

N S Caetano

List of Publications by Year in descending order

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Version: 2024-02-01

101
papers

7,046
citations

257101

24
h-index

60497

81
g-index

120
all docs

120
docs citations

120
times ranked

7611
citing authors

#	ARTICLE	IF	CITATIONS
1	Microalgae for biodiesel production and other applications: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2010, 14, 217-232.	8.2	4,448
2	Analysis of Fossil Fuel Energy Consumption and Environmental Impacts in European Countries. <i>Energies</i> , 2019, 12, 964.	1.6	467
3	Parametric study of a brewery effluent treatment by microalgae <i>Scenedesmus obliquus</i> . <i>Bioresource Technology</i> , 2012, 107, 151-158.	4.8	175
4	Bio-refinery approach for spent coffee grounds valorization. <i>Bioresource Technology</i> , 2018, 247, 1077-1084.	4.8	153
5	Spent coffee grounds for biodiesel production and other applications. <i>Clean Technologies and Environmental Policy</i> , 2014, 16, 1423-1430.	2.1	100
6	Microalgae for biotechnological applications: Cultivation, harvesting and biomass processing. <i>Aquaculture</i> , 2020, 528, 735562.	1.7	93
7	Evaluation of Two Purification Methods of Biodiesel from Beef Tallow, Pork Lard, and Chicken Fat. <i>Energy & Fuels</i> , 2011, 25, 4756-4762.	2.5	83
8	Economic analysis of microalgae biodiesel production in a small-scale facility. <i>Energy Reports</i> , 2020, 6, 325-332.	2.5	67
9	Microalgae Biomolecules: Extraction, Separation and Purification Methods. <i>Processes</i> , 2021, 9, 10.	1.3	64
10	Towards sustainable wine: Comparison of two Portuguese wines. <i>Journal of Cleaner Production</i> , 2018, 183, 662-676.	4.6	60
11	Sustainability and economic evaluation of microalgae grown in brewery wastewater. <i>Bioresource Technology</i> , 2014, 168, 151-158.	4.8	50
12	Biotechnological potential of <i>Phaeodactylum tricornutum</i> for biorefinery processes. <i>Fuel</i> , 2020, 268, 117357.	3.4	50
13	New Trends in Energy Production and Utilization. <i>Energy Procedia</i> , 2017, 107, 7-14.	1.8	48
14	Sustainability analysis of biofuels through the supply chain using indicators. <i>Sustainable Energy Technologies and Assessments</i> , 2013, 3, 53-60.	1.7	47
15	LCA of constructing an industrial building: focus on embodied carbon and energy. <i>Energy Procedia</i> , 2018, 153, 420-425.	1.8	43
16	Valorisation of Spent Coffee Grounds: Production of Biodiesel via Enzymatic Catalysis with Ethanol and a Co-solvent. <i>Waste and Biomass Valorization</i> , 2017, 8, 1981-1994.	1.8	41
17	Biodiesel Production from Corn Oil via Enzymatic Catalysis with Ethanol. <i>Energy & Fuels</i> , 2012, 26, 3034-3041.	2.5	40
18	Comparison of different lipid extraction procedures applied to three microalgal species. <i>Energy Reports</i> , 2020, 6, 477-482.	2.5	32

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19	Environmental assessment of industrial production of microalgal biodiesel in central-south Chile. <i>Journal of Cleaner Production</i> , 2020, 266, 121756.	4.6	32
20	Water footprint of microalgae cultivation in photobioreactor. <i>Energy Procedia</i> , 2018, 153, 426-431.	1.8	31
21	Potential of <i>Phaeodactylum tricornutum</i> for Biodiesel Production under Natural Conditions in Chile. <i>Energies</i> , 2018, 11, 54.	1.6	30
22	Symbiotic Co-Culture of <i>Scenedesmus</i> sp. and <i>Azospirillum brasilense</i> on N-Deficient Media with Biomass Production for Biofuels. <i>Sustainability</i> , 2019, 11, 707.	1.6	30
23	Life cycle assessment of a vanadium flow battery. <i>Energy Reports</i> , 2020, 6, 95-101.	2.5	28
24	MTBE synthesis catalysed by acid ion exchange resins: Kinetic studies and modeling of multiphase batch reactors. <i>Chemical Engineering Science</i> , 1994, 49, 4589-4604.	1.9	27
25	Enhancing extraction and purification of phycocyanin from <i>Arthrospira</i> sp. with lower energy consumption. <i>Energy Reports</i> , 2020, 6, 312-318.	2.5	26
26	Analyzing <i>Phaeodactylum tricornutum</i> lipid profile for biodiesel production. <i>Energy Procedia</i> , 2017, 136, 369-373.	1.8	24
27	A life cycle inventory of microalgae-based biofuels production in an industrial plant concept. <i>Energy Reports</i> , 2020, 6, 397-402.	2.5	24
28	<i>Chlorella vulgaris</i> (SAG 211-12) biofilm formation capacity and proposal of a rotating flat plate photobioreactor for more sustainable biomass production. <i>Journal of Applied Phycology</i> , 2018, 30, 887-899.	1.5	24
29	Life cycle assessment tool of electricity generation in Portugal. <i>Environment, Development and Sustainability</i> , 2018, 20, 129-143.	2.7	23
30	Lipid and carbohydrate profile of a microalga isolated from wastewater. <i>Energy Procedia</i> , 2017, 136, 468-473.	1.8	22
31	Carbon footprint of microalgae production in photobioreactor. <i>Energy Procedia</i> , 2018, 153, 432-437.	1.8	22
32	Flocculation of <i>Arthrospira maxima</i> for improved harvesting. <i>Energy Reports</i> , 2020, 6, 423-428.	2.5	21
33	Economic and environmental analysis of animal fats acidity reduction by enzymatic esterification. <i>Journal of Cleaner Production</i> , 2018, 184, 481-489.	4.6	20
34	Application of domestic greywater for irrigating agricultural products: A brief study. <i>Energy Reports</i> , 2020, 6, 811-817.	2.5	20
35	Catalytic bi-reforming of methane for carbon dioxide ennoblement. <i>Energy Reports</i> , 2020, 6, 74-79.	2.5	20
36	Sugarcane Bagasse Saccharification by Enzymatic Hydrolysis Using Endocellulase and β -glucosidase Immobilized on Different Supports. <i>Catalysts</i> , 2021, 11, 340.	1.6	20

