

# Varuvel Edwin Geo

## List of Publications by Year in descending order

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101  
papers

2,883  
citations

136740

32  
h-index

223531

46  
g-index

102  
all docs

102  
docs citations

102  
times ranked

1642  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental investigation of pomegranate oil methyl ester in ceramic coated engine at different operating condition in direct injection diesel engine with energy and exergy analysis. <i>Energy Conversion and Management</i> , 2020, 205, 112334.	4.4	118
2	Studies on dual fuel operation of rubber seed oil and its bio-diesel with hydrogen as the inducted fuel. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 6357-6367.	3.8	115
3	Insights on biological hydrogen production routes and potential microorganisms for high hydrogen yield. <i>Fuel</i> , 2021, 291, 120136.	3.4	105
4	Experimental analysis of biofuel as an alternative fuel for diesel engines. <i>Applied Energy</i> , 2012, 94, 224-231.	5.1	103
5	Comparative assessment of hexanol and decanol as oxygenated additives with calophyllum inophyllum biodiesel. <i>Energy</i> , 2019, 173, 494-510.	4.5	95
6	Effect of manifold injection of methanol/n-pentanol in safflower biodiesel fuelled CI engine. <i>Fuel</i> , 2020, 261, 116378.	3.4	83
7	Effect of ternary blends of bio-ethanol, diesel and castor oil on performance, emission and combustion in a CI engine. <i>Renewable Energy</i> , 2018, 122, 301-309.	4.3	78
8	Effect of hydrogen on compression-ignition (CI) engine fueled with vegetable oil/biodiesel from various feedstocks: A review. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 37648-37667.	3.8	70
9	Studies on improving the performance of rubber seed oil fuel for diesel engine with DEE port injection. <i>Fuel</i> , 2010, 89, 3559-3567.	3.4	64
10	Simultaneous reduction of NOx and smoke emissions with low viscous biofuel in low heat rejection engine using selective catalytic reduction technique. <i>Fuel</i> , 2019, 255, 115854.	3.4	60
11	Synergistic effect of hydrogen induction with biofuel obtained from winery waste (grapeseed oil) for CI engine application. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12473-12490.	3.8	59
12	Investigation of novel Pistacia khinjuk biodiesel in DI diesel engine with post combustion capture system. <i>Applied Thermal Engineering</i> , 2019, 159, 113969.	3.0	57
13	Assessment of cashew nut shell oil as an alternate fuel for CI (Compression ignition) engines. <i>Energy</i> , 2016, 101, 402-410.	4.5	54
14	Effects of biofuel from fish oil industrial residue " Diesel blends in diesel engine. <i>Energy</i> , 2012, 44, 955-963.	4.5	53
15	Forecasting of an ANN model for predicting behaviour of diesel engine energised by a combination of two low viscous biofuels. <i>Environmental Science and Pollution Research</i> , 2020, 27, 24702-24722.	2.7	52
16	A comparative analysis of different methods to improve the performance of cotton seed oil fuelled diesel engine. <i>Fuel</i> , 2012, 102, 372-378.	3.4	50
17	Single zone combustion modeling of biodiesel from wastes in diesel engine. <i>Fuel</i> , 2013, 106, 558-568.	3.4	50
18	Effect of higher and lower order alcohol blending with gasoline on performance, emission and combustion characteristics of SI engine. <i>Fuel</i> , 2019, 256, 115806.	3.4	48

