

Fausto Freire

List of Publications by Year in descending order

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Version: 2024-02-01

122
papers

4,095
citations

134610

34
h-index

156644

58
g-index

127
all docs

127
docs citations

127
times ranked

4912
citing authors

#	ARTICLE	IF	CITATIONS
1	Integrating life-cycle assessment and multi-criteria decision analysis to compare alternative biodiesel chains. <i>Annals of Operations Research</i> , 2022, 312, 1359-1374.	2.6	17
2	Ecodesign approach for pharmaceutical packaging based on Life Cycle Assessment. <i>Science of the Total Environment</i> , 2022, 816, 151565.	3.9	15
3	A systematic review and life cycle assessment of biomass pellets and briquettes production in Latin America. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 157, 112042.	8.2	20
4	Key drivers of life-cycle environmental and cost assessment of windows for different European climate zones. <i>Journal of Building Engineering</i> , 2022, 50, 104206.	1.6	4
5	Life cycle assessment of a prefabricated house for seven locations in different climates. <i>Journal of Building Engineering</i> , 2022, 53, 104504.	1.6	6
6	Life cycle assessment of pharmaceutical packaging. <i>International Journal of Life Cycle Assessment</i> , 2022, 27, 978-992.	2.2	9
7	Environmental and cost life-cycle approach to support selection of windows in early stages of building design. <i>Journal of Cleaner Production</i> , 2022, 363, 132624.	4.6	7
8	Sustainable Rural Electrification: Harnessing a Cosmolocal Wind. <i>Energies</i> , 2022, 15, 4659.	1.6	1
9	Embodied impacts of window systems: A comparative assessment of framing and glazing alternatives. <i>Journal of Building Engineering</i> , 2021, 35, 102042.	1.6	11
10	Eco-efficiency in early design decisions: A multimethodology approach. <i>Journal of Cleaner Production</i> , 2021, 283, 124630.	4.6	32
11	Environmental Life-Cycle Assessment of an Innovative Multifunctional Toilet. <i>Energies</i> , 2021, 14, 2307.	1.6	2
12	Environmental impacts and costs of residential building retrofits “What matters?”. <i>Sustainable Cities and Society</i> , 2021, 67, 102733.	5.1	19
13	Influence of material choice, renovation rate, and electricity grid to achieve a Paris Agreement-compatible building stock: A Portuguese case study. <i>Building and Environment</i> , 2021, 195, 107773.	3.0	26
14	Circular economy strategies on business modelling: Identifying the greatest influences. <i>Journal of Cleaner Production</i> , 2021, 299, 126918.	4.6	52
15	Material flow analysis of forest biomass in Portugal to support a circular bioeconomy. <i>Resources, Conservation and Recycling</i> , 2021, 169, 105507.	5.3	29
16	Life cycle assessment of a south European house addressing building design options for orientation, window sizing and building shape. <i>Journal of Building Engineering</i> , 2021, 39, 102276.	1.6	18
17	Prefabricated versus conventional construction: Comparing life-cycle impacts of alternative structural materials. <i>Journal of Building Engineering</i> , 2021, 41, 102705.	1.6	29
18	Integrating life cycle assessment in early process development stage: The case of extracting starch from mango kernel. <i>Journal of Cleaner Production</i> , 2021, 321, 128981.	4.6	8

