Brindhadevi Kathirvel

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5022338/publications.pdf

Version: 2024-02-01

102	3,724	134610	169272
papers	citations	34 h-index	56 g-index

102	102	102	3363
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biosynthesis of TiO2 nanoparticles by Acalypha indica; photocatalytic degradation of methylene blue. Applied Nanoscience (Switzerland), 2023, 13, 383-390.	1.6	10
2	Prediction of emission characteristics of a diesel engine using experimental and artificial neural networks. Applied Nanoscience (Switzerland), 2023, 13, 433-442.	1.6	17
3	Study of antimicrobial properties of Piper betel coated nanozirconium on cotton gauze. Applied Nanoscience (Switzerland), 2023, 13, 3301-3307.	1.6	4
4	Wound dressings coated with silver nanoparticles and essential oil of Labdanum. Applied Nanoscience (Switzerland), 2023, 13, 1345-1354.	1.6	4
5	Green and ecofriendly synthesis of cobalt oxide nanoparticles using Phoenix dactylifera L: antimicrobial and photocatalytic activity. Applied Nanoscience (Switzerland), 2023, 13, 1367-1375.	1.6	22
6	Synthesis of silver nanoparticles from wild and tissue cultured Ceropegia juncea plants and its antibacterial, anti-angiogenesis and cytotoxic activities. Applied Nanoscience (Switzerland), 2023, 13, 1619-1633.	1.6	3
7	Green synthesis of titanium dioxide nanoparticles using Laurus nobilis (bay leaf): antioxidant and antimicrobial activities. Applied Nanoscience (Switzerland), 2023, 13, 1477-1484.	1.6	12
8	Antioxidant, anti-inflammatory and anti-proliferative activities of green and yellow zucchini (Courgette). Applied Nanoscience (Switzerland), 2023, 13, 2251-2260.	1.6	6
9	Synthesis, characterization and photocatalytic activity of potassium Titanate nanocatalyst. Applied Nanoscience (Switzerland), 2023, 13, 2223-2232.	1.6	2
10	Enzymatic lipase-based methyl esterified Citrullus colocynthis L. biodiesel for improved combustion, performance and emission characteristics. Fuel, 2022, 307, 121899.	3.4	7
11	Enhancement of the combustion, performance and emission characteristics of spirulina microalgae biodiesel blends using nanoparticles. Fuel, 2022, 308, 121822.	3.4	39
12	Blending and emission characteristics of biogasoline produced using CaO/SBA-15 catalyst by cracking used cooking oil. Fuel, 2022, 307, 121861.	3.4	14
13	Assessment of hydrogen and nanoparticles blended biodiesel on the diesel engine performance and emission characteristics. Fuel, 2022, 307, 121780.	3.4	38
14	PM emissions - assessment of combustion energy transfer with Schizochytrium sp. algal biodiesel and blends in IC engine. Science of the Total Environment, 2022, 802, 149750.	3.9	15
15	Bio-based algal (Chlorella vulgaris) refinery on de-oiled algae biomass cake: A study on biopolymer and biodiesel production. Science of the Total Environment, 2022, 816, 151579.	3.9	18
16	Combined effect of CO2 concentration and low-cost urea repletion/starvation in Chlorella vulgaris for ameliorating growth metrics, total and non-polar lipid accumulation and fatty acid composition. Science of the Total Environment, 2022, 808, 151969.	3.9	15
17	Comparison of cracking activity of the core-shell composite MCM-41/HY & MCM-48/HY catalysts in the synthesis of organic liquid fuel from Mahua oil. Environmental Research, 2022, 205, 112474.	3.7	6
18	An assessment of agricultural waste cellulosic biofuel for improved combustion and emission characteristics. Science of the Total Environment, 2022, 813, 152418.	3.9	16