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19	Mitigation of carbon footprints through a blend of biofuels and oxygenates, combined with post-combustion capture system in a single cylinder CI engine. <i>Renewable Energy</i> , 2019, 130, 1067-1081.	4.3	46
20	Effect of hydroxyl (OH) group position in alcohol on performance, emission and combustion characteristics of SI engine. <i>Energy Conversion and Management</i> , 2019, 189, 195-201.	4.4	46
21	Lipid content, biomass density, fatty acid as selection markers for evaluating the suitability of four fast growing cyanobacterial strains for biodiesel production. <i>Bioresource Technology</i> , 2021, 325, 124654.	4.8	45
22	Effect of lower and higher alcohol fuel synergies in biofuel blends and exhaust treatment system on emissions from CI engine. <i>Environmental Science and Pollution Research</i> , 2017, 24, 25103-25113.	2.7	44
23	Effects of minor addition of aliphatic (1-pentanol) and aromatic (benzyl alcohol) alcohols in Simarouba Glauca-diesel blend fuelled CI engine. <i>Fuel</i> , 2018, 234, 934-943.	3.4	43
24	Role of fuel additives on reduction of NOX emission from a diesel engine powered by camphor oil biofuel. <i>Environmental Science and Pollution Research</i> , 2018, 25, 15368-15377.	2.7	42
25	Studies on performance, combustion and emission of a single cylinder diesel engine fuelled with rubber seed oil and its biodiesel along with ethanol as injected fuel. <i>Fuel</i> , 2017, 209, 733-741.	3.4	41
26	Effect of electrochemical conversion of biofuels using ionization system on CO 2 emission mitigation in CI engine along with post-combustion system. <i>Fuel Processing Technology</i> , 2018, 173, 21-29.	3.7	41
27	Investigating the combined effect of thermal barrier coating and antioxidants on pine oil in DI diesel engine. <i>Environmental Science and Pollution Research</i> , 2019, 26, 15573-15599.	2.7	39
28	Experimental characterization of CI engine performance, combustion and emission parameters using various metal oxide nanoemulsion of grapeseed oil methyl ester. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 139, 3441-3456.	2.0	39
29	Assessment of liquid fuel (bio-oil) production from waste fish fat and utilization in diesel engine. <i>Applied Energy</i> , 2012, 100, 249-257.	5.1	36
30	Effect of electromagnet-based fuel-reforming system on high-viscous and low-viscous biofuel fueled in heavy-duty CI engine. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 138, 633-644.	2.0	36
31	Optimization of biodiesel production from animal fat residue in wastewater using response surface methodology. <i>Bioresource Technology</i> , 2013, 129, 315-320.	4.8	34
32	Simultaneous reduction of NO <sub>x</sub> "smoke" CO <sub>2</sub> emission in a biodiesel engine using low-carbon biofuel and exhaust after-treatment system. <i>Clean Technologies and Environmental Policy</i> , 2017, 19, 1271-1283.	2.1	33
33	Experimental analysis to reduce CO <sub>2</sub> and other emissions of CRDI CI engine using low viscous biofuels. <i>Fuel</i> , 2021, 283, 118829.	3.4	33
34	Effect of fuel inlet temperature on cottonseed oil "diesel mixture composition and performance in a DI diesel engine. <i>Journal of the Energy Institute</i> , 2017, 90, 563-573.	2.7	32
35	Impact of addition of two ether additives with high speed diesel- <i>Calophyllum Inophyllum</i> biodiesel blends on NO <sub>x</sub> reduction in CI engine. <i>Energy</i> , 2019, 185, 39-54.	4.5	32
36	Experimental study on NO <sub>x</sub> reduction in a grapeseed oil biodiesel-fueled CI engine using nanoemulsions and SCR retrofitment. <i>Environmental Science and Pollution Research</i> , 2020, 27, 29703-29716.	2.7	32

