Fernando Israel GÃ³mez Castro

List of Publications by Year
in descending order

85	1,260	394286 19	414303 32
papers	citations	h-index	g-index

86	86	86	1019
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multiobjective optimization of the supply chain for the production of biomass-based fuels and high-value added products in Mexico. Computers and Chemical Engineering, 2022, 157, 107598.	2.0	3
2	Synthesis and intensification of a biorefinery to produce renewable aviation fuel, biofuels, bioenergy and chemical products from Jatropha Curcas fruit. IET Renewable Power Generation, 2022, 16, 2988-3008.	1.7	8
3	Partial energy integration between biofuels production processes: Effect on costs, CO2 emissions and process safety. Chemical Engineering Research and Design, 2022, 159, 918-930.	2.7	6
4	Optimal control of a rate-based modelled batch distillation column: Initialization strategy. Computers and Chemical Engineering, 2022, , 107811.	2.0	0
5	Production of biodiesel: From the oil to the engine. , 2022, , 109-156.		0
6	Biomass: The driver for sustainable development. , 2022, , 1-23.		2
7	Production of renewable aviation fuel from microalgae. , 2022, , 639-664.		3
8	Production of biodiesel with supercritical ethanol: Compromise between safety and costs. Chemical Engineering Research and Design, 2022, 184, 79-89.	2.7	5
9	Advanced biorefineries for the production of renewable aviation fuel. , 2022, , 103-124.		1
10	Optimization of the supply chain for the production of biomass-based fuels and high-added value products in Mexico. Computers and Chemical Engineering, 2021, 145, 107181.	2.0	9
11	Intensification of the alcohol-to-jet process to produce renewable aviation fuel. Chemical Engineering and Processing: Process Intensification, 2021, 160, 108270.	1.8	28
12	Modelling, simulation and intensification of the hydroprocessing of chicken fat to produce renewable aviation fuel. Chemical Engineering and Processing: Process Intensification, 2021, 159, 108250.	1.8	17
13	Production processes for the conversion of triglyceride feedstock. , 2021, , 55-91.		0
14	Biojet fuel: Driving the aviation sector to sustainability. , 2021, , 1-31.		2
15	Production processes from lignocellulosic feedstock. , 2021, , 129-169.		4
16	Production processes for the conversion of sugar and starchy feedstock. , 2021, , 93-127.		0
17	Supply chain for the production of biojet fuel. , 2021, , 201-240.		2
18	Process intensification and integration in the production of biojet fuel. , 2021, , 171-199.		0

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19	Modelling and simulation of a multiple feedstock integrated biorefinery for the production of aviation biofuel and other biofuels. Computer Aided Chemical Engineering, 2021, , 1885-1890.	0.3	2
20	Acetone, Butanol, Ethanol and, Xylitol Production Through a Biorefinery Platform: An Experimental & Simulation Approach. Waste and Biomass Valorization, 2021, 12, 4915-4930.	1.8	6
21	Comparison of the performance of different metaheuristic methods for the optimization of shell-and-tube heat exchangers. Computers and Chemical Engineering, 2021, 152, 107403.	2.0	13
22	The integration of pelletized agricultural residues into electricity grid: Perspectives from the human, environmental and economic aspects. Journal of Cleaner Production, 2021, 321, 128932.	4.6	8
23	The future trends in the production of biojet fuel. , 2021, , 241-254.		2
24	Initialization strategy for the dynamic optimization of a batch distillation column with a rate-based model. Computer Aided Chemical Engineering, 2021, , 1189-1194.	0.3	1
25	Rigorous Modelling and Simulation of the Mass transfer on the Trays of a Pilot Scale Distillation column. Computer Aided Chemical Engineering, 2020, , 13-18.	0.3	1
26	Development of a Virtual Environment for the Rigorous Design and Optimization of Shell-and-tube heat Exchangers. Computer Aided Chemical Engineering, 2020, , 19-24.	0.3	5
27	Supply chain optimization for the production of biofuels and bioproducts from lignocellulosic biomass in Mexico. Computer Aided Chemical Engineering, 2020, 48, 1339-1344.	0.3	2
28	Modelling and Simulation of the Conversion of Chicken Fat to Produce Renewable Aviation Fuel through the Hydrotreating Process. Computer Aided Chemical Engineering, 2020, , 1399-1404.	0.3	1
29	A novel approach to identify hazards in non-conventional/intensified biofuels production processes. Chemical Engineering and Processing: Process Intensification, 2020, 157, 108139.	1.8	8
30	Development of a mass transfer model for the rate-based simulation of a batch distillation column. Computers and Chemical Engineering, 2020, 140, 106981.	2.0	7
31	Development of a biorefinery scheme to produce biofuels from waste cooking oil. Computer Aided Chemical Engineering, 2019, , 289-294.	0.3	6
32	Recovery of Cobalt from Spent Lithium-Ion Mobile Phone Batteries Using Liquidâ€“Liquid Extraction. Batteries, 2019, 5, 44.	2.1	25
33	Alternatives for the Purification of the Blend Butanol/Ethanol from an Acetone/Butanol/Ethanol Fermentation Effluent. Chemical Engineering and Technology, 2019, 42, 1088-1100.	0.9	11
34	Synthesis of mass exchange networks: A novel mathematical programming approach. Computers and Chemical Engineering, 2018, 115, 226-232.	2.0	13
35	Optimization of a solar collector with evacuated tubes using the simulated annealing and computational fluid dynamics. Energy Conversion and Management, 2018, 166, 343-355.	4.4	22
36	Intensification of the hydrotreating process to produce renewable aviation fuel through reactive distillation. Chemical Engineering and Processing: Process Intensification, 2018, 124, 122-130.	1.8	29