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37	Engineering education towards sustainability. Energy Procedia, 2017, 136, 414-417.	1.8	19
38	Life cycle assessment of a renewable energy generation system with a vanadium redox flow battery in a NZEB household. Energy Reports, 2020, 6, 87-94.	2.5	19
39	Study, design and analysis of sustainable alternatives to plastic takeaway cutlery and crockery. Energy Procedia, 2017, 136, 507-512.	1.8	17
40	Indoor Air Quality Improvement Using Nature-Based Solutions: Design Proposals to Greener Cities. International Journal of Environmental Research and Public Health, 2021, 18, 8472.	1.2	17
41	Acid pretreatment of sugarcane biomass to obtain hemicellulosic hydrolysis rich in fermentable sugar. Energy Reports, 2020, 6, 18-23.	2.5	17
42	Increasing energy efficiency with a smart farm – An economic evaluation. Energy Reports, 2022, 8, 454-461.	2.5	17
43	Life cycle assessment of bioethanol from corn stover from soil phytoremediation. Energy Reports, 2022, 8, 468-474.	2.5	16
44	Biofixation of CO ₂ emissions from natural gas combined cycle power plant. Energy Reports, 2020, 6, 140-146.	2.5	15
45	Microalgae processing for biodiesel production. , 2012, , 204-231.		14
46	Fish oil acidity reduction by enzymatic esterification. Energy Procedia, 2017, 136, 474-480.	1.8	14
47	Evaluation of Areca palm renewable options to replace disposable plastic containers using life cycle assessment methodology. Energy Reports, 2020, 6, 80-86.	2.5	13
48	Biochemical characterization of Phaeodactylum tricornutum for microalgae-based biorefinery. Energy Procedia, 2018, 153, 466-470.	1.8	12
49	Influence of cultivation conditions on the bioenergy potential and bio-compounds of Chlorella vulgaris. Energy Reports, 2020, 6, 378-384.	2.5	12
50	Valorization of Waste Frying Oils and Animal Fats for Biodiesel Production. , 2013, , 671-693.		12
51	Composition, cultivation and potential applications of Chlorella zofingiensis – A comprehensive review. Algal Research, 2021, 60, 102508.	2.4	11
52	Development of a new gas sensor for binary mixtures based on the permselectivity of polymeric membranes. Application to oxygen/nitrogen mixture. Journal of Membrane Science, 2004, 244, 35-44.	4.1	10
53	Hydrogen/methane and hydrogen/nitrogen sensor based on the permselectivity of polymeric membranes. Sensors and Actuators B: Chemical, 2005, 111-112, 150-159.	4.0	10
54	Phaeodactylum tricornutum derived biosilica purification for energy applications. Energy Procedia, 2018, 153, 279-283.	1.8	10