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37	Experimental investigation into the effect of magnetic fuel reforming on diesel combustion and emissions running on wheat germ and pine oil. <i>Fuel Processing Technology</i> , 2019, 186, 116-124.	3.7	31
38	Comparative analysis on the influence of antioxidants role with Pistacia khinjuk oil biodiesel to reduce emission in diesel engine. <i>Heat and Mass Transfer</i> , 2020, 56, 1275-1292.	1.2	31
39	Experimental investigations on the production and testing of azolla methyl esters from Azolla microphylla in a compression ignition engine. <i>Fuel</i> , 2021, 287, 119448.	3.4	31
40	Effect of EGR on emissions of a modified DI compression ignition engine energized with nanoemulsive blends of grapeseed biodiesel. <i>Fuel</i> , 2020, 267, 117317.	3.4	30
41	CoS <sub>2</sub> /MoS <sub>2</sub> decorated with nitrogen doped reduced graphene oxide and multiwalled carbon nanotube 3D hybrid as efficient electrocatalyst for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 13952-13959.	3.8	30
42	Experimental Investigations To Study the Characteristics of Rubber-Seed-Oil-Fueled Diesel Engine Supplemented with Diethyl Ether. <i>Energy &amp; Fuels</i> , 2009, 23, 533-538.	2.5	29
43	NO <sub>x</sub> -smoke trade-off characteristics of minor vegetable oil blends synergy with oxygenate in a commercial CI engine. <i>Environmental Science and Pollution Research</i> , 2018, 25, 35715-35724.	2.7	28
44	Comparative analysis of various methods to reduce CO <sub>2</sub> emission in a biodiesel fueled CI engine. <i>Fuel</i> , 2019, 253, 146-158.	3.4	28
45	Biofuel from leather waste fat to lower diesel engine emissions: Valuable solution for lowering fossil fuel usage and perception on waste management. <i>Chemical Engineering Research and Design</i> , 2022, 165, 374-379.	2.7	28
46	Study of engine performance, emission and combustion characteristics fueled with diesel-like fuel produced from waste engine oil and waste plastics. <i>Frontiers of Environmental Science and Engineering</i> , 2018, 12, 1.	3.3	27
47	Experimental Investigations to Improve the Performance of Rubber Seed Oil-Fueled Diesel Engine by Dual Fueling with Hydrogen. <i>International Journal of Green Energy</i> , 2009, 6, 343-358.	2.1	24
48	Evaluation of pine oil blending to improve the combustion of high viscous (castor oil) biofuel compared to castor oil biodiesel in a CI engine. <i>Heat and Mass Transfer</i> , 2019, 55, 1491-1501.	1.2	23
49	Experimental studies to improve the performance, emission and combustion characteristics of wheat germ oil fuelled CI engine using bioethanol injection in PCCI mode. <i>Fuel</i> , 2021, 285, 119196.	3.4	23
50	Comparative analysis of various techniques to improve the performance of novel wheat germ oil – an experimental study. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 5745-5756.	3.8	22
51	Biohythane production from organic waste: Recent advancements, technical bottlenecks and prospects. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 11201-11216.	3.8	22
52	Effect of hydrogen addition on performance, emission, and combustion characteristics of Deccan hemp oil and its methyl ester-fuelled CI engine. <i>Environmental Science and Pollution Research</i> , 2019, 26, 8685-8695.	2.7	21
53	Effect of geraniol on performance, emission and combustion characteristics of CI engine fuelled with gutter oil obtained from different sources. <i>Energy</i> , 2018, 157, 391-401.	4.5	20
54	NO <sub>x</sub> emission reduction using permanent/electromagnet-based fuel reforming system in a compression ignition engine fueled with pine oil. <i>Clean Technologies and Environmental Policy</i> , 2019, 21, 815-825.	2.1	19

