Dimitrios C Rakopoulos

List of Publications by Year
in descending order

86 papers	7,320 citations	87401 40 h-index	64407 83 g-index
86 all docs	86 docs citations	86 times ranked	3981 citing authors

#	Article	IF	Citations
1	Exergy evaluation of equivalence ratio, compression ratio and residual gas effects in variable compression ratio spark-ignition engine using quasi-dimensional combustion modeling. Energy, 2022, 244, 123080.	4.5	10
2	Achievement of NO Emissionâ€“Free Operation of a HSDI Diesel Engine Using Nitrogen Enrichment of Intake Air and Implications on Performance and Soot Emissions. Journal of Energy Engineering - ASCE, 2022, 148, .	1.0	0
3	Marine Exhaust Gas Treatment Systems for Compliance with the IMO 2020 Global Sulfur Cap and Tier III NOx Limits: A Review. Energies, 2022, 15, 3638.	1.6	18
4	Effects of Exhaust Gas Recirculation under Fueling Rate or Air/Fuel Ratioâ€“Controlled Strategies on Diesel Engine Performance and Emissions by Two-Zone Combustion Modeling. Journal of Energy Engineering - ASCE, 2021, 147, 04020079.	1.0	9
5	An Efficient Backward/Forward Sweep Algorithm for Power Flow Analysis through a Novel Tree-Like Structure for Unbalanced Distribution Networks. Energies, 2021, 14, 897.	1.6	14
6	Assessing the cyclic-variability of spark-ignition engine running on methane-hydrogen blends with high hydrogen contents of up to 50%. International Journal of Hydrogen Energy, 2021, 46, 17955-17968.	3.8	23
7	Model Predictive Control for the Energy Management in a District of Buildings Equipped with Building Integrated Photovoltaic Systems and Batteries. Energies, 2021, 14, 3369.	1.6	9
8	State of the Art of Low and Medium Voltage Direct Current (DC) Microgrids. Energies, 2021, 14, 5595.	1.6	38
9	Numerical and Experimental Study by Quasi-Dimensional Modeling of Combustion and Emissions in Variable Compression Ratio High-Speed Spark-Ignition Engine. Journal of Energy Engineering - ASCE, 2021, 147, .	1.0	22
10	A Review on Management of End of Life Tires (ELTs) and Alternative Uses of Textile Fibers. Energies, 2021, 14, 571.	1.6	50
11	Day Ahead Optimal Dispatch Schedule in a Smart Grid Containing Distributed Energy Resources and Electric Vehicles. Sensors, 2021, 21, 7295.	2.1	16
12	Review of Process Modeling of Solid-Fuel Thermal Power Plants for Flexible and Off-Design Operation. Energies, 2020, 13, 6587.	1.6	13
13	Exergy assessment of combustion and EGR and load effects in DI diesel engine using comprehensive two-zone modeling. Energy, 2020, 202, 117685.	4.5	35
14	Engine and Power Plant Combustion Technologies for Sustainability. Journal of Energy Engineering - ASCE, 2019, 145, 02019001.	1.0	3
15	Performance and emissions of a methane-fueled spark-ignition engine under consideration of its cyclic variability by using a computational fluid dynamics code. Fuel, 2019, 258, 116154.	3.4	19
16	Determination of a Methodology to Derive Correlations Between Window Opening Mass Flow Rate and Wind Conditions Based on CFD Results. Energies, 2019, 12, 1600.	1.6	5
17	Experimental comparative assessment of butanol or ethanol diesel-fuel extenders impact on combustion features, cyclic irregularity, and regulated emissions balance in heavy-duty diesel engine. Energy, 2019, 174, 1145-1157.	4.5	96
18	A Methodology for Determination and Definition of Key Performance Indicators for Smart Grids Development in Island Energy Systems. Energies, 2019, 12, 242.	1.6	45

