

Carlos Pozo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5098439/publications.pdf>

Version: 2024-02-01

55
papers

1,364
citations

304602

22
h-index

360920

35
g-index

56
all docs

56
docs citations

56
times ranked

1444
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparing biofuels through the lens of sustainability: A data envelopment analysis approach. Applied Energy, 2022, 307, 118201.	5.1	31
2	Comparative sustainability study of energy storage technologies using data envelopment analysis. Energy Storage Materials, 2022, 48, 412-438.	9.5	16
3	Systematic combination of insulation biomaterials to enhance energy and environmental efficiency in buildings. Construction and Building Materials, 2021, 267, 120973.	3.2	13
4	Global environmental and nutritional assessment of national food supply patterns: Insights from a data envelopment analysis approach. Science of the Total Environment, 2021, 755, 142826.	3.9	16
5	Process screening framework for the synthesis of process networks from a circular economy perspective. Resources, Conservation and Recycling, 2021, 164, 105147.	5.3	14
6	Sustainability footprints of a renewable carbon transition for the petrochemical sector within planetary boundaries. One Earth, 2021, 4, 565-583.	3.6	87
7	Unraveling the links between public spending and Sustainable Development Goals: Insights from data envelopment analysis. Science of the Total Environment, 2021, 786, 147459.	3.9	11
8	Life cycle optimization of BECCS supply chains in the European Union. Applied Energy, 2021, 298, 117252.	5.1	16
9	Process modelling and life cycle assessment coupled with experimental work to shape the future sustainable production of chemicals and fuels. Reaction Chemistry and Engineering, 2021, 6, 1179-1194.	1.9	34
10	Systematic MultiObjective Life Cycle Optimization Tools Applied to the Design of Sustainable Chemical Processes. , 2020, , 435-449.		3
11	Reply to the "Comment on "Powering sustainable development within planetary boundaries" by Y. Yang. Energy Environ. Sci., 2020, 13, DOI: 10.1039/C9EE01176E. Energy and Environmental Science, 2020, 13, 313-316.	15.6	4
12	Realizing the Potential High Benefits of Circular Economy in the Chemical Industry: Ethylene Monomer Recovery via Polyethylene Pyrolysis. ACS Sustainable Chemistry and Engineering, 2020, 8, 3561-3572.	3.2	65
13	Operating within Planetary Boundaries without compromising well-being? A Data Envelopment Analysis approach. Journal of Cleaner Production, 2020, 270, 121833.	4.6	7
14	Equity in allocating carbon dioxide removal quotas. Nature Climate Change, 2020, 10, 640-646.	8.1	91
15	Reducing global environmental inequality: Determining regional quotas for environmental burdens through systems optimisation. Journal of Cleaner Production, 2020, 270, 121828.	4.6	16
16	Electricity grid decarbonisation or green methanol fuel? A life-cycle modelling and analysis of today's transportation-power nexus. Applied Energy, 2020, 265, 114718.	5.1	27
17	Temporal sustainability efficiency analysis of urban areas via Data Envelopment Analysis and the hypervolume indicator: Application to London boroughs. Journal of Cleaner Production, 2019, 239, 117839.	4.6	11
18	Assessing the performance of UK universities in the field of chemical engineering using data envelopment analysis. Education for Chemical Engineers, 2019, 29, 29-41.	2.8	11

#	ARTICLE	IF	CITATIONS
19	Sustainability efficiency assessment of the electricity mix of the 28 EU member countries combining data envelopment analysis and optimized projections. <i>Energy Policy</i> , 2019, 134, 110921.	4.2	28
20	Powering sustainable development within planetary boundaries. <i>Energy and Environmental Science</i> , 2019, 12, 1890-1900.	15.6	77
21	Biomass Conversion into Fuels, Chemicals, or Electricity? A Network-Based Life Cycle Optimization Approach Applied to the European Union. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 10570-10582.	3.2	45
22	Quantifying the cost of leaving the Paris Agreement via the integration of life cycle assessment, energy systems modeling and monetization. <i>Applied Energy</i> , 2019, 242, 588-601.	5.1	26
23	Process systems engineering thinking and tools applied to sustainability problems: current landscape and future opportunities. <i>Current Opinion in Chemical Engineering</i> , 2019, 26, 170-179.	3.8	39
24	Productivity and energy efficiency assessment of existing industrial gases facilities via data envelopment analysis and the Malmquist index. <i>Applied Energy</i> , 2018, 212, 1563-1577.	5.1	51
25	Eco-efficiency assessment of EU manufacturing sectors combining input-output tables and data envelopment analysis following production and consumption-based accounting approaches. <i>Journal of Cleaner Production</i> , 2018, 174, 1161-1189.	4.6	43
26	Time for global action: an optimised cooperative approach towards effective climate change mitigation. <i>Energy and Environmental Science</i> , 2018, 11, 572-581.	15.6	52
27	Systematic generation of insulation materials via DEA and Building modelling. <i>Computer Aided Chemical Engineering</i> , 2018, 43, 457-462.	0.3	0
28	Electricity mix assessment of the EU member countries using DEA and EffMixF. <i>Computer Aided Chemical Engineering</i> , 2018, 43, 445-450.	0.3	2
29	Financial Risk Management in Heat Exchanger Networks Considering Multiple Utility Sources with Uncertain Costs. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 9831-9848.	1.8	6
30	Multiperiod model for the optimal production planning in the industrial gases sector. <i>Applied Energy</i> , 2017, 206, 667-682.	5.1	13
31	Financial risks management of heat exchanger networks under uncertain utility costs via multi-objective optimization. <i>Energy</i> , 2017, 139, 98-117.	4.5	15
32	Combined use of life cycle assessment, data envelopment analysis and Monte Carlo simulation for quantifying environmental efficiencies under uncertainty. <i>Journal of Cleaner Production</i> , 2017, 166, 771-783.	4.6	37
33	Using Pareto filters to support risk management in optimization under uncertainty: Application to the strategic planning of chemical supply chains. <i>Computers and Chemical Engineering</i> , 2017, 98, 236-255.	2.0	11
34	A meta-heuristic approach for financial risks management in heat exchanger networks. <i>Computer Aided Chemical Engineering</i> , 2017, 40, 955-960.	0.3	2
35	Multiperiod and Multiproduct Model for the Optimal Production Planning in the Gases Sector: Application to an Industrial Case Study. <i>Computer Aided Chemical Engineering</i> , 2017, 40, 1297-1302.	0.3	2
36	Modelling and optimization framework for the multi-objective design of buildings. <i>Computer Aided Chemical Engineering</i> , 2016, , 883-888.	0.3	1