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55	Effect of waste exhaust heat on hydrogen production and its utilization in CI engine. International Journal of Hydrogen Energy, 2020, 45, 5987-5996.	3.8	19
56	Liquid hydrocarbon fuels from fish oil industrial residues by catalytic cracking. International Journal of Energy Research, 2013, 37, 1036-1043.	2.2	18
57	Analysis of performance, emission, combustion and endoscopic visualization of micro-arc oxidation piston coated SI engine fuelled with low carbon biofuel blends. Fuel, 2021, 285, 119189.	3.4	18
58	Effect of solar photovoltaic and various photovoltaic air thermal systems on hydrogen generation by water electrolysis. International Journal of Hydrogen Energy, 2022, 47, 3211-3223.	3.8	18
59	Some studies on reducing carbon dioxide emission from a CRDI engine with hydrogen and a carbon capture system. International Journal of Hydrogen Energy, 2022, 47, 26746-26757.	3.8	17
60	Selective Non-catalytic Reduction (SNCR) of CO <sub>2</sub> and NO Emissions from a Single-Cylinder CI Engine Using Chemical Absorbents. Emission Control Science and Technology, 2017, 3, 233-242.	0.8	16
61	The combined effect of low viscous biofuel and EGR on NO-smoke tradeoff in a biodiesel engine—an experimental study. Environmental Science and Pollution Research, 2020, 27, 17468-17480.	2.7	16
62	A comparative analysis of different methods to improve the performance of rubber seed oil fuelled compression ignition engine. Fuel, 2020, 280, 118644.	3.4	16
63	Biodiesel Production Process, Optimization and Characterization of Azadirachta indica Biodiesel in a VCR Diesel Engine. Arabian Journal for Science and Engineering, 2019, 44, 10141-10154.	1.7	15
64	A mixed finite element and analytical method to predict load, mechanical power loss and improved efficiency in non-standard spur gear drives. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2017, 231, 1408-1424.	1.0	14
65	Recent advancement on thermal management strategies in PEM fuel cell stack: a technical assessment from the context of fuel cell electric vehicle application. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 3100-3125.	1.2	14
66	Experimental investigation to reduce CO <sub>2</sub> emission in a single cylinder CI engine using low carbon fuel blend with Karanja oil methyl ester and amine injection in the exhaust manifold. International Journal of Global Warming, 2017, 13, 278.	0.2	13
67	Characterization study on performance, combustion and emission of nano additive blends of grapeseed oil methyl ester fuelled CI engine with various piston bowl geometries. Heat and Mass Transfer, 2020, 56, 715-726.	1.2	13
68	An experimental study to analyze influence of porous media combustor on performance and emission characteristics of a DI diesel engine. Fuel, 2020, 280, 118645.	3.4	13
69	Effect of diglyme addition on performance and emission characteristics of hybrid minor vegetable oil blends (rubber seed and babassu oil) in a tractor engine—An experimental study. Biofuels, 0, , 1-9.	1.4	12
70	Effect of methanol fumigation on performance and emission characteristics in a waste cooking oil-fuelled single cylinder CI engine. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2019, 41, 1088-1096.	1.2	12
71	Combined effect of fuel-design and after-treatment system on reduction of local and global emissions from CI engine. Environmental Technology (United Kingdom), 2019, 40, 2802-2812.	1.2	12
72	Experimental analysis of Deccan hemp oil as a new energy feedstock for compression ignition engine. International Journal of Ambient Energy, 2019, 40, 634-644.	1.4	11

