Teresa M Mata

List of Publications by Year
in descending order

85 papers	7,038 citations	201575 27 h-index	69214 77 g-index
129 all docs	129 docs citations	129 times ranked	7583 citing authors

#	Article	IF	Citations
1	Microalgae for biodiesel production and other applications: A review. Renewable and Sustainable Energy Reviews, 2010, 14, 217-232.	8.2	4,448
2	Parametric study of a brewery effluent treatment by microalgae Scenedesmus obliquus. Bioresource Technology, 2012, 107, 151-158.	4.8	175
3	Simulation and life cycle assessment of process design alternatives for biodiesel production from waste vegetable oils. Journal of Cleaner Production, 2010, 18, 1251-1259.	4.6	161
4	Bio-refinery approach for spent coffee grounds valorization. Bioresource Technology, 2018, 247, 1077-1084.	4.8	153
5	Framework for Sustainability Metrics. Industrial & Engineering Chemistry Research, 2007, 46, 2962-2973.	1.8	129
6	Spent coffee grounds for biodiesel production and other applications. Clean Technologies and Environmental Policy, 2014, 16, 1423-1430.	2.1	100
7	Microalgae for biotechnological applications: Cultivation, harvesting and biomass processing. Aquaculture, 2020, 528, 735562.	1.7	93
8	Evaluation of Two Purification Methods of Biodiesel from Beef Tallow, Pork Lard, and Chicken Fat. Energy & Fuels, 2011, 25, 4756-4762.	2.5	83
9	Sustainability considerations of biodiesel based on supply chain analysis. Clean Technologies and Environmental Policy, 2011, 13, 655-671.	2.1	72
10	Economic analysis of microalgae biodiesel production in a small-scale facility. Energy Reports, 2020, 6, 325-332.	2.5	67
11	Microalgae Biomolecules: Extraction, Separation and Purification Methods. Processes, 2021, 9, 10.	1.3	64
12	Towards sustainable wine: Comparison of two Portuguese wines. Journal of Cleaner Production, 2018, 183, 662-676.	4.6	60
13	Education for sustainability: challenges and trends. Clean Technologies and Environmental Policy, 2006, 8, 31-37.	2.1	53
14	Carbon footprint of the insulation cork board. Journal of Cleaner Production, 2017, 143, 925-932.	4.6	52
15	Sustainability and economic evaluation of microalgae grown in brewery wastewater. Bioresource Technology, 2014, 168, 151-158.	4.8	50
16	Biotechnological potential of Phaeodactylum tricornutum for biorefinery processes. Fuel, 2020, 268, 117357.	3.4	50
17	New Trends in Energy Production and Utilization. Energy Procedia, 2017, 107, 7-14.	1.8	48
18	Sustainability analysis of biofuels through the supply chain using indicators. Sustainable Energy Technologies and Assessments, 2013, 3, 53-60.	1.7	47