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19	What is the potential for prefabricated buildings to decrease costs and contribute to meeting EU environmental targets?. <i>Building and Environment</i> , 2021, 206, 108382.	3.0	23
20	Integrating the Sustainable Development Goals with the Water-Energy-Food Nexus: A Model for Agro-Industrial Companies. , 2021, , 46-53.		0
21	Integrated environmental, energy and cost life-cycle analysis of windows: Optimal selection of components. <i>Building and Environment</i> , 2021, 188, 107516.	3.0	12
22	Using anticipatory life cycle assessment to enable future sustainable construction. <i>Journal of Industrial Ecology</i> , 2020, 24, 178-192.	2.8	35
23	Life cycle assessment of electricity generation: a review of the characteristics of existing literature. <i>International Journal of Life Cycle Assessment</i> , 2020, 25, 36-54.	2.2	43
24	Life-cycle assessment of animal feed ingredients: Poultry fat, poultry by-product meal and hydrolyzed feather meal. <i>Journal of Cleaner Production</i> , 2020, 252, 119845.	4.6	34
25	Life cycle assessment of biomass pellets: A review of methodological choices and results. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 133, 110278.	8.2	30
26	Life-Cycle Assessment of Alternative Envelope Construction for a New House in South-Western Europe: Embodied and Operational Magnitude. <i>Energies</i> , 2020, 13, 4145.	1.6	8
27	Dynamic life cycle assessment of straw-based renovation: A case study from a Portuguese neighbourhood. <i>IOP Conference Series: Earth and Environmental Science</i> , 2020, 588, 042054.	0.2	5
28	Circular economy in the pig farming chain: Proposing a model for measurement. <i>Journal of Cleaner Production</i> , 2020, 260, 121003.	4.6	27
29	Global warming implications from increased forest biomass utilization for bioenergy in a supply-constrained context. <i>Journal of Environmental Management</i> , 2020, 263, 110292.	3.8	11
30	Enriching the results of screening social life cycle assessment using content analysis: a case study of sugarcane in Brazil. <i>International Journal of Life Cycle Assessment</i> , 2019, 24, 781-793.	2.2	28
31	Dynamic Assessment of Construction Materials in Urban Building Stocks: A Critical Review. <i>Environmental Science & Technology</i> , 2019, 53, 9992-10006.	4.6	34
32	Life cycle assessment of wood pellets and wood split logs for residential heating. <i>Science of the Total Environment</i> , 2019, 689, 580-589.	3.9	28
33	Fleet-based LCA applied to the building sector – Environmental and economic analysis of retrofit strategies. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 323, 012172.	0.2	4
34	Life beyond the grid: A Life-Cycle Sustainability Assessment of household energy needs. <i>Applied Energy</i> , 2019, 255, 113881.	5.1	15
35	Life Cycle Assessment of Locally Manufactured Small Wind Turbines and Pico-Hydro Plants. , 2019, , .		5
36	Planning strategies to address operational and price uncertainty in biodiesel production. <i>Applied Energy</i> , 2019, 238, 1573-1581.	5.1	11

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37	A hazard classification system based on incorporation of REACH regulation thresholds in the USEtox method. <i>Journal of Cleaner Production</i> , 2019, 228, 856-866.	4.6	4
38	Comparative life cycle assessment of lithium-ion batteries for electric vehicles addressing capacity fade. <i>Journal of Cleaner Production</i> , 2019, 229, 787-794.	4.6	102
39	Environmental and Cost Life Cycle Analysis of Different Recovery Processes of Organic Fraction of Municipal Solid Waste and Sewage Sludge. <i>Waste and Biomass Valorization</i> , 2019, 10, 3613-3634.	1.8	30
40	Perspectives on Multi-criteria Decision Analysis and Life-Cycle Assessment. <i>Multiple Criteria Decision Making</i> , 2019, , 315-329.	0.6	11
41	Life-cycle sustainability assessment of key electricity generation systems in Portugal. <i>Energy</i> , 2019, 176, 131-142.	4.5	67
42	Robust multi-criteria weighting in comparative LCA and S-LCA: A case study of sugarcane production in Brazil. <i>Journal of Cleaner Production</i> , 2019, 218, 708-717.	4.6	25
43	A Circular Economy Approach to Military Munitions: Valorization of Energetic Material from Ammunition Disposal through Incorporation in Civil Explosives. <i>Sustainability</i> , 2019, 11, 255.	1.6	10
44	Multi-Criteria and Life Cycle Assessment of Wood-Based Bioenergy Alternatives for Residential Heating: A Sustainability Analysis. <i>Energies</i> , 2019, 12, 4391.	1.6	19
45	Analysis of cost-environmental trade-offs in biodiesel production incorporating waste feedstocks: A multi-objective programming approach. <i>Journal of Cleaner Production</i> , 2019, 216, 64-73.	4.6	11
46	Embodied energy and greenhouse gas emissions analysis of a prefabricated modular house: The "Moby" case study. <i>Journal of Cleaner Production</i> , 2019, 212, 1044-1053.	4.6	88
47	Environmental impacts of commuting modes in Lisbon: A life-cycle assessment addressing particulate matter impacts on health. <i>International Journal of Sustainable Transportation</i> , 2019, 13, 652-663.	2.1	9
48	Effects on Greenhouse Gas Emissions of Introducing Electric Vehicles into an Electricity System with Large Storage Capacity. <i>Journal of Industrial Ecology</i> , 2018, 22, 288-299.	2.8	18
49	Streamlined environmental and cost life-cycle approach for building thermal retrofits: A case of residential buildings in South European climates. <i>Journal of Cleaner Production</i> , 2018, 172, 2625-2635.	4.6	28
50	Transportation matters " Does it? GIS-based comparative environmental assessment of concrete mixes with cement, fly ash, natural and recycled aggregates. <i>Resources, Conservation and Recycling</i> , 2018, 137, 1-10.	5.3	63
51	Allocating Shadow Prices in a Multi-objective Chance Constrained Problem of Biodiesel Blending. <i>Multiple Criteria Decision Making</i> , 2018, , 133-149.	0.6	1
52	Intake fraction estimates for on-road fine particulate matter (PM2.5) emissions: Exploring spatial variation of emissions and population distribution in Lisbon, Portugal. <i>Atmospheric Environment</i> , 2018, 190, 284-293.	1.9	3
53	Water footprint profile of crop-based vegetable oils and waste cooking oil: Comparing two water scarcity footprint methods. <i>Journal of Cleaner Production</i> , 2018, 195, 1190-1202.	4.6	25
54	Avaliaço Ambiental de Ciclo de Vida dos principais sistemas de geraço de eletricidade em Portugal. <i>LALCA- Revista Latino Americana Em Avaliaço Do Ciclo De Vida</i> , 2018, 2, 110-127.	0.3	3

