N S Caetano

List of Publications by Year
in descending order

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101 papers	7,046 citations	257357 24 h-index	60583 81 g-index
120 all docs	120 docs citations	120 times ranked	7611 citing authors

#	Article	IF	Citations
1	Syngas production by bi-reforming of methane on a bimetallic Ni-ZnO doped zeolite 13X. Fuel, 2022, 311, 122592.	3.4	10
2	Life cycle energy of vehicles on lightweighting and alternative powertrain strategiesâ€"A review. Energy Reports, 2022, 8, 241-247.	2.5	8
3	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
4	Increasing energy efficiency with a smart farmâ€"An economic evaluation. Energy Reports, 2022, 8, 454-461.	2.5	17
5	Life cycle assessment of bioethanol from corn stover from soil phytoremediation. Energy Reports, 2022, 8, 468-474.	2.5	16
6	Recyclable waste collectionâ€"Increasing ecopoint filling capacity to reduce energy for transportation. Energy Reports, 2022, 8, 430-436.	2.5	4
7	Algae-based bioenergy production aligns with the Paris agreement goals as a carbon mitigation technology. Energy Reports, 2022, 8, 482-488.	2.5	8
8	Editorial: Biomass, Bioenergy and Biofuels for Circular Bioeconomy. Frontiers in Energy Research, 2022, 10, .	1.2	2
9	Macro modeling of electricity price towards SDG7. Energy Reports, 2022, 8, 614-622.	2.5	4
10	Sugarcane Bagasse Saccharification by Enzymatic Hydrolysis Using Endocellulase and Î²-glucosidase Immobilized on Different Supports. Catalysts, 2021, 11, 340.	1.6	20
11	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
12	Microalgae Biomolecules: Extraction, Separation and Purification Methods. Processes, 2021, 9, 10.	1.3	64
13	Valorization of Agro-Industrial Residues: Bioprocessing of Animal Fats to Reduce Their Acidity. Sustainability, 2021, 13, 10837.	1.6	4
14	Composition, cultivation and potential applications of Chlorella zofingiensis â€“ A comprehensive review. Algal Research, 2021, 60, 102508.	2.4	11
15	Teaching sustainable development in higher education - Changing attitudes in a digital era. , 2021, , .		3
16	Fish Oil Enzymatic Esterification for Acidity Reduction. Waste and Biomass Valorization, 2020, 11, 1131-1141.	1.8	2
17	Flocculation of Arthrospira maxima for improved harvesting. Energy Reports, 2020, 6, 423-428.	2.5	21
18	Ground-source energy systems for building heating and cooling â€" A case study. Energy Reports, 2020, 6, 353-357.	2.5	5

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19	Influence of cultivation conditions on the bioenergy potential and bio-compounds of Chlorella vulgaris. Energy Reports, 2020, 6, 378-384.	2.5	12
20	Techno-economic assessment of a Synechocystis based biorefinery through process optimization. Energy Reports, 2020, 6, 509-514.	2.5	10
21	Application of domestic greywater for irrigating agricultural products: A brief study. Energy Reports, 2020, 6, 811-817.	2.5	20
22	Decentralized electricity storage evaluation in the Portuguese context. Electricity Journal, 2020, 33, 106822.	1.3	6
23	Economic analysis of microalgae biodiesel production in a small-scale facility. Energy Reports, 2020, 6, 325-332.	2.5	67
24	Fat extraction from fleshings - optimization of operating conditions. Energy Reports, 2020, 6, 381-390.	2.5	7
25	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
26	Editorial: Methane: A Bioresource for Fuel and Biomolecules. Frontiers in Environmental Science, 2020, 8, .	1.5	9
27	Microalgae for biotechnological applications: Cultivation, harvesting and biomass processing. Aquaculture, 2020, 528, 735562.	1.7	93
28	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
29	Comparison of different lipid extraction procedures applied to three microalgal species. Energy Reports, 2020, 6, 477-482.	2.5	32
30	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
31	Catalytic bi-reforming of methane for carbon dioxide ennoblement. Energy Reports, 2020, 6, 74-79.	2.5	20
32	A life cycle inventory of microalgae-based biofuels production in an industrial plant concept. Energy Reports, 2020, 6, 397-402.	2.5	24
33	Biotechnological potential of Phaeodactylum tricornutum for biorefinery processes. Fuel, 2020, 268, 117357.	3.4	50
34	ICEER2019@Aveiro: Energy and environment - challenges towards circular economy. Energy Reports, 2020, 6, 1-14.	2.5	3
35	Life cycle assessment of a vanadium flow battery. Energy Reports, 2020, 6, 95-101.	2.5	28
36	Environmental assessment of industrial production of microalgal biodiesel in central-south Chile. Journal of Cleaner Production, 2020, 266, 121756.	4.6	32

