

Monica Carvalho

List of Publications by Year in descending order

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Version: 2024-02-01

110
papers

3,329
citations

279798

23
h-index

155660

55
g-index

113
all docs

113
docs citations

113
times ranked

3800
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | The lithium-ion battery: State of the art and future perspectives. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 89, 292-308. | 16.4 | 1,542 |
| 2 | Multicriteria synthesis of trigeneration systems considering economic and environmental aspects. <i>Applied Energy</i> , 2012, 91, 245-254. | 10.1 | 126 |
| 3 | Structure optimization of energy supply systems in tertiary sector buildings. <i>Energy and Buildings</i> , 2009, 41, 1063-1075. | 6.7 | 122 |
| 4 | Optimal synthesis of trigeneration systems subject to environmental constraints. <i>Energy</i> , 2011, 36, 3779-3790. | 8.8 | 100 |
| 5 | Operational strategy and marginal costs in simple trigeneration systems. <i>Energy</i> , 2009, 34, 2001-2008. | 8.8 | 89 |
| 6 | Exergoeconomic and exergoenvironmental comparison of diesel-biodiesel blends in a direct injection engine at variable loads. <i>Energy Conversion and Management</i> , 2019, 183, 450-461. | 9.2 | 81 |
| 7 | Effects of the COVID-19 pandemic on the Brazilian electricity consumption patterns. <i>International Journal of Energy Research</i> , 2021, 45, 3358-3364. | 4.5 | 69 |
| 8 | Energy, exergy and exergoenvironmental analyses of a sugarcane bagasse power cogeneration system. <i>Energy Conversion and Management</i> , 2020, 222, 113232. | 9.2 | 59 |
| 9 | The effect of lockdown on the outcomes of COVID-19 in Spain: An ecological study. <i>PLoS ONE</i> , 2020, 15, e0236779. | 2.5 | 52 |
| 10 | Allocation of economic costs in trigeneration systems at variable load conditions. <i>Energy and Buildings</i> , 2011, 43, 2869-2881. | 6.7 | 39 |
| 11 | On the thermoeconomic and LCA methods for waste and fuel allocation in multiproduct systems. <i>Energy</i> , 2017, 127, 775-785. | 8.8 | 39 |
| 12 | Geographic evaluation of trigeneration systems in the tertiary sector. Effect of climatic and electricity supply conditions. <i>Energy</i> , 2011, 36, 1931-1939. | 8.8 | 36 |
| 13 | Concentrating Solar Power. , 2018, , 373-402. | | 36 |
| 14 | Modeling simple trigeneration systems for the distribution of environmental loads. <i>Environmental Modelling and Software</i> , 2012, 30, 71-80. | 4.5 | 35 |
| 15 | Trend analyses of electricity load changes in Brazil due to COVID-19 shutdowns. <i>Electric Power Systems Research</i> , 2021, 193, 107009. | 3.6 | 34 |
| 16 | Environmental evaluation of dish-Stirling technology for power generation. <i>Solar Energy</i> , 2012, 86, 2811-2825. | 6.1 | 33 |
| 17 | Carbon footprint associated with four disposal scenarios for urban pruning waste. <i>Environmental Science and Pollution Research</i> , 2018, 25, 1863-1868. | 5.3 | 33 |
| 18 | Thermodynamic-economic optimization of a solar-powered combined energy system with desalination for electricity and freshwater production. <i>Smart Energy</i> , 2022, 5, 100062. | 5.7 | 33 |

