

Saravanan Balusamy

List of Publications by Year in descending order

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93
papers

3,654
citations

126907
33
h-index

144013
57
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93
all docs

93
docs citations

93
times ranked

2117
citing authors

#	ARTICLE	IF	CITATIONS
1	Scaling-up heterotrophic cultures of <i>C. Pyrenoidosa</i> microalgae for sustainable synthesis of low-density biodiesel mixtures and predict CI engine behavior at optimal proportions. <i>Environment, Development and Sustainability</i> , 2023, 25, 400-422.	5.0	2
2	Experimental analysis of higher alcoholâ€‘based ternary biodiesel blends in CI engine parameters through multivariate and desirability approaches. <i>Biomass Conversion and Biorefinery</i> , 2022, 12, 1525-1540.	4.6	15
3	Development of biofuel from <i>Nigella sativa</i> biomass and its suitability for energy application. <i>Biomass Conversion and Biorefinery</i> , 2022, 12, 705-721.	4.6	3
4	Experimental Investigation of Turbulent Flow/Flame Structure of Double Swirler Burner. <i>Green Energy and Technology</i> , 2022, , 223-240.	0.6	0
5	Biosynthesis of Amyl Alcohol From <i>Scenedesmus quadricauda</i> Microalgae for Light Commercial Vehicle Compression Ignition Engine Using Prediction Models. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2022, 144, .	2.3	3
6	State of art of valorising of diverse potential feedstocks for the production of alcohols and ethers: Current changes and perspectives. <i>Chemosphere</i> , 2022, 286, 131587.	8.2	15
7	Role of Buoyancy Induced Vortices in a Coupled-Mode of Oscillation in Laminar and Turbulent Jet Diffusion Flames. <i>Flow, Turbulence and Combustion</i> , 2022, 108, 1069-1087.	2.6	2
8	Turbulent Premixed LPG/air Flames Structures in Double Swirl Burner. , 2022, , .		0
9	Influence of alcohol and gaseous fuels on NOx reduction in IC engines. , 2022, , 347-385.		2
10	An Experimental Investigation of Evaporation of Ethanolâ€‘Water Droplets Laden with Alumina Nanoparticles on a Critically Inclined Heated Substrate. <i>Langmuir</i> , 2022, 38, 4722-4735.	3.5	15
11	Biofuel powered engine characteristics improvement through split injection parameter multivariate optimization with titanium based nano-particle additives. <i>Fuel</i> , 2022, 322, 124178.	6.4	2
12	Enhancement of engine characteristics through zirconium nano particle addition and split injection parameter optimization for the adaptability of eucalyptus biofuel in diesel engine. <i>Fuel</i> , 2022, 323, 124425.	6.4	3
13	Study on interactive effects of CRDi engine operating parameters through RSM based multi-objective optimization technique for biofuel application. <i>Energy</i> , 2022, 255, 124499.	8.8	9
14	Evaporation of pure and binary droplets on curved substrates. <i>International Journal of Heat and Mass Transfer</i> , 2022, 196, 123212.	4.8	3
15	Experimental Study of Liquid Spray Mode of Twin Fluid Atomizer Using Optical Diagnostic Tool. <i>Flow, Turbulence and Combustion</i> , 2021, 106, 261-289.	2.6	7
16	Experimental study of swirl-stabilized turbulent premixed and stratified LPG/air flames using optical diagnostics. <i>Experimental Thermal and Fluid Science</i> , 2021, 121, 110281.	2.7	12
17	Liquid fuel from waste tires: novel refining, advanced characterization and utilization in engines with ethyl levulinate as an additive. <i>RSC Advances</i> , 2021, 11, 9807-9826.	3.6	9
18	Effect of Reynolds Number on the Non-reacting Turbulent Flow Structures of a Double Swirler Burner. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 375-382.	0.4	0