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55	Techno-economic assessment of a Synechocystis based biorefinery through process optimization. Energy Reports, 2020, 6, 509-514.	2.5	10
56	Syngas production by bi-reforming of methane on a bimetallic Ni-ZnO doped zeolite 13X. Fuel, 2022, 311, 122592.	3.4	10
57	Development of a new gas sensor for binary mixtures based on the permselectivity of polymeric membranes. Analytica Chimica Acta, 2004, 511, 215-221.	2.6	9
58	Editorial: Methane: A Bioresource for Fuel and Biomolecules. Frontiers in Environmental Science, 2020, 8, .	1.5	9
59	Life cycle energy of vehicles on lightweighting and alternative powertrain strategiesâ€”A review. Energy Reports, 2022, 8, 241-247.	2.5	8
60	Algae-based bioenergy production aligns with the Paris agreement goals as a carbon mitigation technology. Energy Reports, 2022, 8, 482-488.	2.5	8
61	Sustainability Considerations about Microalgae for Biodiesel Production. , 2013, , 745-757.		7
62	Fat extraction from fleshings - optimization of operating conditions. Energy Reports, 2020, 6, 381-390.	2.5	7
63	Syngas production by bi-reforming methane on an Niâ€”K-promoted catalyst using hydrotalcites and filamentous carbon as a support material. RSC Advances, 2020, 10, 21158-21173.	1.7	7
64	Acidity reduction of mammalian fat by enzymatic esterification. Energy Procedia, 2017, 136, 290-295.	1.8	6
65	Water consumption monitoring system for public bathing facilities. Energy Procedia, 2018, 153, 408-413.	1.8	6
66	Decentralized electricity storage evaluation in the Portuguese context. Electricity Journal, 2020, 33, 106822.	1.3	6
67	LCA for Membrane Processes. Green Chemistry and Sustainable Technology, 2017, , 23-66.	0.4	5
68	Sustainability evaluation of a Portuguese â€œterroirâ€•wine. BIO Web of Conferences, 2019, 12, 03017.	0.1	5
69	Ground-source energy systems for building heating and cooling â€” A case study. Energy Reports, 2020, 6, 353-357.	2.5	5
70	Learning sustainability and social compromise skills. , 2015, , .		4
71	Development of a decentralized monitoring system of domestic water consumption. Energy Reports, 2020, 6, 856-861.	2.5	4
72	Valorization of Agro-Industrial Residues: Bioprocessing of Animal Fats to Reduce Their Acidity. Sustainability, 2021, 13, 10837.	1.6	4

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73	Recyclable waste collectionâ€”Increasing ecopoint filling capacity to reduce energy for transportation. Energy Reports, 2022, 8, 430-436.	2.5	4
74	Macro modeling of electricity price towards SDG7. Energy Reports, 2022, 8, 614-622.	2.5	4
75	Design and Simulation of Eco-Efficient Biodiesel Manufacture. Computer Aided Chemical Engineering, 2011, 29, 1235-1240.	0.3	3
76	Sustainability in Buildings â€” A Teaching Approach. Energy Procedia, 2017, 107, 15-22.	1.8	3
77	Acidity reduction in animal fats by enzymatic esterification: economic and environmental analysis. Energy Procedia, 2017, 136, 308-315.	1.8	3
78	Sustainable engineering labs - A Portuguese perspective. Energy Procedia, 2018, 153, 455-460.	1.8	3
79	ICEER2019@Aveiro: Energy and environment - challenges towards circular economy. Energy Reports, 2020, 6, 1-14.	2.5	3
80	Buildings Sustainability: The HVAC Contribution. Journal of Clean Energy Technologies, 2015, 4, 375-379.	0.1	3
81	Teaching sustainable development in higher education - Changing attitudes in a digital era. , 2021, , .		3
82	Life cycle energy and carbon analysis of a road-safety barrier produced using recycled tire rubber. Energy Reports, 2022, 8, 270-276.	2.5	3
83	Teaching sustainability in a multicultural environment. , 2015, , .		2
84	Learning sustainability by developing a solar dryer for microalgae retrieval. Journal of Technology and Science Education, 2016, 5, .	0.5	2
85	Educating global engineers with EPS@ISEP: The â€œpet trackerâ€”project experience. , 2016, , .		2
86	Advances on Sustainable Development in Higher Education. , 2018, , .		2
87	Sustainable development in higher education. , 2019, , .		2
88	Biodiesel Production Systems: Operation, Process Control and Troubleshooting. Biofuel and Biorefinery Technologies, 2019, , 27-56.	0.1	2
89	Fish Oil Enzymatic Esterification for Acidity Reduction. Waste and Biomass Valorization, 2020, 11, 1131-1141.	1.8	2
90	Teaching sustainable development in higher education. , 2020, , .		2

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91	Editorial: Biomass, Bioenergy and Biofuels for Circular Bioeconomy. <i>Frontiers in Energy Research</i> , 2022, 10, .	1.2	2
92	Temperature compensation of a gas sensor for binary mixtures based on the permselectivity of polymeric membranes. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 1-4.	4.0	1
93	Design and development of a solar dryer for microalgae retrieval an EPS@ISEP 2013 spring project. , 2015, , .		1
94	A multicultural approach to teach sustainability. <i>Journal of Technology and Science Education</i> , 2016, 5, .	0.5	1
95	A focus on teaching and learning the sustainability and social compromise skills. <i>Journal of Technology and Science Education</i> , 2016, 5, .	0.5	1
96	ICEER2018@Prague: researching towards a sustainable future. <i>Energy Procedia</i> , 2018, 153, 1-9.	1.8	1
97	Higher Education for Sustainable Development. , 2020, , .		1
98	Conceiving modern engineers within the framework of the sustainability action plan (PASUS) of ISEP: Sustainability matters!. , 2013, , .		0
99	ZELab. , 2018, , .		0
100	Smart Object for 3D Interaction. <i>Lecture Notes in Electrical Engineering</i> , 2014, , 49-61.	0.3	0
101	ICEER2020!Driving Energy and Environment in 2020 Towards A Sustainable Future. <i>Energy Reports</i> , 2020, 6, 1-10.	2.5	0