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|----|---|-----|-----------|
| 19 | Carbon footprint of the generation of bioelectricity from sugarcane bagasse in a sugar and ethanol industry. <i>International Journal of Global Warming</i> , 2019, 17, 235. | 0.5 | 31 |
| 20 | Exergoenvironmental results of a eucalyptus biomass-fired power plant. <i>Energy</i> , 2019, 189, 116188. | 8.8 | 30 |
| 21 | A critical review of the greenhouse gas emissions associated with parabolic trough concentrating solar power plants. <i>Journal of Cleaner Production</i> , 2021, 289, 125774. | 9.3 | 30 |
| 22 | Life cycle assessment and comparative exergoenvironmental evaluation of a micro-trigeneration system. <i>Energy</i> , 2021, 216, 119310. | 8.8 | 28 |
| 23 | Analysis of a CHP plant in a municipal solid waste landfill in the South of Spain. <i>Applied Thermal Engineering</i> , 2015, 91, 706-717. | 6.0 | 27 |
| 24 | Development and assessment of a solar home system to cover cooking and lighting needs in developing regions as a better alternative for existing practices. <i>Solar Energy</i> , 2017, 155, 7-17. | 6.1 | 27 |
| 25 | Use of index analysis to evaluate the water quality of a stream receiving industrial effluents. <i>Water Science and Technology</i> , 2010, 62, 1-10. | 0.4 | 23 |
| 26 | Life cycle assessment of the transesterification double step process for biodiesel production from refined soybean oil in Brazil. <i>Environmental Science and Pollution Research</i> , 2016, 23, 11025-11033. | 5.3 | 23 |
| 27 | Assessment of energy and exergy efficiencies in steam generators. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2017, 39, 3217-3226. | 1.6 | 21 |
| 28 | Carbon and water footprints of irrigated corn and non-irrigated wheat in Northeast Spain. <i>Environmental Science and Pollution Research</i> , 2017, 24, 5647-5653. | 5.3 | 21 |
| 29 | Environmental impact and cost allocations for a dual product heat pump. <i>Energy Conversion and Management</i> , 2018, 173, 763-772. | 9.2 | 21 |
| 30 | Optimal synthesis of energy supply systems for remote open pit mines. <i>Applied Thermal Engineering</i> , 2014, 64, 315-330. | 6.0 | 20 |
| 31 | Potential of photovoltaic solar energy to reduce the carbon footprint of the Brazilian electricity matrix. <i>LALCA- Revista Latino Americana Em Avaliaço Do Ciclo De Vida</i> , 2017, 1, 64-85. | 0.3 | 20 |
| 32 | Exergy, exergoeconomic, life cycle, and exergoenvironmental assessments for an engine fueled by diesel-ethanol blends with aluminum oxide and titanium dioxide additive nanoparticles. <i>Fuel</i> , 2022, 320, 123861. | 6.4 | 20 |
| 33 | Photovoltaic solar energy in the economic optimisation of energy supply and conversion. <i>International Journal of Renewable Power Generation</i> , 2018, 12, 1263-1268. | 3.1 | 18 |
| 34 | Synthesis of Trigeneration Systems: Sensitivity Analyses and Resilience. <i>Scientific World Journal</i> , 2013, 2013, 1-16. | 2.1 | 15 |
| 35 | Comparison of greenhouse gas emissions relative to two frying processes for homemade potato chips. <i>Environmental Progress and Sustainable Energy</i> , 2018, 37, 481-487. | 2.3 | 15 |
| 36 | Carbon footprints for the supply of electricity to a heat pump: Solar energy vs. electric grid. <i>Journal of Renewable and Sustainable Energy</i> , 2018, 10, 023701. | 2.0 | 14 |

