 2017, 142, 474-480.	1.8	2
39	Fundamental Analysis of Thermal Overload in Diesel Engines: Hypothesis and Validation. <i>Energies</i> , 2017, 10, 329.	1.6	6
40	A Decoupled Design Parameter Analysis for Free-Piston Engine Generators. <i>Energies</i> , 2017, 10, 486.	1.6	3
41	Investigation on the Effect of the Gas Exchange Process on the Diesel Engine Thermal Overload with Experimental Results. <i>Energies</i> , 2017, 10, 766.	1.6	5
42	Development of a Diesel Engine Thermal Overload Monitoring System with Applications and Test Results. <i>Energies</i> , 2017, 10, 830.	1.6	3
43	Piston motion control of a free-piston engine generator: A new approach using cascade control. <i>Applied Energy</i> , 2016, 179, 1166-1175.	5.1	72
44	An operational and economic study of a reverse osmosis desalination system for potable water and land irrigation. <i>Desalination</i> , 2016, 397, 174-184.	4.0	145
45	A fast response free-piston engine generator numerical model for control applications. <i>Applied Energy</i> , 2016, 162, 321-329.	5.1	60
46	Effect of closed-loop controlled resonance based mechanism to start free piston engine generator: Simulation and test results. <i>Applied Energy</i> , 2016, 164, 532-539.	5.1	60
47	Design and simulation of a two- or four-stroke free-piston engine generator for range extender applications. <i>Energy Conversion and Management</i> , 2016, 111, 289-298.	4.4	85
48	The future viability of algae-derived biodiesel under economic and technical uncertainties. <i>Bioresource Technology</i> , 2014, 151, 166-173.	4.8	90
49	The carbon footprint and non-renewable energy demand of algae-derived biodiesel. <i>Applied Energy</i> , 2014, 113, 1632-1644.	5.1	83
50	Techno-economic assessment of carbon-negative algal biodiesel for transport solutions. <i>Applied Energy</i> , 2013, 106, 262-274.	5.1	49
51	Meeting the challenges associated with low-carbon alternative fuels through advanced CAE technologies. , 2013, , 137-147.		3
52	Collaborative Sustainability Strategies for Online Laboratories. , 2012, , 468-490.		1
53	Identifying Optimal Operating Points in Terms of Engineering Constraints and Regulated Emissions in Modern Diesel Engines. , 2011, , .		14
54	Laminar flame speeds of C5 to C8 n-alkanes at elevated pressures: Experimental determination, fuel similarity, and stretch sensitivity. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 963-970.	2.4	133

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55	Laminar flame speeds, non-premixed stagnation ignition, and reduced mechanisms in the oxidation of iso-octane. Proceedings of the Combustion Institute, 2011, 33, 501-508.	2.4	88
56	Mapping surrogate gasoline compositions into RON/MON space. Combustion and Flame, 2010, 157, 1122-1131.	2.8	231
57	Laminar Flame Speeds of C5 to C8 n-Alkanes at Elevated Pressures and Temperatures. , 2010, , .		5
58	Delivering authentic experiences for engineering students and professionals through e-labs. , 2010, , .		29
59	Experimental and modeling study of laminar flame speed and non-premixed counterflow ignition of n-heptane. Proceedings of the Combustion Institute, 2009, 32, 1245-1252.	2.4	83
60	Turbulent and Stable/Unstable Laminar Burning Velocity Measurements from Outwardly Propagating Spherical Hydrogen-Air Flames at Elevated Pressures. Journal of Thermal Science and Technology, 2006, 1, 31-41.	0.6	16
61	Propagation and Quench of Premixed Turbulent Flames. , 0, , .		7
62	Automated IC Engine Model Development with Uncertainty Propagation. , 0, , .		13
63	Simulating PM Emissions and Combustion Stability in Gasoline/Diesel Fuelled Engines. , 0, , .		16
64	Implementing Detailed Chemistry and In-Cylinder Stratification into 0/1-D IC Engine Cycle Simulation Tools. , 0, , .		23
65	Optimisation of Injection Strategy, Combustion Characteristics and Emissions for IC Engines Using Advanced Simulation Technologies. , 0, , .		10
66	Virtual Performance and Emissions Mapping for Diesel Engine Design Optimization. , 0, , .		6
67	Combustion and Emissions Performance Analysis of Conventional and Future Fuels using Advanced CAE. , 0, , .		0
68	High-Dimensional Sensitivity Analysis Applied at Vehicle Component and System Level in the Context of CO ₂ Exhaust Emissions. , 0, , .		1