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37	Biofixation of CO2 emissions from natural gas combined cycle power plant. Energy Reports, 2020, 6, 140-146.	2.5	15
38	Development of a decentralized monitoring system of domestic water consumption. Energy Reports, 2020, 6, 856-861.	2.5	4
39	Acid pretreatment of sugarcane biomass to obtain hemicellulosic hydrolisate rich in fermentable sugar. Energy Reports, 2020, 6, 18-23.	2.5	17
40	Enhancing extraction and purification of phycocyanin from Arthrospira sp. with lower energy consumption. Energy Reports, 2020, 6, 312-318.	2.5	26
41	ICEER2020â€"Driving Energy and Environment in 2020 Towards A Sustainable Future. Energy Reports, 2020, 6, 1-10.	2.5	0
42	Higher Education for Sustainable Development. , 2020, , .		1
43	Teaching sustainable development in higher education. , 2020, , .		2
44	Sustainable development in higher education. , 2019, , .		2
45	Symbiotic Co-Culture of Scenedesmus sp. and Azospirillum brasilense on N-Deficient Media with Biomass Production for Biofuels. Sustainability, 2019, 11, 707.	1.6	30
46	Sustainability evaluation of a Portuguese â€œterroirâ€•wine. BIO Web of Conferences, 2019, 12, 03017.	0.1	5
47	Analysis of Fossil Fuel Energy Consumption and Environmental Impacts in European Countries. Energies, 2019, 12, 964.	1.6	467
48	Biodiesel Production Systems: Operation, Process Control and Troubleshooting. Biofuel and Biorefinery Technologies, 2019, , 27-56.	0.1	2
49	Economic and environmental analysis of animal fats acidity reduction by enzymatic esterification. Journal of Cleaner Production, 2018, 184, 481-489.	4.6	20
50	Towards sustainable wine: Comparison of two Portuguese wines. Journal of Cleaner Production, 2018, 183, 662-676.	4.6	60
51	Bio-refinery approach for spent coffee grounds valorization. Bioresource Technology, 2018, 247, 1077-1084.	4.8	153
52	ZELab. , 2018, , .		0
53	ICEER2018@Prague: researching towards a sustainable future. Energy Procedia, 2018, 153, 1-9.	1.8	1
54	Water consumption monitoring system for public bathing facilities. Energy Procedia, 2018, 153, 408-413.	1.8	6

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55	LCA of constructing an industrial building: focus on embodied carbon and energy. Energy Procedia, 2018, 153, 420-425.	1.8	43
56	Phaeodactylum tricornutum derived biosilica purification for energy applications. Energy Procedia, 2018, 153, 279-283.	1.8	10
57	Carbon footprint of microalgae production in photobioreactor. Energy Procedia, 2018, 153, 432-437.	1.8	22
58	Sustainable engineering labs - A Portuguese perspective. Energy Procedia, 2018, 153, 455-460.	1.8	3
59	Water footprint of microalgae cultivation in photobioreactor. Energy Procedia, 2018, 153, 426-431.	1.8	31
60	Biochemical characterization of Phaeodactylum tricornutum for microalgae-based biorefinery. Energy Procedia, 2018, 153, 466-470.	1.8	12
61	Advances on Sustainable Development in Higher Education. , 2018, , .		2
62	Life cycle assessment tool of electricity generation in Portugal. Environment, Development and Sustainability, 2018, 20, 129-143.	2.7	23
63	Potential of Phaeodactylum tricornutum for Biodiesel Production under Natural Conditions in Chile. Energies, 2018, 11, 54.	1.6	30
64	Chlorella vulgaris (SAG 211-12) biofilm formation capacity and proposal of a rotating flat plate photobioreactor for more sustainable biomass production. Journal of Applied Phycology, 2018, 30, 887-899.	1.5	24
65	New Trends in Energy Production and Utilization. Energy Procedia, 2017, 107, 7-14.	1.8	48
66	Sustainability in Buildings â€“ A Teaching Approach. Energy Procedia, 2017, 107, 15-22.	1.8	3
67	Valorisation of Spent Coffee Grounds: Production of Biodiesel via Enzymatic Catalysis with Ethanol and a Co-solvent. Waste and Biomass Valorization, 2017, 8, 1981-1994.	1.8	41
68	Analyzing Phaeodactylum tricornutum lipid profile for biodiesel production. Energy Procedia, 2017, 136, 369-373.	1.8	24
69	LCA for Membrane Processes. Green Chemistry and Sustainable Technology, 2017, , 23-66.	0.4	5
70	Acidity reduction of mammalian fat by enzymatic esterification. Energy Procedia, 2017, 136, 290-295.	1.8	6
71	Acidity reduction in animal fats by enzymatic esterification: economic and environmental analysis. Energy Procedia, 2017, 136, 308-315.	1.8	3
72	Engineering education towards sustainability. Energy Procedia, 2017, 136, 414-417.	1.8	19