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37	Dynamic Performance of a Complex Distillation System to Separate a Fiveâ€Component Hydrocarbon Mixture. Chemical Engineering and Technology, 2018, 41, 2053-2065.	0.9	5
38	Optimal synthesis of mass exchange networks through a state-task representation superstructure. Computer Aided Chemical Engineering, 2018, , 331-336.	0.3	3
39	Modeling, simulation and intensification of hydroprocessing of micro-algae oil to produce renewable aviation fuel. Clean Technologies and Environmental Policy, 2018, 20, 1589-1598.	2.1	27
40	Design of a low-cost process for the production of biodiesel using waste oil as raw material. Computer Aided Chemical Engineering, 2018, , 1529-1534.	0.3	7
41	Feasibility of energy integration for high-pressure biofuels production processes. Computer Aided Chemical Engineering, 2018, , 1523-1528.	0.3	2
42	Feasibility study of using reactive distillation for the production of renewable aviation fuel. Computer Aided Chemical Engineering, 2018, , 639-644.	0.3	2
43	Performance of a gasoline engine powered by a mixture of ethanol and n-butanol. Clean Technologies and Environmental Policy, 2018, 20, 1929-1937.	2.1	9
44	A framework for optimised sustainable solvent mixture and separation process design. Computer Aided Chemical Engineering, 2018, 43, 755-760.	0.3	2
45	Hydrotreating of Triglyceride Feedstock to Produce Renewable Aviation Fuel. Recent Innovations in Chemical Engineering, 2018, 11, 77-89.	0.2	4
46	Hydrodynamic feasibility of the production of biodiesel fuel in a high-pressure reactive distillation column. Chemical Engineering and Processing: Process Intensification, 2017, 112, 31-37.	1.8	7
47	A review on the production processes of renewable jet fuel. Renewable and Sustainable Energy Reviews, 2017, 79, 709-729.	8.2	223
48	10. Process synthesis and intensification by integration between process design and control. , 2017, , 370-404.		0
49	Mathematical optimization of a supply chain for the production of fuel pellets from residual biomass. Clean Technologies and Environmental Policy, 2017, 19, 721-734.	2.1	11
50	Rate-based hydrodynamics and reaction performance of a high-pressure reactive distillation column for the production of biodiesel fuel. Computer Aided Chemical Engineering, 2017, , 103-108.	0.3	0
51	Process integration for the supercritical production of biodiesel and the production of lignocellulosic bioethanol. Computer Aided Chemical Engineering, 2017, 40, 931-936.	0.3	5
52	Energy Integration and Optimization of the Separation Section in a Hydrotreating Process for the Production of Biojet Fuel. Computer Aided Chemical Engineering, 2017, 40, 661-666.	0.3	3
53	A Framework for an Optimized Sustainable Product and Process Design: Acetone-Butanol-Ethanol Separation and Purification. Computer Aided Chemical Engineering, 2017, 40, 697-702.	0.3	4
54	Modelling of the hydrotreating process to produce renewable aviation fuel from micro-algae oil. Computer Aided Chemical Engineering, 2017, 40, 655-660.	0.3	10