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19	Effect of Strain Rate on Diffusion Flame Structure and Relationship in Scalar Fields. Lecture Notes in Mechanical Engineering, 2021, , 413-421.	0.4	0
20	A Review on the Evaporation Dynamics of Sessile Drops of Binary Mixtures: Challenges and Opportunities. Fluid Dynamics and Materials Processing, 2021, 17, 253-284.	0.7	11
21	Lifetime of sessile saliva droplets in the context of SARS-CoV-2. International Communications in Heat and Mass Transfer, 2021, 123, 105178.	5.6	10
22	Experimental study of buoyancy-induced instability in the DME and LPG jet diffusion flame. Fuel, 2021, 291, 120173.	6.4	8
23	Evaporation Dynamics of a Sessile Droplet of Binary Mixture Laden with Nanoparticles. Langmuir, 2021, 37, 6311-6321.	3.5	24
24	Enhancement of idling characteristics using multi-objective approach in light-duty diesel Vehicle fuelled with orange peel biofuel. Fuel, 2021, 291, 120222.	6.4	9
25	Fluid dynamics of respiratory droplets in the context of COVID-19: Airborne and surfaceborne transmissions. Physics of Fluids, 2021, 33, 081302.	4.0	46
26	Insight into the recent advances of microwave pretreatment technologies for the conversion of lignocellulosic biomass into sustainable biofuel. Chemosphere, 2021, 281, 130878.	8.2	129
27	Multi-Objective Optimization on Vibration and Noise Characteristics of Light Duty Biofuel Powered Engine at Idling Condition Using Response Surface Methodology. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	2.3	18
28	Topology of turbulent premixed and stratified LPG/air flames. Aerospace Science and Technology, 2021, , 107253.	4.8	2
29	Emission reduction in CI engine using biofuel reformulation strategies through nano additives for atmospheric air quality improvement. Renewable Energy, 2020, 147, 2295-2308.	8.9	33
30	Experimental study on the effect of cetane improver with turpentine oil on CI engine characteristics. Fuel, 2020, 262, 116551.	6.4	30
31	A compressive review on the effects of alcohols and nanoparticles as an oxygenated enhancer in compression ignition engine. Energy Conversion and Management, 2020, 203, 112244.	9.2	150
32	Experimental investigation on engine parameters variation in common rail direct injection engine fueled with biodiesel. Clean Technologies and Environmental Policy, 2020, 22, 459-479.	4.1	14
33	Comparative analysis on the influence of antioxidants role with Pistacia khinjuk oil biodiesel to reduce emission in diesel engine. Heat and Mass Transfer, 2020, 56, 1275-1292.	2.1	31
34	Decanol proportional effect prediction model as additive in palm biodiesel using ANN and RSM technique for diesel engine. Energy, 2020, 213, 119072.	8.8	32
35	Calibration of idling characteristics for Lemon Peel Oil using Central Composite Design in light commercial vehicle diesel engine. Energy Conversion and Management, 2020, 221, 113183.	9.2	33
36	Effects of using ternary gasoline-ethanol-LPO blend on PFI engine performance and emissions. Fuel, 2020, 281, 118664.	6.4	18