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73	Study, design and analysis of sustainable alternatives to plastic takeaway cutlery and crockery. Energy Procedia, 2017, 136, 507-512.	1.8	17
74	Lipid and carbohydrate profile of a microalga isolated from wastewater. Energy Procedia, 2017, 136, 468-473.	1.8	22
75	Fish oil acidity reduction by enzymatic esterification. Energy Procedia, 2017, 136, 474-480.	1.8	14
76	A multicultural approach to teach sustainability. Journal of Technology and Science Education, 2016, 5, .	0.5	1
77	Learning sustainability by developing a solar dryer for microalgae retrieval. Journal of Technology and Science Education, 2016, 5, .	0.5	2
78	A focus on teaching and learning the sustainability and social compromise skills. Journal of Technology and Science Education, 2016, 5, .	0.5	1
79	Educating global engineers with EPS@ISEP: The â€œpet trackerâ€•project experience. , 2016, , .		2
80	Teaching sustainability in a multicultural environment. , 2015, , .		2
81	Learning sustainability and social compromise skills. , 2015, , .		4
82	Design and development of a solar dryer for microalgae retrieval an EPS@ISEP 2013 spring project. , 2015, , .		1
83	Buildings Sustainability: The HVAC Contribution. Journal of Clean Energy Technologies, 2015, 4, 375-379.	0.1	3
84	Spent coffee grounds for biodiesel production and other applications. Clean Technologies and Environmental Policy, 2014, 16, 1423-1430.	2.1	100
85	Sustainability and economic evaluation of microalgae grown in brewery wastewater. Bioresource Technology, 2014, 168, 151-158.	4.8	50
86	Smart Object for 3D Interaction. Lecture Notes in Electrical Engineering, 2014, , 49-61.	0.3	0
87	Sustainability analysis of biofuels through the supply chain using indicators. Sustainable Energy Technologies and Assessments, 2013, 3, 53-60.	1.7	47
88	Conceiving modern engineers within the framework of the sustainability action plan (PASUS) of ISEP: Sustainability matters!. , 2013, , .		0
89	Sustainability Considerations about Microalgae for Biodiesel Production. , 2013, , 745-757.		7
90	Valorization of Waste Frying Oils and Animal Fats for Biodiesel Production. , 2013, , 671-693.		12

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91	Microalgae processing for biodiesel production. , 2012, , 204-231.		14
92	Biodiesel Production from Corn Oil via Enzymatic Catalysis with Ethanol. Energy & Fuels, 2012, 26, 3034-3041.	2.5	40
93	Parametric study of a brewery effluent treatment by microalgae Scenedesmus obliquus. Bioresource Technology, 2012, 107, 151-158.	4.8	175
94	Evaluation of Two Purification Methods of Biodiesel from Beef Tallow, Pork Lard, and Chicken Fat. Energy & Fuels, 2011, 25, 4756-4762.	2.5	83
95	Design and Simulation of Eco-Efficient Biodiesel Manufacture. Computer Aided Chemical Engineering, 2011, 29, 1235-1240.	0.3	3
96	Microalgae for biodiesel production and other applications: A review. Renewable and Sustainable Energy Reviews, 2010, 14, 217-232.	8.2	4,448
97	Temperature compensation of a gas sensor for binary mixtures based on the permselectivity of polymeric membranes. Sensors and Actuators B: Chemical, 2007, 123, 1-4.	4.0	1
98	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
99	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
100	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
101	MTBE synthesis catalysed by acid ion exchange resins: Kinetic studies and modeling of multiphase batch reactors. Chemical Engineering Science, 1994, 49, 4589-4604.	1.9	27