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19	The Smart City Business Model Canvasâ€"A Smart City Business Modeling Framework and Practical Tool. Energies, 2019, 12, 4798.	1.6	40
20	Thermal Simulation and Economic Study of Predried Lignite Production Retrofit of a Greek Power Plant for Enhanced Flexibility. Journal of Energy Engineering - ASCE, 2019, 145, 04019001.	1.0	12
21	Evaluation of the Air Oxygen Enrichment Effects on Combustion and Emissions of Natural Gas/Diesel Dual-Fuel Engines at Various Loads and Pilot Fuel Quantities. Energies, 2018, 11, 3028.	1.6	7
22	CFD-based method with an improved ignition model for estimating cyclic variability in a spark-ignition engine fueled with methane. Energy Conversion and Management, 2018, 174, 769-778.	4.4	24
23	Investigating the EGR rate and temperature impact on diesel engine combustion and emissions under various injection timings and loads by comprehensive two-zone modeling. Energy, 2018, 157, 990-1014.	4.5	95
24	Evaluating Oxygenated Fuelâ€™s Influence on Combustion and Emissions in Diesel Engines Using a Two-Zone Combustion Model. Journal of Energy Engineering - ASCE, 2018, 144, .	1.0	54
25	A combined experimental and theoretical study of diesel fuel injection timing and gaseous fuel/diesel mass ratio effects on the performance and emissions of natural gas-diesel HDDI engine operating at various loads. Fuel, 2017, 202, 675-687.	3.4	71
26	Dynamic Modeling of a Utility Once-Through Pulverized-Fuel Steam Generator. Journal of Energy Engineering - ASCE, 2017, 143, 04016070.	1.0	8
27	Numerical Investigation of a Coal-Fired Power Plant Main Furnace under Normal and Reduced-Oxygen Operating Conditions. Journal of Energy Engineering - ASCE, 2017, 143, .	1.0	5
28	Efficient CHP-Plant Configuration for District Heating Systems Utilizing Low-Rank Coals. Journal of Energy Engineering - ASCE, 2017, 143, .	1.0	7
29	Comparative Evaluation of Ethanol, n-Butanol, and Diethyl Ether Effects as Biofuel Supplements on Combustion Characteristics, Cyclic Variations, and Emissions Balance in Light-Duty Diesel Engine. Journal of Energy Engineering - ASCE, 2017, 143, .	1.0	73
30	Combustion Instability during Starting of Turbocharged Diesel Engine Including Biofuel Effects. Journal of Energy Engineering - ASCE, 2017, 143, .	1.0	12
31	Theoretical Study of the Effects of Spark Timing on the Performance and Emissions of a Light-Duty Spark Ignited Engine Running under Either Gasoline or Ethanol or Butanol Fuel Operating Modes. Energies, 2017, 10, 1198.	1.6	18
32	Advanced Combustion and Fuel Technologies for Economical and Environmentally Friendly Power Generation in Engines and Power Plants: Issues and Challenges. Journal of Energy Engineering - ASCE, 2016, 142, .	1.0	8
33	Methane/hydrogen fueling a spark-ignition engine for studying NO, CO and HC emissions with a research CFD code. Fuel, 2016, 185, 903-915.	3.4	77
34	Butanol or DEE blends with either straight vegetable oil or biodiesel excluding fossil fuel: Comparative effects on diesel engine combustion attributes, cyclic variability and regulated emissions trade-off. Energy, 2016, 115, 314-325.	4.5	147
35	Pre-dried lignite technology implementation in partial load/low demand cases for flexibility enhancement. Energy, 2016, 96, 427-436.	4.5	20
36	Numerical Evaluation of the Effects of Compression Ratio and Diesel Fuel Injection Timing on the Performance and Emissions of a Fumigated Natural Gasâ€"Diesel Dual-Fuel Engine. Journal of Energy Engineering - ASCE, 2016, 142, .	1.0	18