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37	Evaporation of sessile ethanol-water droplets on a critically inclined heated surface. International Journal of Multiphase Flow, 2020, 131, 103368.	3.4	30
38	Biodegradable and non-biodegradable fraction of municipal solid waste for multifaceted applications through a closed loop integrated refinery platform: Paving a path towards circular economy. Science of the Total Environment, 2020, 731, 138049.	8.0	78
39	Study on effect of diverse air inlet arrangement on thermal management of cylindrical lithium-ion cells. Heat Transfer, 2020, 49, 4626-4656.	3.0	6
40	Effect of viscosity on the volumetric oscillations of a non-equilibrium bubble in free-field and near a free-surface. Experimental Thermal and Fluid Science, 2020, 116, 110113.	2.7	13
41	An experimental and kinetic modeling study of gasoline/lemon peel oil blends for PFI engine. Fuel, 2020, 267, 117189.	6.4	22
42	Experimental study on engine parameters variation in CRDI engine fuelled with palm biodiesel. Fuel, 2020, 276, 118076.	6.4	13
43	INVESTIGATION OF LPG SOOTING DIFFUSION FLAME BY RAINBOW SCHLIEREN DEFLECTOMETRY. Journal of Flow Visualization and Image Processing, 2020, 27, 297-318.	0.5	2
44	Effects of n-octanol as a fuel blend with biodiesel on diesel engine characteristics. Fuel, 2019, 235, 363-373.	6.4	120
45	Simultaneous reduction of NOx and smoke emissions with low viscous biofuel in low heat rejection engine using selective catalytic reduction technique. Fuel, 2019, 255, 115854.	6.4	60
46	Investigation on the effect of butanol isomers with gasoline on spark ignition engine characteristics. , 2019, , 265-289.		4
47	Impact of addition of two ether additives with high speed diesel- Calophyllum Inophyllum biodiesel blends on NOx reduction in CI engine. Energy, 2019, 185, 39-54.	8.8	32
48	Comprehensive review of Calophyllum inophyllum as a feasible alternate energy for CI engine applications. Renewable and Sustainable Energy Reviews, 2019, 115, 109397.	16.4	17
49	Evaporation of ethanol-water sessile droplet of different compositions at an elevated substrate temperature. International Journal of Heat and Mass Transfer, 2019, 145, 118770.	4.8	65
50	NOx emission reduction using permanent/electromagnet-based fuel reforming system in a compression ignition engine fueled with pine oil. Clean Technologies and Environmental Policy, 2019, 21, 815-825.	4.1	19
51	Investigation of novel Pistacia khinjuk biodiesel in DI diesel engine with post combustion capture system. Applied Thermal Engineering, 2019, 159, 113969.	6.0	57
52	Lemon peel oil as an alternative fuel for GDI engines: A spray characterization perspective. Renewable Energy, 2019, 142, 249-263.	8.9	21
53	Effect of electromagnet-based fuel-reforming system on high-viscous and low-viscous biofuel fueled in heavy-duty CI engine. Journal of Thermal Analysis and Calorimetry, 2019, 138, 633-644.	3.6	36
54	Comparative assessment of hexanol and decanol as oxygenated additives with calophyllum inophyllum biodiesel. Energy, 2019, 173, 494-510.	8.8	95

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55	An experimental analysis on the effect of n-pentanol- Calophyllum Inophyllum Biodiesel binary blends in CI engine characteristic. Energy, 2019, 173, 290-305.	8.8	64
56	Study on isobutanol and Calophyllum inophyllum biodiesel as a partial replacement in CI engine applications. Fuel, 2019, 235, 984-994.	6.4	78
57	An investigation on CRDi engine characteristic using renewable orange-peel oil. Energy Conversion and Management, 2019, 180, 1026-1038.	9.2	45
58	Investigation on diethyl ether as an additive with Calophyllum Inophyllum biodiesel for CI engine application. Energy Conversion and Management, 2019, 179, 104-113.	9.2	129
59	Study on decanol and Calophyllum Inophyllum biodiesel as ternary blends in CI engine. Fuel, 2019, 239, 862-873.	6.4	82
60	Influence of Exhaust Gas Recirculation on Combustion and Emission Characteristics of Diesel Engine Fuelled with 100% Waste Cooking Oil Methyl Ester. Waste and Biomass Valorization, 2019, 10, 2001-2014.	3.4	35
61	Experimental and Numerical Analysis of Turbulent Swirl Flow Structure in Double Swirler Burner. , 2019, , .		1
62	Effect of next generation higher alcohols and Calophyllum inophyllum methyl ester blends in diesel engine. Journal of Cleaner Production, 2018, 180, 50-63.	9.3	91
63	An assessment on the effects of 1-pentanol and 1-butanol as additives with Calophyllum Inophyllum biodiesel. Energy Conversion and Management, 2018, 158, 70-80.	9.2	117
64	Performance analysis and emissions profile of cottonseed oil biodieselâ€“ethanol blends in a CI engine. Biofuels, 2018, 9, 711-718.	2.4	11
65	Mitigation of NOx and smoke emissions in a diesel engine using novel emulsified lemon peel oil biofuel. Environmental Science and Pollution Research, 2018, 25, 25098-25114.	5.3	59
66	A novel study on the effect lemon peel oil as a fuel in CRDI engine at various injection strategies. Energy Conversion and Management, 2018, 172, 517-528.	9.2	69
67	Extracting flame describing functions in the presence of self-excited thermoacoustic oscillations. Proceedings of the Combustion Institute, 2017, 36, 3851-3861.	3.9	26
68	Lemon peel oil â€“ A novel renewable alternative energy source for diesel engine. Energy Conversion and Management, 2017, 139, 110-121.	9.2	124
69	Influence on the effect of zinc oxide and titanium dioxide nanoparticles as an additive with Calophyllum inophyllum methyl ester in a CI engine. Energy Conversion and Management, 2017, 146, 8-19.	9.2	198
70	Study on the effect of exhaust gas-based fuel preheating device on ethanolâ€“diesel blends operation in a compression ignition engine. Clean Technologies and Environmental Policy, 2017, 19, 2379-2392.	4.1	20
71	Comparative analysis on the effect of zinc oxide and ethanox as additives with biodiesel in CI engine. Energy, 2017, 140, 352-364.	8.8	108
72	Experimental studies on the effect of metal oxide and antioxidant additives with Calophyllum Inophyllum Methyl ester in compression ignition engine. Journal of Cleaner Production, 2017, 166, 474-484.	9.3	82

