

William F Northrop

List of Publications by Year in descending order

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93
papers

1,039
citations

706676

14
h-index

721071

23
g-index

94
all docs

94
docs citations

94
times ranked

1042
citing authors

#	ARTICLE	IF	CITATIONS
1	Solid particulate mass and number from ducted fuel injection in an optically accessible diesel engine in skip-fired operation. <i>International Journal of Engine Research</i> , 2022, 23, 1226-1236.	1.4	7
2	Neural Network-Based Electric Vehicle Range Prediction for Smart Charging Optimization. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2022, 144, .	0.9	8
3	Impacts of engine lubrication oil-derived ash on soot oxidative reactivity on a catalytic gasoline particulate filter. <i>Journal of Aerosol Science</i> , 2022, 162, 105960.	1.8	2
4	Synthesis gas as a fuel for internal combustion engines in transportation. <i>Progress in Energy and Combustion Science</i> , 2022, 90, 100995.	15.8	44
5	Bowl piston geometry as an alternative to enlarged crevice pistons for rapid compression machines. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 5723-5731.	2.4	5
6	A non-premixed reactive volatilization reactor for catalytic partial oxidation of low volatility fuels at a short contact time. <i>Reaction Chemistry and Engineering</i> , 2021, 6, 662-671.	1.9	1
7	Surveying the applicability of energy recovery technologies for waste treatment: Case study for anaerobic wastewater treatment in Minnesota. <i>Journal of the Air and Waste Management Association</i> , 2021, 71, 974-988.	0.9	2
8	Influence of Fuel Properties on Gasoline Direct Injection Particulate Matter Emissions Over First 200 s of World-Harmonized Light-Duty Test Procedure Using an Engine Dynamometer and Novel "Virtual Drivetrain" Software. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2021, 143, .	1.4	3
9	Non-premixed reactive volatilization reactor for catalytic reforming of ethanol and E85. <i>Results in Engineering</i> , 2021, 11, 100247.	2.2	4
10	Thermochemical Recuperation to Enable Efficient Ammonia-Diesel Dual-Fuel Combustion in a Compression Ignition Engine. <i>Energies</i> , 2021, 14, 7540.	1.6	19
11	Correlation of nanoparticle size distribution features to spatiotemporal flame luminosity in gasoline direct injection engines. <i>International Journal of Engine Research</i> , 2020, 21, 1107-1117.	1.4	14
12	Risk-aware Energy Management of Extended Range Electric Delivery Vehicles with Implicit Quantile Network. , 2020, , .		2
13	Dicarboxylic acid emissions from a GDI engine equipped with a catalytic gasoline particulate filter. <i>Fuel</i> , 2020, 275, 117940.	3.4	7
14	Physics-guided Energy-efficient Path Selection Using On-board Diagnostics Data. <i>ACM/IMS Transactions on Data Science</i> , 2020, 1, 1-28.	2.1	5
15	Uncertainty-aware Energy Management of Extended Range Electric Delivery Vehicles with Bayesian Ensemble. , 2020, , .		1
16	Formal methods approach to the charging facility location problem for battery electric vehicles. , 2020, , .		2
17	Hydrous Ethanol Steam Reforming and Thermochemical Recuperation to Improve Dual-Fuel Diesel Engine Emissions and Efficiency. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2019, 141, .	1.4	5
18	Trajectory-aware Lowest-cost Path Selection. , 2019, , .		4