#	Article	IF	Citations
19	Life cycle assessment of different reuse percentages for glass beer bottles. International Journal of Life Cycle Assessment, 2001, 6, 307-319.	2.2	43
20	LCA of constructing an industrial building: focus on embodied carbon and energy. Energy Procedia, 2018, 153, 420-425.	1.8	43
21	Prospects of using microalgae for biofuels production: Results of a Delphi study. Renewable Energy, 2015, 75, 799-804.	4.3	41
22	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
23	Biodiesel Production from Corn Oil via Enzymatic Catalysis with Ethanol. Energy & Fuels, 2012, 26, 3034-3041.	2.5	40
24	Comparison of different lipid extraction procedures applied to three microalgal species. Energy Reports, 2020, 6, 477-482.	2.5	32
25	Environmental assessment of industrial production of microalgal biodiesel in central-south Chile. Journal of Cleaner Production, 2020, 266, 121756.	4.6	32
26	Water footprint of microalgae cultivation in photobioreactor. Energy Procedia, 2018, 153, 426-431.	1.8	31
27	Potential of Phaeodactylum tricornutum for Biodiesel Production under Natural Conditions in Chile. Energies, 2018, 11, 54.	1.6	30
28	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
29	Life cycle assessment of a vanadium flow battery. Energy Reports, 2020, 6, 95-101.	2.5	28
30	Enhancing extraction and purification of phycocyanin from Arthrospira sp. with lower energy consumption. Energy Reports, 2020, 6, 312-318.	2.5	26
31	A life cycle inventory of microalgae-based biofuels production in an industrial plant concept. Energy Reports, 2020, 6, 397-402.	2.5	24
32	Life cycle assessment tool of electricity generation in Portugal. Environment, Development and Sustainability, 2018, 20, 129-143.	2.7	23
33	Evaluating the environmental friendliness, economics and energy efficiency of chemical processes: heat integration. Clean Technologies and Environmental Policy, 2003, 5, 302-309.	2.1	22
34	Lipid and carbohydrate profile of a microalga isolated from wastewater. Energy Procedia, 2017, 136, 468-473.	1.8	22
35	Carbon footprint of microalgae production in photobioreactor. Energy Procedia, 2018, 153, 432-437.	1.8	22
36	Designing environmentally friendly chemical processes with fugitive and open emissions. Journal of Cleaner Production, 2004, 12, 125-129.	4.6	21

#	Article	IF	Citations
37	Flocculation of Arthrospira maxima for improved harvesting. Energy Reports, 2020, 6, 423-428.	2.5	21
38	Economic and environmental analysis of animal fats acidity reduction by enzymatic esterification. Journal of Cleaner Production, 2018, 184, 481-489.	4.6	20
39	Application of domestic greywater for irrigating agricultural products: A brief study. Energy Reports, 2020, 6, 811-817.	2.5	20
40	Catalytic bi-reforming of methane for carbon dioxide ennoblement. Energy Reports, 2020, 6, 74-79.	2.5	20
41	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
42	Environmental analysis of gasoline blending components through their life cycle. Journal of Cleaner Production, 2005, 13, 517-523.	4.6	18
43	Indoor Air Quality in Elderly Centers: Pollutants Emission and Health Effects. Environments - MDPI, 2022, 9, 86.	1.5	18
44	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
45	Acid pretreatment of sugarcane biomass to obtain hemicellulosic hydrolisate rich in fermentable sugar. Energy Reports, 2020, 6, 18-23.	2.5	17
46	Life Cycle Assessment of Gasoline Blending Options. Environmental Science & Technology, 2003, 37, 3724-3732.	4.6	16
47	Life cycle assessment of bioethanol from corn stover from soil phytoremediation. Energy Reports, 2022, 8, 468-474.	2.5	16
48	Biofixation of CO2 emissions from natural gas combined cycle power plant. Energy Reports, 2020, 6, 140-146.	2.5	15
49	Comparison of allocation approaches in soybean biodiesel life cycle assessment. Journal of the Institute of Energy, 2010, 83, 48-55.	0.4	14
50	Microalgae processing for biodiesel production. , 2012, , 204-231.		14
51	Fish oil acidity reduction by enzymatic esterification. Energy Procedia, 2017, 136, 474-480.	1.8	14
52	Dunaliella tertiolecta (Chlorophyta) Avoids Cell Death Under Ultraviolet Radiation By Triggering Alternative Photoprotective Mechanisms. Photochemistry and Photobiology, 2015, 91, 1389-1402.	1.3	13
53	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
54	Biochemical characterization of Phaeodactylum tricornutum for microalgae-based biorefinery. Energy Procedia, 2018, 153, 466-470.	1.8	12