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55	Purification of Bioethanol from a Fermentation Process: Alternatives for Dehydration. Computer Aided Chemical Engineering, 2016, 38, 373-378.	0.3	11
56	Energy consumption maps for quaternary distillation sequences. Computer Aided Chemical Engineering, 2016, 38, 121-126.	0.3	2
57	Energy Integration of a Hydrotreatment Process for Sustainable Biojet Fuel Production. Industrial & Engineering Chemistry Research, 2016, 55, 8165-8175.	1.8	29
58	Energy integration of a hydrotreating process for the production of biojet fuel. Computer Aided Chemical Engineering, 2016, 38, 127-132.	0.3	6
59	Dynamic behavior of a multi-tasking reactive distillation column for production of silane, dichlorosilane and monochlorosilane. Chemical Engineering and Processing: Process Intensification, 2016, 108, 125-138.	1.8	23
60	Design of a Multitask Reactive Distillation with Intermediate Heat Exchangers for the Production of Silane and Chlorosilane Derivates. Industrial & Engineering Chemistry Research, 2016, 55, 10968-10977.	1.8	15
61	Controllability Analysis of Distillation Sequences for the Separation of Bioâ€Jet Fuel and Green Diesel Fractions. Chemical Engineering and Technology, 2016, 39, 2273-2283.	0.9	13
62	Petlyuk Columns in Multicomponent Distillation Trains: Effect of Their Location on the Separation of Hydrocarbon Mixtures. Chemical Engineering and Technology, 2016, 39, 2207-2216.	0.9	12
63	Simultaneous energy integration and intensification of the hydrotreating process to produce biojet fuel from jatropha curcas. Chemical Engineering and Processing: Process Intensification, 2016, 110, 134-145.	1.8	43
64	A comparative simulation study of power generation plants involving chemical looping combustion systems. Computers and Chemical Engineering, 2016, 84, 434-445.	2.0	21
65	Optimization of a reactive distillation process with intermediate condensers for silane production. Computers and Chemical Engineering, 2015, 78, 85-93.	2.0	19
66	Design of non-equilibrium stage separation systems by a stochastic optimization approach for a class of mixtures. Chemical Engineering and Processing: Process Intensification, 2015, 88, 58-69.	1.8	9
67	Analysis of alternative non-catalytic processes for the production of biodiesel fuel. Clean Technologies and Environmental Policy, 2015, 17, 2041-2054.	2.1	13
68	Mechanical design and hydrodynamic analysis of sieve trays in a dividing wall column for a hydrocarbon mixture. Chemical Engineering and Processing: Process Intensification, 2015, 97, 55-65.	1.8	12
69	Intensification of a hydrotreating process to produce biojet fuel using thermally coupled distillation. Chemical Engineering and Processing: Process Intensification, 2015, 88, 29-36.	1.8	41
70	Mechanical Design and Hydraulic Analysis of Sieve Trays in Dividing Wall Columns. Computer Aided Chemical Engineering, 2014, 33, 1375-1380.	0.3	1
71	Energy Minimization in Cryogenic Distillation Columns Through Intermediate Side Heat Exchangers. Computer Aided Chemical Engineering, 2014, 33, 1501-1506.	0.3	5
72	Process control analysis for intensified bioethanol separation systems. Chemical Engineering and Processing: Process Intensification, 2014, 75, 119-125.	1.8	27

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73	Optimal design of cryogenic distillation columns with side heat pumps for the propylene/propane separation. Chemical Engineering and Processing: Process Intensification, 2014, 82, 112-122.	1.8	45
74	Analysis of Dynamic Performance for Multiple Dividing Wall Distillation Columns. Industrial & Engineering Chemistry Research, 2013, 52, 9922-9929.	1.8	18
75	Simulation and optimization of a biojet fuel production process. Computer Aided Chemical Engineering, 2013, 32, 13-18.	0.3	19
76	Design, optimization and controllability of an alternative process based on extractive distillation for an ethaneâ€“carbon dioxide mixture. Chemical Engineering and Processing: Process Intensification, 2013, 74, 55-68.	1.8	32
77	Hybrid Distillation/Melt Crystallization Process Using Thermally Coupled Arrangements: Optimization with evolutive algorithms. Chemical Engineering and Processing: Process Intensification, 2013, 67, 25-38.	1.8	14
78	Simulation study on biodiesel production by reactive distillation with methanol at high pressure and temperature: Impact on costs and pollutant emissions. Computers and Chemical Engineering, 2013, 52, 204-215.	2.0	38
79	Simplified Methodology for the Design and Optimization of Thermally Coupled Reactive Distillation Systems. Industrial & Engineering Chemistry Research, 2012, 51, 11717-11730.	1.8	16
80	Optimal design and control of trains of dividing wall columns for the separation of petrochemical mixtures. Computer Aided Chemical Engineering, 2012, 30, 742-746.	0.3	3
81	Dehydration of Bioethanol by Hybrid Process Liquidâ€“Liquid Extraction/Extractive Distillation. Industrial & Engineering Chemistry Research, 2012, 51, 5847-5855.	1.8	73
82	Optimal Designs of Multiple Dividing Wall Columns. Chemical Engineering and Technology, 2011, 34, 2051-2058.	0.9	33
83	Esterification of fatty acids in a thermally coupled reactive distillation column by the two-step supercritical methanol method. Chemical Engineering Research and Design, 2011, 89, 480-490.	2.7	38
84	Feasibility study of a thermally coupled reactive distillation process for biodiesel production. Chemical Engineering and Processing: Process Intensification, 2010, 49, 262-269.	1.8	49
85	Injection parameters study for a polypropylene probe used on tension test. Journal of Technology and Innovation, 0, , 1-6.	0.0	1