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19	Design and Control of a Controlled Trajectory Rapid Compression and Expansion Machine. IEEE/ASME Transactions on Mechatronics, 2019, 24, 1711-1722.	3.7	7
20	Impact of Time-Varying Passenger Loading on Conventional and Electrified Transit Bus Energy Consumption. Transportation Research Record, 2019, 2673, 632-640.	1.0	12
21	In-cylinder flame luminosity measured from a stratified lean gasoline direct injection engine. Results in Engineering, 2019, 1, 100005.	2.2	5
22	A Deep Reinforcement Learning Framework for Energy Management of Extended Range Electric Delivery Vehicles. , 2019, , .		11
23	Actor-Critic based Deep Reinforcement Learning Framework for Energy Management of Extended Range Electric Delivery Vehicles. , 2019, , .		14
24	Uncertainty Estimation with Distributional Reinforcement Learning for Applications in Intelligent Transportation Systems: A Case Study. , 2019, , .		4
25	Emissions factors from distributed, small-scale biomass gasification power generation: Comparison to open burning and large-scale biomass power generation. Atmospheric Environment, 2019, 200, 221-227.	1.9	23
26	Thermochemical and Sensible Energy Recuperation Using Thermally-Integrated Reactor and Diesel-Ammonia Dual Fueling Strategy. , 2019, , .		3
27	Physics-guided energy-efficient path selection. , 2018, , .		6
28	Considerations in Using Photometer Instruments for Measuring Total Particulate Matter Mass Concentration in Diesel Engine Exhaust. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	2
29	Microglial Immune Response to Low Concentrations of Combustion-Generated Nanoparticles: An In Vitro Model of Brain Health. Nanomaterials, 2018, 8, 155.	1.9	6
30	Hydrous Ethanol Steam Reforming and Thermochemical Recuperation to Improve Dual-Fuel Diesel Engine Emissions and Efficiency. , 2018, , .		2
31	Emissions From a Diesel Engine Operating in a Dual-Fuel Mode Using Port-Fuel Injection of Heated Hydrous Ethanol. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .	1.4	18
32	Discovering non-compliant window co-occurrence patterns. Geoinformatica, 2017, 21, 829-866.	2.0	3
33	Dilution Sensitivity of Particulate Matter Emissions From Reactivity-Controlled Compression Ignition Combustion. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .	1.4	12
34	Efficacy of Add-On Hydrous Ethanol Dual Fuel Systems to Reduce NOx Emissions From Diesel Engines. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .	1.4	13
35	Dicarboxylic Acid Emissions from Aftertreatment Equipped Diesel Engines. Environmental Science & Technology, 2017, 51, 13036-13043.	4.6	12
36	Tailoring Charge Reactivity Using In-Cylinder Generated Reformate for Gasoline Compression Ignition Strategies. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	0.5	7

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37	Real-World NO _x Emissions of Transit Buses Equipped with Diesel Exhaust Aftertreatment Systems. <i>Emission Control Science and Technology</i> , 2017, 3, 153-160.	0.8	7
38	Evolution and current understanding of physicochemical characterization of particulate matter from reactivity controlled compression ignition combustion on a multicylinder light-duty engine. <i>International Journal of Engine Research</i> , 2017, 18, 505-519.	1.4	33
39	Exploration of Dual Fuel Diesel Engine Operation with On-Board Fuel Reforming. , 2017, , .		11
40	Investigation of Species from Negative Valve Overlap Reforming Using a Stochastic Reactor Model. , 2017, , .		4
41	Markov chain solution of photon multiple scattering through turbid slabs. <i>Optics Express</i> , 2016, 24, 26942.	1.7	8
42	Effects of Variable Piston Trajectory on Indicated Efficiency Using a Quasi-Dimensional Spark-Ignition Model and Genetic Algorithm Optimization. , 2016, , .		1
43	Efficacy of Add-On Hydrous Ethanol Dual Fuel Systems to Reduce NO _x Emissions From Diesel Engines. , 2016, , .		2
44	Tailoring Charge Reactivity Using In-Cylinder Generated Reformate for Gasoline Compression Ignition Strategies. , 2016, , .		4
45	Volatility characterization of nanoparticles from single and dual-fuel low temperature combustion in compression ignition engines. <i>Aerosol Science and Technology</i> , 2016, 50, 436-447.	1.5	18
46	Lagrangian Hotspots of In-Use NO _x Emissions from Transit Buses. <i>Environmental Science & Technology</i> , 2016, 50, 5750-5756.	4.6	14
47	Novel Vehicle Mass-Based Automated Passenger Counter for Transit Applications. <i>Transportation Research Record</i> , 2016, 2563, 37-43.	1.0	6
48	Detailed speciation and reactivity characterization of fuel-specific in-cylinder reforming products and the associated impact on engine performance. <i>Fuel</i> , 2016, 185, 348-361.	3.4	32
49	Fractionation of engine exhaust hydrocarbons using flame ionization detection with variable temperature sample conditioner. <i>International Journal of Engine Research</i> , 2016, 17, 235-245.	1.4	1
50	A Markov Chain-based quantitative study of angular distribution of photons through turbid slabs via isotropic light scattering. <i>Computer Physics Communications</i> , 2016, 201, 77-84.	3.0	8
51	Emissions From a Diesel Engine Operating in a Dual-Fuel Mode Using Port-Fuel Injection of Heated Hydrous Ethanol. , 2015, , .		5
52	Future connected vehicles. , 2015, , .		8
53	Dilution Sensitivity of Particulate Matter Emissions From Reactivity Controlled Compression Ignition Combustion. , 2015, , .		1
54	Integrated Mechanical and Thermodynamic Optimization of an Engine Linkage Using a Multi-Objective Genetic Algorithm. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2015, 137, .	1.7	5