#	Article	IF	Citations
19	Role of soluble nano-catalyst and blends for improved combustion performance and reduced greenhouse gas emissions in internal combustion engines. Fuel, 2022, 312, 122826.	3.4	9
20	Experimental analysis of C.I. engine using pyrolyzed plastic oil blended with alumina nano additive. Fuel, 2022, 312, 122929.	3.4	11
21	Comparative study of pyrolysis and hydrothermal liquefaction of microalgal species: Analysis of product yields with reaction temperature. Fuel, 2022, 311, 121932.	3.4	29
22	Fabrication, characterization, anti-inflammatory, and anti-diabetic activity of silver nanoparticles synthesized from Azadirachta indica kernel aqueous extract. Environmental Research, 2022, 208, 112684.	3.7	32
23	Microwave assisted biodiesel production from chicken feather meal oil using Bio-Nano Calcium oxide derived from chicken egg shell. Environmental Research, 2022, 205, 112509.	3.7	14
24	Synthesis of mesoporous SiO2 nanoparticles and toxicity assessment in early life stages of zebrafish. Microporous and Mesoporous Materials, 2022, 330, 111573.	2.2	6
25	Effects of nanofluids on the photovoltaic thermal system for hydrogen production via electrolysis process. International Journal of Hydrogen Energy, 2022, 47, 37183-37191.	3.8	21
26	Vibration, acoustic and emission characteristics of the chlorella vulgaris microalgae oil in compression ignition engine to mitigate environmental pollution. Chemosphere, 2022, 293, 133475.	4.2	17
27	Fungi fabrication, characterization, and anticancer activity of silver nanoparticles using metals resistant Aspergillus niger. Environmental Research, 2022, 208, 112721.	3.7	13
28	Silver nanoparticles (AgNPs) fabricating potential of aqueous shoot extract of Aristolochia bracteolata and assessed their antioxidant efficiency. Environmental Research, 2022, 208, 112683.	3.7	5
29	A novel synthesis, analysis and evaluation of Musa coccinea based zero valent iron nanoparticles for antimicrobial and antioxidant. Environmental Research, 2022, 209, 112770.	3.7	14
30	Green synthesis of Zirconium nanoparticles using Punica granatum (pomegranate) peel extract and their antimicrobial and antioxidant potency. Environmental Research, 2022, 209, 112771.	3.7	41
31	Performance and emissions of Chlorella vulgaris with ruthenium oxide in CI engines. Fuel, 2022, 314, 122764.	3.4	3
32	Rubikâ€™s cube shaped organic template free hydrothermal synthesis and characterization of zeolite NaA for CO2 adsorption. Fuel, 2022, 317, 123492.	3.4	6
33	In vitro efficacy of green synthesized ZnO nanoparticles against biofilm and virulence of Serratia marcescens. Progress in Organic Coatings, 2022, 166, 106781.	1.9	4
34	A review on graphene / graphene oxide supported electrodes for microbial fuel cell applications: Challenges and prospects. Chemosphere, 2022, 296, 133983.	4.2	23
35	Performance, combustion and emission characteristics of the CI engine fueled with Botryococcus braunii microalgae with addition of TiO2 nanoparticle. Fuel, 2022, 317, 121898.	3.4	28
36	Comparative assessment of waste cooking, chicken waste and waste tire biodiesel blends on performance and emission characteristics. Fuel, 2022, 320, 123859.	3.4	24

#	Article	IF	Citations
37	Small scale photobioreactor, outdoor open pond cultivation of Chlorella sp. and harvesting at log and stationary growth phase towards lipids and methyl ester production. Fuel, 2022, 319, 123813.	3.4	10
38	Central composite design for the optimization of CaO and Fe2(SO4)3 facilitated transesterification of Scenedesmus sp. oil for fatty acid methyl ester production. Fuel, 2022, 321, 124096.	3.4	10
39	A study on biofuel produced from cracking of low density poly ethylenes using TiO2/AlSBA-15 nanocatalysts. Fuel, 2022, 323, 124299.	3.4	5
40	Invivo detection of triacylglycerols through Nile red staining and quantification of fatty acids in hyper lipid producer Nannochloropsis sp. cultured under adequate nitrogen and deficient nitrogen condition. Fuel, 2022, 322, 124179.	3.4	9
41	Prediction of the fuel spray characteristics in the combustion chamber with methane and TiO2 nanoparticles via numerical modelling. Fuel, 2022, 326, 124820.	3.4	9
42	Experimental investigation and numerical analysis of energy efficiency building using phase changing material coupled with reflective coating. International Journal of Energy Research, 2021, 45, 17279-17290.	2.2	7
43	A review on biochar production techniques and biochar based catalyst for biofuel production from algae. Fuel, 2021, 287, 119411.	3.4	132
44	Effect of reaction temperature on the conversion of algal biomass to bio-oil and biochar through pyrolysis and hydrothermal liquefaction. Fuel, 2021, 285, 119106.	3.4	111
45	Experimental analysis to reduce CO2 and other emissions of CRDI CI engine using low viscous biofuels. Fuel, 2021, 283, 118829.	3.4	33
46	Biohydrogen production using horizontal and vertical continuous stirred tank reactor- a numerical optimization. International Journal of Hydrogen Energy, 2021, 46, 11305-11312.	3.8	57
47	Impact of abiotic factors on biodiesel production by microalgae. Fuel, 2021, 284, 118962.	3.4	45
48	Mechanism and challenges behind algae as a wastewater treatment choice for bioenergy production and beyond. Fuel, 2021, 285, 119093.	3.4	69
49	Activation strategies for biochar to use as an efficient catalyst in various applications. Fuel, 2021, 285, 119205.	3.4	97
50	Ultrasound-assisted synthesis of mixed calcium magnesium oxide (CaMgO2) nanoflakes for photocatalytic degradation of methylene blue. Journal of Colloid and Interface Science, 2021, 584, 770-778.	5.0	48
51	Chaetomium globosum extract mediated gold nanoparticle synthesis and potent anti-inflammatory activity. Analytical Biochemistry, 2021, 612, 113970.	1.1	22
52	A realistic scenario on microalgae based biodiesel production: Third generation biofuel. Fuel, 2021, 284, 118965.	3.4	97
53	Performance and emission evaluation of dual fuel CI engine using preheated biogas-air mixture. Science of the Total Environment, 2021, 754, 142389.	3.9	30
54	Recent developments and strategies in genome engineering and integrated fermentation approaches for biobutanol production from microalgae. Fuel, 2021, 285, 119052.	3.4	49

