

Martin Davy

List of Publications by Year in descending order

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66
papers

660
citations

758635

12
h-index

839053

18
g-index

66
all docs

66
docs citations

66
times ranked

457
citing authors

#	ARTICLE	IF	CITATIONS
1	The effect of a stepped lip piston design on performance and emissions from a high-speed diesel engine. <i>Applied Energy</i> , 2018, 215, 679-689.	5.1	34
2	Effects of Fuel Composition on Mixture Formation in a Firing Direct-Injection Spark-Ignition (DISI) Engine: An Experimental Study using Mie-Scattering and Planar Laser-Induced Fluorescence (PLIF) Techniques. , 0, , .		31
3	Combustion and emissions from cerium oxide nanoparticle dosed diesel fuel in a high speed diesel research engine under low temperature combustion (LTC) conditions. <i>Fuel</i> , 2021, 288, 119636.	3.4	31
4	Iso-stoichiometric fuel blends: characterisation of physicochemical properties for mixtures of gasoline, ethanol, methanol and water. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2015, 229, 111-139.	1.1	26
5	The Prism: Efficient Signal Processing for the Internet of Things. <i>IEEE Industrial Electronics Magazine</i> , 2017, 11, 22-32.	2.3	26
6	On the application of artificial neural networks for the prediction of NO _x emissions from a high-speed direct injection diesel engine. <i>International Journal of Engine Research</i> , 2021, 22, 1808-1824.	1.4	23
7	Effects of Injection Timing on Liquid-Phase Fuel Distributions in a Centrally-Injected Four-Valve Direct-Injection Spark-Ignition Engine. , 0, , .		22
8	Engine-out emissions from a modern high speed diesel engine – The importance of Nozzle Tip Protrusion. <i>Applied Energy</i> , 2018, 226, 340-352.	5.1	22
9	Fast Coriolis mass flow metering for monitoring diesel fuel injection. <i>Flow Measurement and Instrumentation</i> , 2017, 58, 1-5.	1.0	20
10	VISCOELASTIC AIR-BLAST SPRAYS IN A CROSS-FLOW. PART 1: PENETRATION AND DISPERSION. <i>Atomization and Sprays</i> , 2010, 20, 697-720.	0.3	19
11	Cyclic NO ₂ :NO _x ratio from a diesel engine undergoing transient load steps. <i>International Journal of Engine Research</i> , 2021, 22, 284-294.	1.4	17
12	Effects of Hydrogen Addition on High-Pressure Nonpremixed Natural Gas Combustion. <i>Combustion Science and Technology</i> , 2010, 183, 20-42.	1.2	16
13	In-situ studies of gas phase composition and anode surface temperature through a model DIR-SOFC steam-methane reformer at 973.15ÅK. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 13762-13773.	3.8	16
14	Time-resolved gas thermometry by laser-induced grating spectroscopy with a high-repetition rate laser system. <i>Experiments in Fluids</i> , 2017, 58, 1.	1.1	15
15	Comparing the Effect of Fuel/Air Interactions in a Modern High-Speed Light-Duty Diesel Engine. , 0, , .		15
16	The effects of split injections on high exhaust gas recirculation low-temperature diesel engine combustion. <i>International Journal of Engine Research</i> , 2013, 14, 68-79.	1.4	14
17	Simulation of ECN diesel spray A using conditional source-term estimation. <i>Combustion Theory and Modelling</i> , 2020, 24, 725-760.	1.0	13
18	Newtonian liquid jet impaction on a high-speed moving surface. <i>International Journal of Heat and Fluid Flow</i> , 2011, 32, 1216-1225.	1.1	12

#	ARTICLE	IF	CITATIONS
19	Spray Behaviour and Particulate Matter Emissions with M15 Methanol/Gasoline Blends in a GDI Engine. , 0, , .		12
20	Numerical and Experimental Characterization of a Natural Gas Engine With Partially Stratified Charge Spark Ignition. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	0.5	11
21	Effects of engine operating parameters on diesel low-temperature combustion with split fuel injection. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2012, 226, 1271-1286.	1.1	11
22	Evaluation of exhaust gas recirculation techniques on a high-speed direct injection diesel engine using first law analysis. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2019, 233, 710-726.	1.1	11
23	Development of a laminar burning velocity empirical correlation for combustion of iso-octane/ethanol blends in air. Fuel, 2022, 307, 121880.	3.4	11
24	EXPERIMENTS ON AIR-BLAST ATOMIZATION OF VISCOELASTIC LIQUIDS, PART 1: QUIESCENT CONDITIONS. Small Group Research, 2009, 19, 157-190.	1.8	11
25	VISCOELASTIC AIR-BLAST SPRAYS IN A CROSS-FLOW. PART 2: DROPLET VELOCITIES. Atomization and Sprays, 2010, 20, 721-735.	0.3	11
26	Pulsating one-dimensional detonation in ammonia-hydrogen air mixtures. International Journal of Hydrogen Energy, 2022, 47, 21517-21536.	3.8	11
27	Effects of Fuel Composition on High-Pressure Non-Premixed Natural Gas Combustion. Combustion Science and Technology, 2009, 181, 397-416.	1.2	10
28	Pre-ignition characterization of partially-stratified natural gas injection. , 2007, , .		9
29	Effect of Thermocouple Size on the Measurement of Exhaust Gas Temperature in Internal Combustion Engines. , 0, , .		9
30	Cycle-to-Cycle NO and NOx Emissions From a HSDI Diesel Engine. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	0.5	9
31	Artificial neural network (ANN) assisted prediction of transient NO _x emissions from a high-speed direct injection (HSDI) diesel engine. International Journal of Engine Research, 2022, 23, 1201-1212.	1.4	9
32	On the experimental validation of combustion simulations in turbulent non-premixed jets. Combustion Theory and Modelling, 2010, 14, 855-874.	1.0	8
33	An optical method for measuring exhaust gas pressure from an internal combustion engine at high speed. Review of Scientific Instruments, 2017, 88, 125004.	0.6	8
34	The effects of increasing FAME biodiesel content on combustion characteristics and HC emissions in high-EGR low temperature combustion. Fuel, 2021, 302, 121055.	3.4	8
35	Effects of Injection Timing on the Exhaust Emissions of a Centrally-Injected Four-Valve Direct-Injection Spark-Ignition Engine. , 0, , .		7
36	Autoignition and Emission Characteristics of Gaseous Fuel Direct Injection Compression Ignition Combustion. , 2007, , .		7