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55	An Experimental Investigation of Reactivity-Controlled Compression Ignition Combustion in a Single-Cylinder Diesel Engine Using Hydrous Ethanol. Journal of Energy Resources Technology, Transactions of the ASME, 2015, 137, .	1.4	25
56	Optimization of reactivity-controlled compression ignition combustion fueled with diesel and hydrous ethanol using response surface methodology. Fuel, 2015, 160, 446-457.	3.4	44
57	Energy, carbon dioxide and water use implications of hydrous ethanol production. Energy Conversion and Management, 2015, 105, 900-907.	4.4	43
58	Exploration of Semi-Volatile Particulate Matter Emissions from Low Temperature Combustion in a Light-Duty Diesel Engine. SAE International Journal of Engines, 2014, 7, 852-859.	0.4	5
59	Dual-Fuel Diesel Engine Combustion With Hydrogen, Gasoline, and Ethanol as Fumigants: Effect of Diesel Injection Timing. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	0.5	22
60	Gas and Particle Emissions From a Diesel Engine Operating in a Dual-Fuel Mode Using High Water Content Hydrous Ethanol. , 2014, , .		3
61	Particulate and Aromatic Hydrocarbon Emissions from a Small-Scale Biomass Gasifierâ€“Generator System. Energy & Fuels, 2014, 28, 3255-3261.	2.5	8
62	Combustion Phasing Effect on Cycle Efficiency of a Diesel Engine Using Advanced Gasoline Fumigation. Journal of Engineering for Gas Turbines and Power, 2013, 135, .	0.5	13
63	An Experimental Investigation of Reactivity-Controlled Compression Ignition Combustion in a Single-Cylinder Diesel Engine Using Hydrous Ethanol. , 2013, , .		8
64	Gaseous and Particulate Emissions from Diesel Engines at Idle and under Load: Comparison of Biodiesel Blend and Ultralow Sulfur Diesel Fuels. Energy & Fuels, 2012, 26, 6737-6748.	2.5	37
65	Combustion Phasing Effect on Cycle Efficiency of a Diesel Engine Using Advanced Gasoline Fumigation. , 2012, , .		0
66	Investigation of the Load Limits and Emissions of a Naturally-Aspirated Direct-Injection Diesel Engine. SAE International Journal of Engines, 2012, 5, 493-503.	0.4	1
67	Thermally integrated fuel processor design for fuel cell applications. International Journal of Hydrogen Energy, 2012, 37, 3447-3458.	3.8	12
68	Condensational Growth of Particulate Matter from Partially Premixed Low Temperature Combustion of Biodiesel in a Compression Ignition Engine. Aerosol Science and Technology, 2011, 45, 26-36.	1.5	32
69	Comparison of Filter Smoke Number and Elemental Carbon Mass From Partially Premixed Low Temperature Combustion in a Direct-Injection Diesel Engine. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	0.5	38
70	Investigation of Hydrogen Emissions in Partially Premixed Diesel Combustion. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	0.5	2
71	Comparison of Filter Smoke Number and Elemental Carbon Mass From Partially Premixed Low Temperature Combustion in a Direct Injection Diesel Engine. , 2010, , .		3
72	Investigation of Hydrogen Emissions in Partially Premixed Diesel Combustion. , 2009, , .		1