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55	Life-cycle assessment of irrigated and rainfed sunflower addressing uncertainty and land use change scenarios. <i>Journal of Cleaner Production</i> , 2017, 140, 436-444.	4.6	10
56	Life-cycle assessment of fresh and frozen chestnut. <i>Journal of Cleaner Production</i> , 2017, 140, 742-752.	4.6	13
57	Environmental impact trade-offs in building envelope retrofit strategies. <i>International Journal of Life Cycle Assessment</i> , 2017, 22, 557-570.	2.2	29
58	Environmental life cycle assessment of biodiesel produced with palm oil from Colombia. <i>International Journal of Life Cycle Assessment</i> , 2017, 22, 587-600.	2.2	31
59	Greening transportation and parking at University of Coimbra. <i>International Journal of Sustainability in Higher Education</i> , 2017, 18, 23-38.	1.6	18
60	Building retrofit addressing occupancy: An integrated cost and environmental life-cycle analysis. <i>Energy and Buildings</i> , 2017, 140, 388-398.	3.1	29
61	Fatty acid based prediction models for biodiesel properties incorporating compositional uncertainty. <i>Fuel</i> , 2017, 196, 13-20.	3.4	39
62	Adaptive reuse of buildings: Eco-efficiency assessment of retrofit strategies for alternative uses of an historic building. <i>Journal of Cleaner Production</i> , 2017, 157, 94-105.	4.6	46
63	A review of fleet-based life-cycle approaches focusing on energy and environmental impacts of vehicles. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 79, 935-945.	8.2	42
64	Environmental Assessment of Ammunition: the Importance of a Life-Cycle Approach. <i>Propellants, Explosives, Pyrotechnics</i> , 2017, 42, 44-53.	1.0	7
65	Marginal Life-Cycle Greenhouse Gas Emissions of Electricity Generation in Portugal and Implications for Electric Vehicles. <i>Resources</i> , 2016, 5, 41.	1.6	30
66	Reducing impacts from ammunitions: A comparative life-cycle assessment of four types of 9 mm ammunitions. <i>Science of the Total Environment</i> , 2016, 566-567, 34-40.	3.9	6
67	Significance of mobility in the life-cycle assessment of buildings. <i>Building Research and Information</i> , 2016, 44, 376-393.	2.0	26
68	Economic-energy-environment analysis of prospective sugarcane bioethanol production in Brazil. <i>Applied Energy</i> , 2016, 181, 514-526.	5.1	41
69	Comparative life-cycle energy analysis of a new and an existing house: The significance of occupant's habits, building systems and embodied energy. <i>Sustainable Cities and Society</i> , 2016, 26, 507-518.	5.1	56
70	Incorporating uncertainty in the life cycle assessment of biodiesel from waste cooking oil addressing different collection systems. <i>Resources, Conservation and Recycling</i> , 2016, 112, 83-92.	5.3	30
71	A multi-objective interactive approach to assess economic-energy-environment trade-offs in Brazil. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 54, 1429-1442.	8.2	28
72	Comparative Life-Cycle Analysis of Insulation Materials in A Dwelling, Addressing Alternative Heating Systems and Life Spans. <i>Journal of Clean Energy Technologies</i> , 2016, 4, 462-465.	0.1	5