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73	Effect of the second generation and third generation biofuel blend on performance, emission and combustion characteristics of CI engine. <i>International Journal of Ambient Energy</i> , 2020, 41, 767-774.	1.4	11
74	Effect of oxygen enrichment on CI engine behavior fueled with vegetable oil: an experimental study. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 142, 1275-1286.	2.0	11
75	Experimental analysis of fuel from fish processing industry waste in a diesel engine. <i>Clean Technologies and Environmental Policy</i> , 2017, 19, 1099-1108.	2.1	10
76	Effect of calcite/activated carbon-based post-combustion CO <sub>2</sub> capture system in a biodiesel-fueled CI engine—An experimental study. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2019, 41, 1972-1982.	1.2	10
77	A Comparative Combustion Analysis of Rubber Seed Oil and its Methyl Ester in a D.I. Diesel Engine. , 0, , .		9
78	Experimental study of feasibility of orange peel oil as a partial replacement for gasoline fuel in SI engine with and without MAO coated piston. <i>Fuel</i> , 2022, 315, 123173.	3.4	9
79	Carbon dioxide (CO <sub>2</sub> ) capture and sequestration using biofuels and an exhaust catalytic carbon capture system in a single-cylinder CI engine: an experimental study. <i>Biofuels</i> , 2018, 9, 659-668.	1.4	8
80	Characterization of urea SCR using Taguchi technique and computational methods. <i>Environmental Science and Pollution Research</i> , 2021, 28, 11988-11999.	2.7	8
81	CO <sub>2</sub> reduction in a common rail direct injection engine using the combined effect of low carbon biofuels, hydrogen and a post combustion carbon capture system. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 0, , 1-20.	1.2	7
82	Effect of Free Fatty Acids and Short Chain Alcohols on Conversion of Waste Cooking Oil to Biodiesel. <i>International Journal of Green Energy</i> , 2014, 11, 441-453.	2.1	6
83	Effect of Port Premixed Liquefied Petroleum Gas on the Engine Characteristics. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2019, 141, .	1.4	6
84	The potential impact of unsaturation degree of the biodiesels obtained from beverage and food processing biomass streams on the performance, combustion and emission characteristics in a single-cylinder CI engine. <i>Environmental Science and Pollution Research</i> , 2019, 26, 5008-5019.	2.7	6
85	Study on the effect of 2-butoxyethanol as an additive on the combustion flame, performance and emission characteristics of a spark ignition engine. <i>Fuel</i> , 2021, 285, 119187.	3.4	6
86	Moving ahead from hydrogen to methanol economy: scope and challenges. <i>Clean Technologies and Environmental Policy</i> , 0, , 1.	2.1	5
87	Combustion analysis of higher order alcohols blended gasoline in a spark ignition engine using endoscopic visualization technique. <i>Fuel</i> , 2022, 322, 124134.	3.4	5
88	Predicting the different engine parameters of a rubber seed oil-ethanol dual fuel engine using artificial neural networks. <i>International Journal of Global Warming</i> , 2018, 16, 485.	0.2	4
89	Effect of start of main injection timing on performance, emission, and combustion characteristics of a VGT CI engine fueled with neem biodiesel. <i>Environmental Science and Pollution Research</i> , 2021, 28, 11942-11953.	2.7	4
90	Effect of amyl alcohol addition in a CI engine with <i>Prosopis juliflora</i> oil — an experimental study. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 0, , 1-15.	1.2	4

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91	Effect of low carbon biofuel on carbon emissions in biodiesel fueled CI engine. , 2021, , 333-368.		3
92	Optimization of compression ratio and injection timing of a diesel engine Fueled with oxygenated blends using fuzzy logic-based Taguchi method. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-21.	1.2	2
93	A study on the feasibility of bergamot peel oil-gasoline blends for spark-ignition engines. Journal of Cleaner Production, 2022, 339, 130515.	4.6	2
94	Combined effects of various strategies to curtail exhaust emissions in a biomass waste fueled CI engine coupled with SCR system. Engineering Science and Technology, an International Journal, 2022, 33, 101085.	2.0	2
95	Effect of intake port design modifications on diesel engine characteristics fuelled by pine oil-diesel blends. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-17.	1.2	2
96	Effect of Diglyme on Simultaneous Reduction of NO and Smoke in a Third-Generation Biofuel Derived from Waste in a Tractor Engine. Lecture Notes in Mechanical Engineering, 2020, , 655-667.	0.3	1
97	Combustion Analysis of Biofuel Derived from Waste Fish Fat. Green Energy and Technology, 2018, , 1311-1328.	0.4	0
98	Experimental Analysis of Biofuel and Undistilled Biofuel from Waste Fish Fat in Diesel Engine. Green Energy and Technology, 2018, , 1339-1359.	0.4	0
99	Computational analysis of turbulence enhancement in a compression ignition engine with modified inlet design. Environmental Science and Pollution Research, 2020, 28, 33866-33879.	2.7	0
100	Experimental evaluation of a compression ignition engine enacted with biofuel from beverage industry waste and higher grades of alcohol. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-16.	1.2	0
101	Environmentally friendly energy solutions. International Journal of Energy Research, 2021, 45, 17027-17027.	2.2	0