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73	Deactivation of a diesel oxidation catalyst due to exhaust species from rich premixed compression ignition combustion in a light-duty diesel engine. International Journal of Engine Research, 2007, 8, 487-498.	1.4	17
74	Premixed Low Temperature Combustion of Biodiesel and Blends in a High Speed Compression Ignition Engine. SAE International Journal of Fuels and Lubricants, 0, 2, 28-40.	0.2	55
75	Evaluation of Diesel Oxidation Catalyst Conversion of Hydrocarbons and Particulate Matter from Premixed Low Temperature Combustion of Biodiesel. SAE International Journal of Engines, 0, 4, 1431-1444.	0.4	11
76	Fuel Effects on Combustion and Emissions of a Direct-Injection Diesel Engine Operating at Moderate to High Engine Speed and Load. , 0, , .		5
77	Efficacy of In-Cylinder Control of Particulate Emissions to Meet Current and Future Regulatory Standards. , 0, , .		6
78	Parametric 1-D Modeling Study of a 5-Stroke Spark-Ignition Engine Concept for Increasing Engine Thermal Efficiency. , 0, , .		5
79	Analysis of Thermal and Chemical Effects on Negative Valve Overlap Period Energy Recovery for Low-Temperature Gasoline Combustion. SAE International Journal of Engines, 0, 8, 2227-2239.	0.4	24
80	Investigation of Negative Valve Overlap Reforming Products Using Gas Sampling and Single-Zone Modeling. SAE International Journal of Engines, 0, 8, 747-757.	0.4	23
81	Effects of Aftertreatment on Semi-Volatile Particulate Matter Emissions from Low Temperature Combustion in a Light-Duty Diesel Engine. SAE International Journal of Engines, 0, 8, 791-796.	0.4	5
82	Investigation of Fuel Effects on In-Cylinder Reforming Chemistry Using Gas Chromatography. SAE International Journal of Engines, 0, 9, 964-978.	0.4	15
83	Particle Emissions from Light-Duty Vehicles during Cold-Cold Start. SAE International Journal of Engines, 0, 9, 1775-1785.	0.4	56
84	Energy Analysis of Low-Load Low-Temperature Gasoline Combustion with Auxiliary-Fueled Negative Valve Overlap. SAE International Journal of Engines, 0, 10, 1238-1255.	0.4	10
85	Comparison and Optimization of Fourier Transform Infrared Spectroscopy and Gas Chromatography-Mass Spectroscopy for Speciating Unburned Hydrocarbons from Diesel Low Temperature Combustion. , 0, , .		1
86	Demonstration of Single-Fuel Reactivity Controlled Compression Ignition Using Reformed Exhaust Gas Recirculation. , 0, , .		9
87	Solid Particle Number and Mass Emissions from Lean and Stoichiometric Gasoline Direct Injection Engine Operation. , 0, , .		16
88	Effect of Piston Geometry on In-Cylinder Fluid Mechanics, Heat Transfer, and Ignition Delay in Rapid Compression Machines. , 0, , .		0
89	Prediction of NO _x Emissions from Compression Ignition Engines Using Ensemble Learning-Based Models with Physical Interpretability. , 0, , .		4
90	Effects of Fuel Properties on Particle Number and Particle Mass Emissions from Lean and Stoichiometric Gasoline Direct Injection Engine Operation. , 0, , .		9

#	ARTICLE	IF	CITATIONS
91	Path-Averaged Temperature Measurement in a Motored Engine Cylinder Using Ultrasonic Thermometry. , 0, , .		1
92	Reinforcement Learning based Energy Management of Multi-Mode Plug-in Hybrid Electric Vehicles for Commuter Route. , 0, , .		1
93	Data-Driven Framework for Fuel Efficiency Improvement in Extended Range Electric Vehicle Used in Package Delivery Applications. , 0, , .		0