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37	Combustion noise radiation during dynamic diesel engine operation including effects of various biofuel blends: A review. Renewable and Sustainable Energy Reviews, 2016, 54, 1099-1113.	8.2	79
38	Combustion and Emissions in an HSDI Engine Running on Diesel or Vegetable Oil Base Fuel with n-Butanol or Diethyl Ether As a Fuel Extender. Journal of Energy Engineering - ASCE, 2016, 142, .	1.0	18
39	Special Issue on Contemporary Combustion Experimentation and Modeling for Clean and Efficient Power Generation: Issues and Challenges. Journal of Energy Engineering - ASCE, 2015, 141, .	1.0	7
40	Comparison of Combustion, Performance, and Emissions of HSDI Diesel Engine Operating on Blends of Diesel Fuel with Ethanol, n-Butanol, or Butanol Isomer Ether DEE. Journal of Energy Engineering - ASCE, 2015, 141, .	1.0	23
41	Effects of Boost Pressure and Spark Timing on Performance and Exhaust Emissions in a Heavy-Duty Spark-Ignited Wood-Gas Engine. Journal of Energy Engineering - ASCE, 2015, 141, .	1.0	5
42	Impact of properties of vegetable oil, bio-diesel, ethanol and n -butanol on the combustion and emissions of turbocharged HDDI diesel engine operating under steady and transient conditions. Fuel, 2015, 156, 1-19.	3.4	200
43	Investigation of nitric oxide emission mechanisms in a SI engine fueled with methane/hydrogen blends using a research CFD code. International Journal of Hydrogen Energy, 2015, 40, 15088-15104.	3.8	44
44	Comparative Evaluation of Two Straight Vegetable Oils and Their Methyl Ester Biodiesels as Fuel Extenders in HDDI Diesel Engines: Performance and Emissions. Journal of Energy Engineering - ASCE, 2014, 140, .	1.0	25
45	Special Issue on Innovative Technologies on Combustion of Biofuels in Engines: Issues and Challenges. Journal of Energy Engineering - ASCE, 2014, 140, .	1.0	9
46	Assessment of NOx Emissions during Transient Diesel Engine Operation with Biodiesel Blends. Journal of Energy Engineering - ASCE, 2014, 140, .	1.0	47
47	Influence of properties of various common bio-fuels on the combustion and emission characteristics of high-speed DI (direct injection) diesel engine: Vegetable oil, bio-diesel, ethanol, n-butanol, diethyl ether. Energy, 2014, 73, 354-366.	4.5	268
48	Studying combustion and cyclic irregularity of diethyl ether as supplement fuel in diesel engine. Fuel, 2013, 109, 325-335.	3.4	117
49	Combustion and emissions of cottonseed oil and its bio-diesel in blends with either n-butanol or diethyl ether in HSDI diesel engine. Fuel, 2013, 105, 603-613.	3.4	183
50	Exhaust emissions with ethanol or n-butanol diesel fuel blends during transient operation: A review. Renewable and Sustainable Energy Reviews, 2013, 17, 170-190.	8.2	245
51	Combustion noise radiation during the acceleration of a turbocharged diesel engine operating with biodiesel or n-butanol diesel fuel blends. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2012, 226, 971-986.	1.1	24
52	Exhaust emissions of diesel engines operating under transient conditions with biodiesel fuel blends. Progress in Energy and Combustion Science, 2012, 38, 691-715.	15.8	272
53	Characteristics of performance and emissions in high-speed direct injection diesel engine fueled with diethyl ether/diesel fuel blends. Energy, 2012, 43, 214-224.	4.5	208
54	Heat release analysis of combustion in heavy-duty turbocharged diesel engine operating on blends of diesel fuel with cottonseed or sunflower oils and their bio-diesel. Fuel, 2012, 96, 524-534.	3.4	94