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|----|--|-----|-----------|
| 37 | Exergoeconomic and exergoenvironmental analyses of an off-grid reverse osmosis system with internal combustion engine and waste heat recovery. <i>Chemical Engineering Journal Advances</i> , 2020, 4, 100056. | 5.2 | 14 |
| 38 | Environmental evaluation of the life cycle of elephant grass fertilization using chemical fertilization and biosolids. <i>Environmental Monitoring and Assessment</i> , 2018, 190, 30. | 2.7 | 13 |
| 39 | Energy, exergy, and exergoeconomic evaluations of a micro-trigeneration system. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2020, 42, 1. | 1.6 | 13 |
| 40 | Concept Development of Optimal Mine Site Energy Supply. <i>Energies</i> , 2012, 5, 4726-4745. | 3.1 | 12 |
| 41 | APPLICATION OF A POLYGENERATION OPTIMIZATION TECHNIQUE FOR A HOSPITAL IN NORTHERN ONTARIO. <i>Transactions of the Canadian Society for Mechanical Engineering</i> , 2014, 38, 45-62. | 0.8 | 12 |
| 42 | Optimal Design and Control of Wind-Diesel Hybrid Energy Systems for Remote Arctic Mines. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2016, 138, . | 2.3 | 12 |
| 43 | Indicators for sustainability assessment of biofuels: Economic, environmental, social, and technological dimensions. , 2020, , 73-113. | | 12 |
| 44 | Sustainable enhancement of district heating and cooling configurations by combining thermal energy storage and life cycle assessment. <i>Clean Technologies and Environmental Policy</i> , 2021, 23, 857-867. | 4.1 | 12 |
| 45 | Carbon emissions associated with two types of foundations: CP-II Portland cement-based composite vs. geopolymer concrete. <i>Revista Materia</i> , 2019, 24, . | 0.2 | 12 |
| 46 | Exergoeconomic Assessment of a Compact Electricity-Cooling Cogeneration Unit. <i>Energies</i> , 2020, 13, 5417. | 3.1 | 11 |
| 47 | Influence of climatic variability on the electricity generation potential by renewable sources in the Brazilian semi-arid region. <i>Journal of Arid Environments</i> , 2021, 184, 104331. | 2.4 | 11 |
| 48 | Carbon footprint associated with a mono-Si cell photovoltaic ceramic roof tile system. <i>Environmental Progress and Sustainable Energy</i> , 2019, 38, 13120. | 2.3 | 10 |
| 49 | Municipal Solid Waste Management and Energy Recovery. , 0, , . | | 10 |
| 50 | A decision-making method to choose optimal systems considering financial and environmental aspects: Application in hybrid CCHP systems. <i>Energy</i> , 2022, 250, 123816. | 8.8 | 9 |
| 51 | Hybridization of solar dish-stirling technology: Analysis and design. <i>Environmental Progress and Sustainable Energy</i> , 2014, 33, 1459-1466. | 2.3 | 8 |
| 52 | Sustainable enhancement of sugarcane fertilization for energy purposes in hot climates. <i>Renewable Energy</i> , 2020, 159, 547-552. | 8.9 | 8 |
| 53 | Greenhouse gas accounting for the energy transition in a brewery. <i>Environmental Progress and Sustainable Energy</i> , 2021, 40, e13563. | 2.3 | 8 |
| 54 | Robustness within the optimal economic polygeneration system for a dairy industry. <i>Journal of Cleaner Production</i> , 2021, 314, 127976. | 9.3 | 8 |

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|----|--|-----|-----------|
| 55 | URBAN PRUNING WASTE: CARBON FOOTPRINT ASSOCIATED WITH ENERGY GENERATION AND PROSPECTS FOR CLEAN DEVELOPMENT MECHANISMS. <i>Revista Arvore</i> , 2019, 43, . | 0.5 | 8 |
| 56 | Environmental Impacts of the Red Ceramics Industry in Northeast Brazil. <i>International Journal of Emerging Research in Management & Technology</i> , 2018, 6, 310. | 0.1 | 8 |
| 57 | CARBON FOOTPRINTS ASSOCIATED WITH ELECTRICITY GENERATION FROM BIOMASS SYNGAS AND DIESEL. <i>Environmental Engineering and Management Journal</i> , 2019, 18, 1391-1397. | 0.6 | 8 |
| 58 | Energy analysis of products and processes in a sanitary landfill. <i>IET Renewable Power Generation</i> , 2019, 13, 1063-1075. | 3.1 | 7 |
| 59 | 100% renewable fueled mine. <i>Energy</i> , 2020, 205, 117964. | 8.8 | 7 |
| 60 | Environmental and Economic Perspectives in the Analysis of Two Options for Hand Drying At an University Campus. <i>International Journal of Emerging Research in Management & Technology</i> , 2017, 6, 24-35. | 0.1 | 7 |
| 61 | Computational fluid dynamics. <i>Management of Environmental Quality</i> , 2004, 15, 102-110. | 4.3 | 6 |
| 62 | A comparison of the economic benefits of centralized and distributed model predictive control strategies for optimal and sub-optimal mine dewatering system designs. <i>Applied Thermal Engineering</i> , 2015, 90, 1172-1183. | 6.0 | 6 |
| 63 | Carbon Footprint Associated with Firewood Consumption in Northeast Brazil: An Analysis by the IPCC 2013 GWP 100y Criterion. <i>Waste and Biomass Valorization</i> , 2019, 10, 2985-2993. | 3.4 | 6 |
| 64 | Optimization of an integrated combined cooling, heat, and power system with solar and wind contribution for buildings located in tropical areas. <i>International Journal of Energy Research</i> , 2022, 46, 1263-1284. | 4.5 | 6 |
| 65 | Exergy, exergoeconomic and exergy-based emission cost analyses of a coconut husk-fired power and desalination plant. <i>International Journal of Exergy</i> , 2020, 32, 267. | 0.4 | 5 |
| 66 | Life Cycle Analysis as a Decision Criterion for the Implementation of Solar Photovoltaic Panels in as Northeast Brazil Hospital. <i>Green Energy and Technology</i> , 2016, , 295-310. | 0.6 | 5 |
| 67 | Second law assessment of a Hoffmann kiln for the red ceramics industry. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2018, 40, 1. | 1.6 | 4 |
| 68 | Adaptation of the ascendancy theory to industrial systems. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2019, 41, 1. | 1.6 | 4 |
| 69 | Exergoenvironmental analysis of a combined cycle power plant fueled by natural gas from an offshore platform. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 46, 101245. | 2.7 | 4 |
| 70 | Perspectives on the Implementation of Climate Change Public Policies in Brazil. <i>Green Energy and Technology</i> , 2016, , 13-20. | 0.6 | 4 |
| 71 | MULTICRITERIA OPTIMIZATION OF RENEWABLE-BASED POLYGENERATION SYSTEM FOR TERTIARY SECTOR BUILDINGS. <i>Environmental Engineering and Management Journal</i> , 2019, 18, 2441-2453. | 0.6 | 4 |
| 72 | Carbon footprint of the generation of bioelectricity from sugarcane bagasse in a sugar and ethanol industry. <i>International Journal of Global Warming</i> , 2019, 17, 235. | 0.5 | 4 |