#	ARTICLE	IF	CITATIONS
37	Long-term planning and retrofitting of supply and distribution chains with decaying performance. <i>Computer Aided Chemical Engineering</i> , 2016, 38, 823-828.	0.3	0
38	Systematic approach for the life cycle multi-objective optimization of buildings combining objective reduction and surrogate modeling. <i>Energy and Buildings</i> , 2016, 130, 506-518.	3.1	38
39	An optimization model for the long-term planning of energy distribution networks. , 2016, , .		0
40	Enhancing the μ -constraint method through the use of objective reduction and random sequences: Application to environmental problems. <i>Computers and Chemical Engineering</i> , 2016, 87, 36-48.	2.0	23
41	On the use of filters to facilitate the post-optimal analysis of the Pareto solutions in multi-objective optimization. <i>Computers and Chemical Engineering</i> , 2015, 74, 48-58.	2.0	38
42	Combined use of MILP and multi-linear regression to simplify LCA studies. <i>Computers and Chemical Engineering</i> , 2015, 82, 34-43.	2.0	29
43	Multi-stage linear programming model for optimizing cropping plan decisions under the new Common Agricultural Policy. <i>Land Use Policy</i> , 2015, 48, 515-524.	2.5	65
44	Global optimization of hybrid kinetic/FBA models via outer-approximation. <i>Computers and Chemical Engineering</i> , 2015, 72, 325-333.	2.0	21
45	Multiobjective optimization under uncertainty of the economic and life-cycle environmental performance of industrial processes. <i>AIChE Journal</i> , 2014, 60, 2098-2121.	1.8	24
46	Identifying the Preferred Subset of Enzymatic Profiles in Nonlinear Kinetic Metabolic Models via Multiobjective Global Optimization and Pareto Filters. <i>PLoS ONE</i> , 2012, 7, e43487.	1.1	12
47	Deterministic global optimization algorithm based on outer approximation for the parameter estimation of nonlinear dynamic biological systems. <i>BMC Bioinformatics</i> , 2012, 13, 90.	1.2	31
48	On the use of Principal Component Analysis for reducing the number of environmental objectives in multi-objective optimization: Application to the design of chemical supply chains. <i>Chemical Engineering Science</i> , 2012, 69, 146-158.	1.9	69
49	A Spatial Branch-and-Bound Framework for the Global Optimization of Kinetic Models of Metabolic Networks. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 5225-5238.	1.8	19
50	Deterministic global optimization of kinetic models of metabolic networks: outer approximation vs. spatial branch and bound. <i>Computer Aided Chemical Engineering</i> , 2011, 29, 582-586.	0.3	0
51	Steady-state global optimization of metabolic non-linear dynamic models through recasting into power-law canonical models. <i>BMC Systems Biology</i> , 2011, 5, 137.	3.0	21
52	Optimization and evolution in metabolic pathways: Global optimization techniques in Generalized Mass Action models. <i>Journal of Biotechnology</i> , 2010, 149, 141-153.	1.9	32
53	Outer approximation-based algorithm for biotechnology studies in systems biology. <i>Computers and Chemical Engineering</i> , 2010, 34, 1719-1730.	2.0	13
54	A global optimization strategy to identify quantitative design principles for gene expression in yeast adaptation to heat shock. <i>Computer Aided Chemical Engineering</i> , 2009, 26, 1045-1050.	0.3	2

#	ARTICLE	IF	CITATIONS
55	An Outer Approximation Algorithm for the Global Optimization of Regulated Metabolic Systems. Computer Aided Chemical Engineering, 2009, , 1707-1712.	0.3	0