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55	Comparative environmental behavior of bus engine operating on blends of diesel fuel with four straight vegetable oils of Greek origin: Sunflower, cottonseed, corn and olive. Fuel, 2011, 90, 3439-3446.	3.4	121
56	Study of turbocharged diesel engine operation, pollutant emissions and combustion noise radiation during starting with bio-diesel or n-butanol diesel fuel blends. Applied Energy, 2011, 88, 3905-3916.	5.1	201
57	Combustion heat release analysis of ethanol or n-butanol diesel fuel blends in heavy-duty DI diesel engine. Fuel, 2011, 90, 1855-1867.	3.4	288
58	Effects of butanolâ€“diesel fuel blends on the performance and emissions of a high-speed DI diesel engine. Energy Conversion and Management, 2010, 51, 1989-1997.	4.4	516
59	Emission characteristics of high speed, dual fuel, compression ignition engine operating in a wide range of natural gas/diesel fuel proportions. Fuel, 2010, 89, 1397-1406.	3.4	343
60	Investigation of the performance and emissions of bus engine operating on butanol/diesel fuel blends. Fuel, 2010, 89, 2781-2790.	3.4	275
61	Investigation of the combustion of neat cottonseed oil or its neat bio-diesel in a HSDI diesel engine by experimental heat release and statistical analyses. Fuel, 2010, 89, 3814-3826.	3.4	86
62	Investigating the emissions during acceleration of a turbocharged diesel engine operating with bio-diesel or n-butanol diesel fuel blends. Energy, 2010, 35, 5173-5184.	4.5	160
63	Evaluation of the effect of engine, load and turbocharger parameters on transient emissions of diesel engine. Energy Conversion and Management, 2009, 50, 2381-2393.	4.4	73
64	Exhaust emissions estimation during transient turbocharged diesel engine operation using a two-zone combustion model. International Journal of Vehicle Design, 2009, 49, 125.	0.1	20
65	Performance and emissions of bus engine using blends of diesel fuel with bio-diesel of sunflower or cottonseed oils derived from Greek feedstock. Fuel, 2008, 87, 147-157.	3.4	201
66	Experimental-stochastic investigation of the combustion cyclic variability in HSDI diesel engine using ethanolâ€“diesel fuel blends. Fuel, 2008, 87, 1478-1491.	3.4	86
67	Multi-zone modeling of combustion and emissions formation in DI diesel engine operating on ethanolâ€“diesel fuel blends. Energy Conversion and Management, 2008, 49, 625-643.	4.4	117
68	Effects of ethanolâ€“diesel fuel blends on the performance and exhaust emissions of heavy duty DI diesel engine. Energy Conversion and Management, 2008, 49, 3155-3162.	4.4	273
69	Study of the short-term cylinder wall temperature oscillations during transient operation of a turbo-charged diesel engine with various insulation schemes. International Journal of Engine Research, 2008, 9, 177-193.	1.4	40
70	Characteristics of the performance and emissions of a HSDI diesel engine running with cottonseed oil or its methyl ester and their blends with diesel fuel. International Journal of Vehicle Design, 2007, 45, 200.	0.1	22
71	Evaluation of various rich combustion strategies for HD-DI diesel engines. International Journal of Vehicle Design, 2007, 45, 171.	0.1	2
72	Study of the performance and emissions of a high-speed direct injection diesel engine operating on ethanol diesel fuel blends. International Journal of Alternative Propulsion, 2007, 1, 309.	0.9	24

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73	Development and application of multi-zone model for combustion and pollutants formation in direct injection diesel engine running with vegetable oil or its bio-diesel. Energy Conversion and Management, 2007, 48, 1881-1901.	4.4	118
74	Theoretical study of DI diesel engine performance and pollutant emissions using comparable air-side and fuel-side oxygen addition. Energy Conversion and Management, 2007, 48, 2962-2970.	4.4	46
75	Experimental heat release analysis and emissions of a HSDI diesel engine fueled with ethanolâ€“diesel fuel blends. Energy, 2007, 32, 1791-1808.	4.5	267
76	Study of combustion in a divided chamber turbocharged diesel engine by experimental heat release analysis in its chambers. Applied Thermal Engineering, 2006, 26, 1611-1620.	3.0	35
77	Multi-zone modeling of Diesel engine fuel spray development with vegetable oil, bio-diesel or Diesel fuels. Energy Conversion and Management, 2006, 47, 1550-1573.	4.4	118
78	Comparative performance and emissions study of a direct injection Diesel engine using blends of Diesel fuel with vegetable oils or bio-diesels of various origins. Energy Conversion and Management, 2006, 47, 3272-3287.	4.4	484
79	Validation and sensitivity analysis of a two zone Diesel engine model for combustion and emissions prediction. Energy Conversion and Management, 2004, 45, 1471-1495.	4.4	124
80	Cylinder wall temperature effects on the transient performance of a turbocharged Diesel engine. Energy Conversion and Management, 2004, 45, 2627-2638.	4.4	36
81	Investigation of the temperature oscillations in the cylinder walls of a diesel engine with special reference to the limited cooled case. International Journal of Energy Research, 2004, 28, 977-1002.	2.2	26
82	Experimental and theoretical study of the short term response temperature transients in the cylinder walls of a diesel engine at various operating conditions. Applied Thermal Engineering, 2004, 24, 679-702.	3.0	75
83	Comparative Environmental Evaluation of JP-8 and Diesel Fuels Burned in Direct Injection (DI) or Indirect Injection (IDI) Diesel Engines and in a Laboratory Furnace. Energy & Fuels, 2004, 18, 1302-1308.	2.5	20
84	Development and validation of a comprehensive two-zone model for combustion and emissions formation in a DI diesel engine. International Journal of Energy Research, 2003, 27, 1221-1249.	2.2	82
85	Combustion and Performance Characteristics of a DI Diesel Engine Operating from Low to High Natural Gas Supplement Ratios at Various Operating Conditions. , 0, , .		51
86	A Review on the Driving Forces, Challenges, and Applications of AC/DC Hybrid Smart Microgrids. , 0, , .		1