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73	Bioenergy production from algae using dairy manure as a nutrient source: Life cycle energy and greenhouse gas emission analysis. <i>Applied Energy</i> , 2015, 154, 1112-1121.	5.1	30
74	Environmental life-cycle assessment of rapeseed produced in Central Europe: addressing alternative fertilization and management practices. <i>Journal of Cleaner Production</i> , 2015, 99, 266-274.	4.6	35
75	Applying Multi-Criteria Decision Analysis to the Life-Cycle Assessment of vehicles. <i>Journal of Cleaner Production</i> , 2015, 107, 749-759.	4.6	61
76	Vehicle environmental rating methodologies: Overview and application to light-duty vehicles. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 45, 192-206.	8.2	12
77	Life-Cycle Greenhouse Gas Assessment of Nigerian Liquefied Natural Gas Addressing Uncertainty. <i>Environmental Science & Technology</i> , 2015, 49, 3949-3957.	4.6	19
78	Biodiesel from Waste Cooking Oils in Portugal: Alternative Collection Systems. <i>Waste and Biomass Valorization</i> , 2015, 6, 771-779.	1.8	19
79	Dynamic fleet-based life-cycle greenhouse gas assessment of the introduction of electric vehicles in the Portuguese light-duty fleet. <i>International Journal of Life Cycle Assessment</i> , 2015, 20, 1287-1299.	2.2	35
80	A life cycle multi-objective economic and environmental assessment of distributed generation in buildings. <i>Energy Conversion and Management</i> , 2015, 97, 420-427.	4.4	22
81	Life-cycle assessment of soybean-based biodiesel in Europe: comparing grain, oil and biodiesel import from Brazil. <i>Journal of Cleaner Production</i> , 2015, 102, 188-201.	4.6	64
82	A hybrid input-output multi-objective model to assess economic-energy-environment trade-offs in Brazil. <i>Energy</i> , 2015, 82, 769-785.	4.5	39
83	Stochastic comparative assessment of life-cycle greenhouse gas emissions from conventional and electric vehicles. <i>International Journal of Life Cycle Assessment</i> , 2015, 20, 854-864.	2.2	31
84	Energy retrofit of historic buildings: Environmental assessment of cost-optimal solutions. <i>Journal of Building Engineering</i> , 2015, 4, 167-176.	1.6	76
85	Life-cycle assessment of a civil explosive. <i>Journal of Cleaner Production</i> , 2015, 89, 159-164.	4.6	15
86	Life-cycle assessment of electricity in Portugal. <i>Applied Energy</i> , 2014, 134, 563-572.	5.1	113
87	Primary and secondary use of electric mobility batteries from a life cycle perspective. <i>Journal of Power Sources</i> , 2014, 262, 169-177.	4.0	115
88	Life-cycle energy and greenhouse gas analysis of three building types in a residential area in Lisbon. <i>Energy and Buildings</i> , 2014, 69, 344-353.	3.1	108
89	Integrated life-cycle assessment and thermal dynamic simulation of alternative scenarios for the roof retrofit of a house. <i>Building and Environment</i> , 2014, 81, 204-215.	3.0	61
90	Environmental sustainability of biodiesel in Brazil. <i>Energy Policy</i> , 2014, 65, 680-691.	4.2	58