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73	Influence of injection timing and exhaust gas recirculation of a Calophyllum inophyllum methyl ester fuelled CI engine. Fuel Processing Technology, 2017, 167, 18-30.	7.2	89
74	An assessment of calophyllum inophyllum biodiesel fuelled diesel engine characteristics using novel antioxidant additives. Energy Conversion and Management, 2017, 148, 935-943.	9.2	105
75	Estimation of position of electromechanical actuator valve using Kalman filter. , 2017, , .		2
76	Influence of fuel injection pressures on Calophyllum inophyllum methyl ester fuelled direct injection diesel engine. Energy Conversion and Management, 2016, 116, 165-173.	9.2	123
77	High spatial resolution laser cavity extinction and laser-induced incandescence in low-soot-producing flames. Applied Physics B: Lasers and Optics, 2015, 120, 469-487.	2.2	36
78	Laser diagnostics for characterization of sprays formed by a collapsing non-equilibrium bubble. Journal of Physics: Conference Series, 2015, 656, 012114.	0.4	1
79	Spatial Analysis on Forced Heat Release Response of Turbulent Stratified Flames. Journal of Engineering for Gas Turbines and Power, 2015, 137, .	1.1	11
80	Laser diagnostics of pulverized coal combustion in O ₂ /N ₂ and O ₂ /CO ₂ conditions: velocity and scalar field measurements. Experiments in Fluids, 2015, 56, 1.	2.4	43
81	LPG diesel dual fuel engine “ A critical review. AEJ - Alexandria Engineering Journal, 2015, 54, 105-126.	6.4	146
82	Nonlinear dynamics of a self-excited thermoacoustic system subjected to acoustic forcing. Proceedings of the Combustion Institute, 2015, 35, 3229-3236.	3.9	89
83	Large-eddy simulation of pulverized coal jet flame “ Effect of oxygen concentration on NO formation. Fuel, 2015, 142, 152-163.	6.4	79
84	Favre- and Reynolds-averaged velocity measurements: Interpreting PIV and LDA measurements in combustion. Proceedings of the Combustion Institute, 2015, 35, 3803-3811.	3.9	15
85	Proper Orthogonal Decomposition Analysis of Non-Swirling Turbulent Stratified and Premixed Methane/Air Flames. , 2014, , .		1
86	OxyCAP UK: Oxyfuel Combustion - academic Programme for the UK. Energy Procedia, 2014, 63, 504-510.	1.8	1
87	Laminar propagation of lean premixed flames ignited in stratified mixture. Combustion and Flame, 2014, 161, 427-437.	5.2	31
88	118 Large-Eddy Simulation of Pulverized Coal Swirl Jet Flame : Effect of Oxygen Concentration on NO _x generation. The Proceedings of Conference of Kansai Branch, 2014, 2014.89, _1-18_.	0.0	0
89	Flow field measurements of a series of turbulent premixed and stratified methane/air flames. Combustion and Flame, 2013, 160, 2017-2028.	5.2	65
90	Flow field measurements of pulverized coal combustion using optical diagnostic techniques. Experiments in Fluids, 2013, 54, 1.	2.4	36

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91	Comparison of Acoustic Velocity Perturbation Measurements Using PIV vs. Two-Microphone Technique. , 2013, , .		1
92	Direct measurement of local instantaneous laminar burning velocity by a new PIV algorithm. Experiments in Fluids, 2011, 50, 1109-1121.	2.4	46
93	Potential of amyl alcohol mixtures derived from<i>Scenedesmus quadricauda</i>microalgae biomass as third generation bioenergy for compression ignition engine applications using multivariate-desirability analysis. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0. , 1-19.	2.3	5