#	Article	IF	Citations
55	Impact of cultivation conditions on the biomass and lipid in microalgae with an emphasis on biodiesel. Fuel, 2021, 284, 119058.	3.4	98
56	Characterization of polyurethane coating on high performance concrete reinforced with chemically treated Ananas erectifolius fiber. Progress in Organic Coatings, 2021, 150, 105977.	1.9	21
57	A review on the pyrolysis of algal biomass for biochar and bio-oil â€“ Bottlenecks and scope. Fuel, 2021, 283, 119190.	3.4	178
58	Synthesis, biological and environmental applications of hydroxyapatite and its composites with organic and inorganic coatings. Progress in Organic Coatings, 2021, 151, 106056.	1.9	43
59	Biohythane production from organic waste: Recent advancements, technical bottlenecks and prospects. International Journal of Hydrogen Energy, 2021, 46, 11201-11216.	3.8	22
60	Performance, noise and emission characteristics of DI engine using canola and Moringa oleifera biodiesel blends using soluble multiwalled carbon nanotubes. Fuel, 2021, 289, 119829.	3.4	37
61	Influence of dynamic position, fluid intake, hydration, and energy expenditure on sustainable mobility transport. Applied Acoustics, 2021, 175, 107809.	1.7	11
62	Impact on degradation of antibiotics from poultry litter using Autothermal Thermophilic Aerobic Digestion (ATAD). Saudi Journal of Biological Sciences, 2021, 28, 988-992.	1.8	6
63	Upgrading of bio-oil from thermochemical conversion of various biomass â€“ Mechanism, challenges and opportunities. Fuel, 2021, 287, 119329.	3.4	66
64	Examining the uniformity of the superhydrophobic coating on steel substrates using Kelvin probe force microscope. Progress in Organic Coatings, 2021, 150, 105973.	1.9	4
65	GA-SVR: a novel hybrid data-driven model to simulate vertical load capacity of driven piles. Engineering With Computers, 2021, 37, 823-831.	3.5	44
66	A study on biofuel produced by catalytic cracking of mustard and castor oil using porous HÎ² and AlMCM-41 catalysts. Science of the Total Environment, 2021, 757, 143781.	3.9	9
67	A state of the art review on the cultivation of algae for energy and other valuable products: Application, challenges, and opportunities. Renewable and Sustainable Energy Reviews, 2021, 138, 110649.	8.2	105
68	Pretreatment of second and third generation feedstock for enhanced biohythane production: Challenges, recent trends and perspectives. International Journal of Hydrogen Energy, 2021, 46, 11252-11268.	3.8	37
69	Lipid content, biomass density, fatty acid as selection markers for evaluating the suitability of four fast growing cyanobacterial strains for biodiesel production. Bioresource Technology, 2021, 325, 124654.	4.8	45
70	Insights on biological hydrogen production routes and potential microorganisms for high hydrogen yield. Fuel, 2021, 291, 120136.	3.4	105
71	A detailed scrutinize on panorama of catalysts in biodiesel synthesis. Science of the Total Environment, 2021, 777, 145683.	3.9	31
72	Experimental assessment of performance, combustion and emission characteristics of diesel engine fuelled by combined non-edible blends with nanoparticles. Fuel, 2021, 295, 120590.	3.4	37