#	Article	IF	Citations
55	Influence of cultivation conditions on the bioenergy potential and bio-compounds of Chlorella vulgaris. Energy Reports, 2020, 6, 378-384.	2.5	12
56	Valorization of Waste Frying Oils and Animal Fats for Biodiesel Production. , 2013, , 671-693.		12
57	Composition, cultivation and potential applications of Chlorella zofingiensis â€“ A comprehensive review. Algal Research, 2021, 60, 102508.	2.4	11
58	Life cycle energy and carbon emissions of essential oil extraction from Rosemary. Energy Reports, 2022, 8, 291-297.	2.5	11
59	Phaeodactylum tricornutum derived biosilica purification for energy applications. Energy Procedia, 2018, 153, 279-283.	1.8	10
60	Designing Eco-Efficient Biodiesel Production Processes from Waste Vegetable Oils. Computer Aided Chemical Engineering, 2010, , 253-258.	0.3	9
61	Life cycle energy and carbon emissions of ergosterol from mushroom residues. Energy Reports, 2020, 6, 333-339.	2.5	9
62	Energy consumption and carbon footprint of perovskite solar cells. Energy Reports, 2022, 8, 475-481.	2.5	8
63	Sustainability Considerations about Microalgae for Biodiesel Production. , 2013, , 745-757.		7
64	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
65	Optimization of Ultrasound-Assisted Extraction of Spent Coffee Grounds Oil Using Response Surface Methodology. Processes, 2021, 9, 2085.	1.3	7
66	Environmental analysis of a bio-based coating material for automobile interiors. Journal of Cleaner Production, 2022, 367, 133011.	4.6	7
67	Modeling and Simulation of Heavy Metals Removal From Drinking Water by Magnetic Zeolite. NATO Science for Peace and Security Series C: Environmental Security, 2009, , 61-84.	0.1	6
68	Acidity reduction of mammalian fat by enzymatic esterification. Energy Procedia, 2017, 136, 290-295.	1.8	6
69	Decentralized electricity storage evaluation in the Portuguese context. Electricity Journal, 2020, 33, 106822.	1.3	6
70	LCA for Membrane Processes. Green Chemistry and Sustainable Technology, 2017, , 23-66.	0.4	5
71	Sustainability evaluation of a Portuguese â€œterroirâ€•wine. BIO Web of Conferences, 2019, 12, 03017.	0.1	5
72	Valorization of Agro-Industrial Residues: Bioprocessing of Animal Fats to Reduce Their Acidity. Sustainability, 2021, 13, 10837.	1.6	4

#	Article	IF	Citations
73	Designing efficient, economic and environmentally friendly chemical processes. Computer Aided Chemical Engineering, 2001, 9, 1165-1170.	0.3	3
74	Design and Simulation of Eco-Efficient Biodiesel Manufacture. Computer Aided Chemical Engineering, 2011, 29, 1235-1240.	0.3	3
75	Acidity reduction in animal fats by enzymatic esterification: economic and environmental analysis. Energy Procedia, 2017, 136, 308-315.	1.8	3
76	Environmental life cycle assessment of early-stage development of ergosterol extraction from mushroom bio-residues. Journal of Cleaner Production, 2022, 355, 131623.	4.6	3
77	Fish Oil Enzymatic Esterification for Acidity Reduction. Waste and Biomass Valorization, 2020, 11, 1131-1141.	1.8	2
78	Macroscopic and Microscopic Effects in Diffusion and Reaction in Catalyst Porous Particles. Defect and Diffusion Forum, 0, 283-286, 388-393.	0.4	1
79	Technology transfer and sustainability. Clean Technologies and Environmental Policy, 2010, 12, 1-2.	2.1	1
80	Life cycle analysis of a combined electrolysis and methanation reactor for methane production. Energy Reports, 2022, 8, 554-560.	2.5	1
81	Webwatch for volume 7, number 3. Clean Technologies and Environmental Policy, 2005, 7, 148-149.	2.1	0
82	Clean technologies and environmental policy WEBWATCH. Clean Technologies and Environmental Policy, 2006, 8, 13-14.	2.1	0
83	Clean technologies and environmental policy WEBWATCH. Clean Technologies and Environmental Policy, 2006, 8, 75-76.	2.1	0
84	Clean technologies and environmental policy WEBWATCH. Clean Technologies and Environmental Policy, 2006, 8, 229-231.	2.1	0
85	Evaluating the Environmental Friendliness, Economics and Energy Efficiency of Chemical Processes: Heat Integration. , 2004, , 355-369.		0