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|----|--|-----|-----------|
| 73 | Economic and greenhouse gas assessments for two hot water industrial systems: Solar vs. natural gas. <i>Cleaner Engineering and Technology</i> , 2022, 6, 100365. | 4.0 | 4 |
| 74 | Life Cycle and Exergoenvironmental Analyses of Ethanol: Performance of a Flex-Fuel Spark-Ignition Engine at Wide-Open Throttle Conditions. <i>Energies</i> , 2022, 15, 1422. | 3.1 | 4 |
| 75 | Energy, Exergy, Entropy Generation Minimization, and Exergoenvironmental Analyses of Energy Systems-A Mini-Review. <i>Frontiers in Sustainability</i> , 2022, 3, . | 2.6 | 4 |
| 76 | On the consideration of different dead states in the exergy assessment of a solar-assisted combined cooling, heat and power system. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 47, 101361. | 2.7 | 3 |
| 77 | Tackling Dissipative Components Based on the SPECOC Approach: A Cryogenic Heat Exchanger Used in Natural Gas Liquefaction. <i>Energies</i> , 2021, 14, 6850. | 3.1 | 3 |
| 78 | Avalia o do ciclo de vida da coleta seletiva de papel e papel o no n cleo do Bessa, munic pio de Jo o Pessoa (PB), Brasil. <i>Engenharia Sanitaria E Ambiental</i> , 2019, 24, 875-886. | 0.5 | 3 |
| 79 | Research on a Solar Hybrid Trigeneration System Based on Exergy and Exergoenvironmental Assessments. <i>Energies</i> , 2021, 14, 7560. | 3.1 | 3 |
| 80 | Analysis of the start-up and variable load operation of a combined cycle power plant for off-grid mines. <i>International Journal of Global Warming</i> , 2017, 13, 330. | 0.5 | 2 |
| 81 | Optimization and sensitivity analyses of a combined cooling, heat and power system for a residential building. <i>Thermal Science</i> , 2021, 25, 3969-3986. | 1.1 | 2 |
| 82 | Analysis of the start-up and variable load operation of a combined cycle power plant for off-grid mines. <i>International Journal of Global Warming</i> , 2017, 13, 330. | 0.5 | 2 |
| 83 | A STEP BY STEP DESIGN GUIDE FOR A SOLAR WATER HEATING SYSTEM CONSIDERING THERMAL LOSSES. <i>Revista De Engenharia T rmica</i> , 2019, 18, 26. | 0.2 | 2 |
| 84 | Greenhouse gas emissions associated with two air-conditioning systems for a university building. <i>Environmental Challenges</i> , 2021, 5, 100371. | 4.2 | 2 |
| 85 | Geothermal Power. , 2018, , 173-205. | | 1 |
| 86 | Transcritical Carbon Dioxide Charge-Discharge Energy Storage with Integration of Solar Energy. <i>Journal of Sustainable Development of Energy, Water and Environment Systems</i> , 0, , . | 1.9 | 1 |
| 87 | Educa o ambiental por meio de um app para quantifica o de pegada de carbono. <i>Research, Society and Development</i> , 2021, 10, e0710111058. | 0.1 | 1 |
| 88 | Vulnerabilidade das regi es semi ridas  s mudan as clim ticas: impactos na produ o de energia fotovoltaica. <i>Research, Society and Development</i> , 2021, 10, e4010312931. | 0.1 | 1 |
| 89 | Greenhouse gas emissions associated with four types of fertilization for corn crops in a Mediterranean basin. <i>Environmental Progress and Sustainable Energy</i> , 2021, 40, e13681. | 2.3 | 1 |
| 90 | PEGADA DE CARBONO ASSOCIADA AO PROCESSO DE PASTEURIZA O DE SORVETES. <i>Revista Em Agronegocio E Meio Ambiente</i> , 2019, 12, 609. | 0.1 | 1 |