#	Article	IF	Citations
73	Synergistic supplementation of organic carbon substrates for upgrading neutral lipids and fatty acids contents in microalga. Journal of Environmental Chemical Engineering, 2021, 9, 105482.	3.3	26
74	Synthesis of titanium/niobium oxide nanocomposite on top open bamboo like titanium dioxide nanotube for the catalytic degradation of organic pollutants. Journal of Environmental Chemical Engineering, 2021, 9, 105400.	3.3	7
75	Electronic waste generation, recycling and resource recovery: Technological perspectives and trends. Journal of Hazardous Materials, 2021, 416, 125664.	6.5	120
76	Assessment of hexavalent chromium (VI) biosorption competence of indigenous Aspergillus tubingensis AF3 isolated from bauxite mine tailing. Chemosphere, 2021, 282, 131055.	4.2	30
77	Organic and inorganic nanomaterial coatings for the prevention of microbial growth and infections on biotic and abiotic surfaces. Surface and Coatings Technology, 2021, 425, 127739.	2.2	22
78	Photocatalytic degradation of congo red dye using nickelâ€“titanium dioxide nanoflakes synthesized by Mukia madrasapatna leaf extract. Environmental Research, 2021, 202, 111647.	3.7	42
79	Egg shell catalyst and chicken waste biodiesel blends for improved performance, combustion and emission characteristics. Fuel, 2021, 306, 121633.	3.4	24
80	Clean approach for chromium removal in aqueous environments and role of nanomaterials in bioremediation: Present research and future perspective. Chemosphere, 2021, 284, 131368.	4.2	37
81	Numerical modelling of the premixed compression ignition engine for superior combustion and emission characteristics. Fuel, 2021, 306, 121540.	3.4	10
82	Performance, combustion and emission analysis of castor oil biodiesel blends enriched with nanoadditives and hydrogen fuel using CI engine. Fuel, 2021, 306, 121541.	3.4	41
83	ORELM: A Novel Machine Learning Approach for Prediction of Flyrock in Mine Blasting. Natural Resources Research, 2020, 29, 641-654.	2.2	63
84	Core/shell nanoparticles: Synthesis, investigation of antimicrobial potential and photocatalytic degradation of Rhodamine B. Journal of Photochemistry and Photobiology B: Biology, 2020, 202, 111729.	1.7	33
85	Green synthesis of cobalt-oxide nanoparticle using jumbo Muscadine (Vitis rotundifolia): Characterization and photo-catalytic activity of acid Blue-74. Journal of Photochemistry and Photobiology B: Biology, 2020, 211, 112011.	1.7	132
86	Role of thermal barrier coating and porous medium combustor for a diesel engine: An experimental study. Fuel, 2020, 280, 118597.	3.4	7
87	Zinc oxide nanoparticles (ZnONPs) -induced antioxidants and photocatalytic degradation activity from hybrid grape pulp extract (HGPE). Biocatalysis and Agricultural Biotechnology, 2020, 28, 101730.	1.5	46
88	A review on prospective production of biofuel from microalgae. Biotechnology Reports (Amsterdam,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.1	134
89	Facile synthesis and characterization of hydroxyapatite from fish bones: Photocatalytic degradation of industrial dyes (crystal violet and Congo red). Progress in Organic Coatings, 2020, 148, 105890.	1.9	57
90	Experimental insight into co-combustion characteristics of oxygenated biofuels in modified DICI engine. Fuel, 2020, 278, 118303.	3.4	15

#	Article	IF	Citations
91	Fabrication of naringenin functionalized-Ag/RGO nanocomposites for potential bactericidal effects. Journal of Materials Research and Technology, 2020, 9, 7013-7019.	2.6	27
92	COVID-19 and frequent use of hand sanitizers; human health and environmental hazards by exposure pathways. Science of the Total Environment, 2020, 742, 140561.	3.9	175
93	Natural organic and inorganicâ€“hydroxyapatite biopolymer composite for biomedical applications. Progress in Organic Coatings, 2020, 147, 105858.	1.9	58
94	Biogenic synthesis of gold nanoparticles using Commiphora wightii and their cytotoxic effects on breast cancer cell line (MCF-7). Process Biochemistry, 2020, 92, 269-276.	1.8	55
95	Optimizing the sterilization methods for initiation of the five different clones of the Eucalyptus hybrid species. Biocatalysis and Agricultural Biotechnology, 2019, 22, 101361.	1.5	9
96	Minicutting - A powerful tool for the clonal propagation of the selected species of the Eucalyptus hybrid clones based on their pulpwood studies. Biocatalysis and Agricultural Biotechnology, 2019, 22, 101357.	1.5	4
97	Efficacy of crude extracts of Clitoria ternatea for antibacterial activity against gram negative bacterium (Proteus mirabilis). Biocatalysis and Agricultural Biotechnology, 2019, 21, 101328.	1.5	13
98	Comparative analysis of various types of multipliers for effective low power. Microelectronic Engineering, 2019, 214, 28-37.	1.1	16
99	A survey: comparative study on internet of things and cloud of things. International Journal of Cloud Computing, 2019, 8, 237.	0.3	0
100	Optimised handoff mechanism using RFID tags for a communication-based train control system. International Journal of Cloud Computing, 2019, 8, 227.	0.3	0
101	Inorganic nanoparticles: A potential cancer therapy for human welfare. International Journal of Pharmaceutics, 2018, 539, 104-111.	2.6	226
102	Bacteriological assessment of drinking water from hand-pump-fitted borehole sources in Kola Tembien, Central Tigray, northern Ethiopia. Journal of Water Supply: Research and Technology - AQUA, 2018, 67, 790-799.	0.6	8