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91	Impact of Policy on Greenhouse Gas Emissions and Economics of Biodiesel Production. Environmental Science & Technology, 2014, 48, 7642-7650.	4.6	9
92	Impact of feedstock diversification on the cost-effectiveness of biodiesel. Applied Energy, 2014, 126, 281-296.	5.1	36
93	Carbon footprint of particleboard: a comparison between ISO/TS 14067, GHG Protocol, PAS 2050 and Climate Declaration. Journal of Cleaner Production, 2014, 66, 199-209.	4.6	104
94	Environmental life-cycle assessment of rapeseed-based biodiesel: Alternative cultivation systems and locations. Applied Energy, 2014, 114, 837-844.	5.1	71
95	Greenhouse gas intensity of palm oil produced in Colombia addressing alternative land use change and fertilization scenarios. Applied Energy, 2014, 114, 958-967.	5.1	31
96	A Multiobjective Model for Biodiesel Blends Minimizing Cost and Greenhouse Gas Emissions. Lecture Notes in Computer Science, 2014, , 653-666.	1.0	2
97	Life cycle assessment of medium density particleboard (MDP) produced in Brazil. International Journal of Life Cycle Assessment, 2013, 18, 1404-1411.	2.2	77
98	Greenhouse gas assessment of soybean production: implications of land use change and different cultivation systems. Journal of Cleaner Production, 2013, 54, 49-60.	4.6	127
99	Impact of the electricity mix and use profile in the life-cycle assessment of electric vehicles. Renewable and Sustainable Energy Reviews, 2013, 24, 271-287.	8.2	244
100	A model for optimal energy planning of a commercial building integrating solar and cogeneration systems. Energy, 2013, 61, 211-223.	4.5	17
101	Life-cycle Assessment of Ammunition Demilitarization in a Static Kiln. Propellants, Explosives, Pyrotechnics, 2013, 38, 296-302.	1.0	12
102	Electric vehicles in Portugal: An integrated energy, greenhouse gas and cost life-cycle analysis. , 2012, , .		16
103	A life-cycle cost optimization model with environmental impact assessment for energy management of service buildings. , 2012, , .		3
104	Life-cycle GHG assessment of soybean biodiesel. , 2012, , .		3
105	Addressing land use change and uncertainty in the life-cycle assessment of wheat-based bioethanol. Energy, 2012, 45, 519-527.	4.5	22
106	Life-cycle assessment of a house with alternative exterior walls: Comparison of three impact assessment methods. Energy and Buildings, 2012, 47, 572-583.	3.1	190
107	Environmental performance of palm oil biodiesel — A life-cycle perspective. , 2011, , .		4
108	Life-cycle studies of biodiesel in Europe: A review addressing the variability of results and modeling issues. Renewable and Sustainable Energy Reviews, 2011, 15, 338-351.	8.2	110

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109	Comparative assessment of environmental life-cycle-based tools: An application to particleboard. , 2011, , .		2
110	Capturing uncertainty in GHG savings and carbon payback time of rapeseed oil displacing fossil diesel in Europe. , 2011, , .		0
111	Development and Application of Competencies for Graduate Programs in Energy and Sustainability. Journal of Professional Issues in Engineering Education and Practice, 2011, 137, 198-207.	0.9	28
112	Uncertainty Analysis in Biofuel Systems. Journal of Industrial Ecology, 2010, 14, 322-334.	2.8	46
113	Energy and Environmental Benefits of Rapeseed Oil Replacing Diesel. International Journal of Green Energy, 2009, 6, 287-301.	2.1	22
114	Renewability and life-cycle energy efficiency of bioethanol and bio-ethyl tertiary butyl ether (bioETBE): Assessing the implications of allocation. Energy, 2006, 31, 3362-3380.	4.5	218
115	Life Cycle Activity Analysis: A Case Study of Plastic Panels. , 2002, , 323-352.		0
116	PHÊ Postharvest Technology. Biosystems Engineering, 2001, 78, 397-406.	0.4	26
117	Life cycle activity analysis: logistics and environmental policies for bottled water in Portugal. OR Spectrum, 2001, 23, 159-182.	2.1	21
118	THERMAL ANALYSIS AND DRYING KINETICS OF OLIVE BAGASSE. Drying Technology, 1999, 17, 895-907.	1.7	14
119	EXPERIMENTAL ANALYSIS OF THE DRYING KINETICS OF A FOOD PRODUCT. Drying Technology, 1998, 16, 1687-1702.	1.7	12
120	Life Cycle Activity Analysis Applied to the Portuguese Used Tire Market. , 0, , .		4
121	Uncertainty Analysis of the Life-Cycle Greenhouse Gas Emissions and Energy Renewability of Biofuels. , 0, , .		5
122	Environmental management of military ranges with the support of a life-cycle assessment approach. , 0, , 5-1-5-20.		1