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|-----|--|-----|-----------|
| 91 | Alocação em sistemas energéticos multiproduto: revisão e proposta de métodos. LALCA- Revista Latino Americana Em Avaliação Do Ciclo De Vida, 0, 4, e44660. | 0.3 | 1 |
| 92 | Thermoeconomic and thermoenvironmental analysis of the chilled water system in a shopping mall. International Journal of Refrigeration, 2022, 134, 304-311. | 3.4 | 1 |
| 93 | Behavioral effects of microwave radiation on Rattus norvegicus. , 0, , . | | 0 |
| 94 | Evaluation of the level of stress in rats of the species Rattus norvegicus submitted to microwave radiation. , 0, , . | | 0 |
| 95 | The influence of microwave radiation on the behaviour of Rattus norvegicus. International Journal of Risk Assessment and Management, 2009, 13, 82. | 0.1 | 0 |
| 96 | Water quality of a stream receiving industrial effluents, located in the Brazilian Northeast. International Journal of Risk Assessment and Management, 2009, 13, 137. | 0.1 | 0 |
| 97 | Evaluation of Environmental Loads for the Synthesis of a Trigeneration System. , 2010, , . | | 0 |
| 98 | Comparação ambiental entre sistema fotovoltaico convencional e semitransparente. Revista Principia, 2021, 1, 103. | 0.1 | 0 |
| 99 | On the definition of part-load operation strategies in a complex trigeneration system with hourly-seasonal demands: Exergoeconomics and optimization. Energy Conversion and Management, 2021, 246, 114688. | 9.2 | 0 |
| 100 | Developing Carbon-limiting Disposal Scenarios For Urban Pruning Waste. , 2018, , . | | 0 |
| 101 | Exergy, exergoeconomic and exergy-based emission cost analyses of a coconut husk-fired power and desalination plant. International Journal of Exergy, 2020, 32, 267. | 0.4 | 0 |
| 102 | Pegada de carbono associada à produção de bolos. Revista Em Agronegocio E Meio Ambiente, 2020, 13, 1185-1200. | 0.1 | 0 |
| 103 | Greenhouse gas emissions associated with traditional and alternative concretes. Revista Principia, 2023, 60, 561. | 0.1 | 0 |
| 104 | Evaluation of the manufacturing processes for solar selective surfaces based on CrxOy from a carbon footprint perspective. Cleaner Materials, 2022, 3, 100035. | 5.1 | 0 |
| 105 | Pegada de carbono da produção de pão francês em padaria no nordeste brasileiro. Revista Em Agronegocio E Meio Ambiente, 2020, 13, 1471-1492. | 0.1 | 0 |
| 106 | Pegada de carbono da sinterização do porcelanato e potencial de mitigação de mudanças climáticas associado à substituição energética. Revista Principia, 0, , . | 0.1 | 0 |
| 107 | The effect of lockdown on the outcomes of COVID-19 in Spain: An ecological study. , 2020, 15, e0236779. | | 0 |
| 108 | The effect of lockdown on the outcomes of COVID-19 in Spain: An ecological study. , 2020, 15, e0236779. | | 0 |

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| 109 | The effect of lockdown on the outcomes of COVID-19 in Spain: An ecological study. , 2020, 15, e0236779. | | 0 |
| 110 | The effect of lockdown on the outcomes of COVID-19 in Spain: An ecological study. , 2020, 15, e0236779. | | 0 |