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37	Insights into the hydrocarbon and carbon monoxide emissions in moderately and highly dilute Low Temperature Combustion. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2014, 228, 1285-1296.	1.1	7
38	Load transient between conventional diesel operation and low-temperature combustion. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2015, 229, 850-865.	1.1	7
39	Numerical Studies of Combustion Recession on ECN Diesel Spray A. , 2018, , .		7
40	The impact of intake pressure on high exhaust gas recirculation low-temperature compression ignition engine combustion using borescopic imaging. International Journal of Engine Research, 2021, 22, 2347-2361.	1.4	7
41	The Ultra Lean Burn Partially Stratified Charge Natural Gas Engine. , 0, , .		6
42	Broadband 308 nm vibrational Raman spectroscopy of gaseous species using a potassium hydrogen phthalate liquid filter and polarization fluorescence suppression. Review of Scientific Instruments, 2010, 81, 013108.	0.6	6
43	High-temperature vibrational Raman spectroscopy of gaseous species for solid-oxide fuel cell research. International Journal of Hydrogen Energy, 2012, 37, 3403-3414.	3.8	6
44	Comparison of Transient Diesel Spray Break-Up Between Two Computational Fluid Dynamics Codes. , 2018, , .		6
45	NEWTONIAN AND NON-NEWTONIAN SPRAY INTERACTION WITH A HIGH-SPEED MOVING SURFACE. Small Group Research, 2009, 19, 19-39.	1.8	6
46	The Effect of Non-Ideal Vapour-Liquid Equilibrium and Non-Ideal Liquid Diffusion on Multi-Component Droplet Evaporation for Gasoline Direct Injection Engines. , 2015, , .		5
47	Investigation of fuel volatility on the heat transfer dynamics on piston surface due to the pulsed spray impingement. International Journal of Heat and Mass Transfer, 2021, 170, 121008.	2.5	5
48	Comparing the Effect of a Swirl Flap and Asymmetric Inlet Valve Opening on a Light Duty Diesel Engine. , 0, , .		4
49	Prism Signal Processing of Coriolis meter data for gasoline fuel injection monitoring. Flow Measurement and Instrumentation, 2019, 70, 101645.	1.0	4
50	A Study on Kinetic Mechanisms of Diesel Fuel Surrogate n-Dodecane for the Simulation of Combustion Recession. , 0, , .		4
51	Effect of ethanol addition on the laminar burning velocities of gasoline surrogates. Fuel, 2022, 327, 125186.	3.4	4
52	Effects of Fuel Injection Pressure in an Optically-Accessed DISI Engine with Side-Mounted Fuel Injector. , 2001, , .		3
53	Fuel spray structure, flame propagation and charge motion at fuel impingement locations within a DISI engine. , 2012, , 199-214.		3
54	Managing the Transition Between Low Temperature Combustion and Conventional Diesel Combustion During a Load Change. , 2012, , .		3

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55	An optical investigation of a cold-start DISI engine startup strategy. , 2013, , 33-52.		3
56	Effects of intake-port throttling on combustion behaviour in diesel low-temperature combustion. International Journal of Engine Research, 2018, 19, 827-838.	1.4	3
57	Manifold reduction techniques for the comparison of crank angle-resolved particle image velocimetry (PIV) data and Reynolds-averaged Navier-Stokes (RANS) simulations in a spark ignition direct injection (SID) engine. International Journal of Engine Research, 2022, 23, 1275-1294.	1.4	3
58	Improving the Uncertainty of Exhaust Gas Temperature Measurements in Internal Combustion Engines. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	0.5	3
59	Experimental Investigation into the Liquid Sheet Break-Up of High-Pressure DISI Swirl Atomizers. , 0, , .		2
60	The Oxford Cold Driven Shock Tube (CDST) for Fuel Spray and Chemical Kinetics Research. , 0, , .		2
61	Numerical Study of the Effects of Droplet Size Distribution on Fuel Transport and Air-Fuel Mixing in a Gasoline Direct-Injection Engine. , 2003, , .		1
62	Effect of Impinging Airflow on the Near Nozzle Characteristics of a Gasoline Spray from a Pressure-Swirl Atomiser. , 2006, , .		1
63	A Marine Propeller Aerodynamic Test Facility. Strain, 2007, 43, 125-131.	1.4	1
64	The Potential of Fuel Metering Control for Optimising Unburned Hydrocarbon Emissions in Diesel Low Temperature Combustion. , 0, , .		1
65	Two-Colour Pyrometry Measurements of Low-Temperature Combustion using Borescopic Imaging. , 0, , .		1
66	The Influence of Cycle-to-Cycle Hydrocarbon Emissions on Cyclic NO:NO ₂ Ratio From a HSDI Diesel Engine. Journal of Engineering for Gas Turbines and Power, 2021, 143, .	0.5	1