

Luis Puigjaner

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/542399/publications.pdf>

Version: 2024-02-01

266
papers

6,248
citations

57631

44
h-index

95083

68
g-index

291
all docs

291
docs citations

291
times ranked

3759
citing authors

#	ARTICLE	IF	CITATIONS
1	Targeting and design methodology for reduction of fuel, power and CO ₂ on total sites. Applied Thermal Engineering, 1997, 17, 993-1003.	3.0	353
2	Multiobjective supply chain design under uncertainty. Chemical Engineering Science, 2005, 60, 1535-1553.	1.9	261
3	Kinetics of Biomass Pyrolysis: A Reformulated Three-Parallel-Reactions Model. Industrial & Engineering Chemistry Research, 2003, 42, 434-441.	1.8	242
4	Incorporating environmental impacts and regulations in a holistic supply chains modeling: An LCA approach. Computers and Chemical Engineering, 2009, 33, 1747-1759.	2.0	170
5	Fluidized-bed co-gasification of residual biomass/poor coal blends for fuel gas production. Fuel, 2000, 79, 1317-1326.	3.4	169
6	Pyrolysis of blends of biomass with poor coals. Fuel, 1996, 75, 412-418.	3.4	125
7	Simultaneous optimization of process operations and financial decisions to enhance the integrated planning/scheduling of chemical supply chains. Computers and Chemical Engineering, 2006, 30, 421-436.	2.0	97
8	Performance assessment of a novel fault diagnosis system based on support vector machines. Computers and Chemical Engineering, 2009, 33, 244-255.	2.0	97
9	Risk Management in the Scheduling of Batch Plants under Uncertain Market Demand. Industrial & Engineering Chemistry Research, 2004, 43, 741-750.	1.8	95
10	Use of neural networks and expert systems to control a gas/solid sorption chilling machine. International Journal of Refrigeration, 1999, 22, 59-66.	1.8	92
11	MIP-based decomposition strategies for large-scale scheduling problems in multiproduct multistage batch plants: A benchmark scheduling problem of the pharmaceutical industry. European Journal of Operational Research, 2010, 207, 644-655.	3.5	88
12	A holistic framework for short-term supply chain management integrating production and corporate financial planning. International Journal of Production Economics, 2007, 106, 288-306.	5.1	83
13	Control and optimization of the divided wall column. Chemical Engineering and Processing: Process Intensification, 1999, 38, 549-562.	1.8	82
14	Conceptual model and evaluation of generated power and emissions in an IGCC plant. Energy, 2009, 34, 1721-1732.	4.5	82
15	Simultaneous production and logistics operations planning in semicontinuous food industries. Omega, 2012, 40, 634-650.	3.6	79
16	Design of regional and sustainable bio-based networks for electricity generation using a multi-objective MILP approach. Energy, 2012, 44, 79-95.	4.5	77
17	Incorporating heat integration in batch process scheduling. Applied Thermal Engineering, 2003, 23, 1743-1762.	3.0	76
18	Optimisation of water use in batch process industries. Computers and Chemical Engineering, 1999, 23, 1427-1437.	2.0	75

#	ARTICLE	IF	CITATIONS
19	Capturing dynamics in integrated supply chain management. Computers and Chemical Engineering, 2008, 32, 2582-2605.	2.0	73
20	Removal of tar by secondary air in fluidised bed gasification of residual biomass and coal. Fuel, 1999, 78, 1703-1709.	3.4	68
21	Controllability of Different Multicomponent Distillation Arrangements. Industrial & Engineering Chemistry Research, 2003, 42, 1773-1782.	1.8	66
22	Production Planning and Scheduling of Parallel Continuous Processes with Product Families. Industrial & Engineering Chemistry Research, 2011, 50, 1369-1378.	1.8	65
23	Kinetic Study of the Pyrolysis of Waste Wood. Industrial & Engineering Chemistry Research, 1998, 37, 4290-4295.	1.8	64
24	Optimal Production Scheduling and Lot-Sizing in Dairy Plants: The Yogurt Production Line. Industrial & Engineering Chemistry Research, 2010, 49, 701-718.	1.8	63
25	Further Applications of a Revisited Summative Model for Kinetics of Biomass Pyrolysis. Industrial & Engineering Chemistry Research, 2004, 43, 901-906.	1.8	60
26	A Simulation-Based Optimization Framework for Parameter Optimization of Supply-Chain Networks. Industrial & Engineering Chemistry Research, 2006, 45, 3133-3148.	1.8	60
27	Thermogravimetric study of the pyrolysis of waste wood. Thermochimica Acta, 1998, 320, 161-167.	1.2	57
28	Magnetically stabilized fluidization: modelling and application to mixtures. Powder Technology, 1985, 44, 57-62.	2.1	55
29	Batch production and preventive maintenance scheduling under equipment failure uncertainty. Computers and Chemical Engineering, 1997, 21, 1157-1168.	2.0	54
30	On-line fault diagnosis system support for reactive scheduling in multipurpose batch chemical plants. Computers and Chemical Engineering, 2001, 25, 829-837.	2.0	53
31	Combinatorial framework for effective scheduling of multipurpose batch plants. AIChE Journal, 2002, 48, 2557-2570.	1.8	53
32	Flexible design& planning of supply chain networks. AIChE Journal, 2009, 55, 1736-1753.	1.8	52
33	Considering environmental assessment in an ontological framework for& enterprise sustainability. Journal of Cleaner Production, 2013, 47, 149-164.	4.6	52
34	Real-Time Evolution for On-line Optimization of Continuous Processes. Industrial & Engineering Chemistry Research, 2002, 41, 1815-1825.	1.8	50
35	Towards an integrated framework for supply chain management in the batch chemical process industry. Computers and Chemical Engineering, 2008, 32, 650-670.	2.0	50
36	Addressing Robustness in Scheduling Batch Processes with Uncertain Operation Times. Industrial & Engineering Chemistry Research, 2005, 44, 1524-1534.	1.8	49

#	ARTICLE	IF	CITATIONS
37	Global strategy for energy and waste analysis in scheduling and planning of multiproduct batch chemical processes. Computers and Chemical Engineering, 1996, 20, 853-868.	2.0	48
38	Predicting the minimum fluidization velocity of polydisperse mixtures of scrap-wood particles. Powder Technology, 2000, 111, 245-251.	2.1	48
39	An agent-based approach for supply chain retrofitting under uncertainty. Computers and Chemical Engineering, 2007, 31, 722-735.	2.0	48
40	An Efficient Mixed-Integer Linear Programming Scheduling Framework for Addressing Sequence-Dependent Setup Issues in Batch Plants. Industrial & Engineering Chemistry Research, 2009, 48, 6346-6357.	1.8	48
41	Rationalizing the water use in the batch process industry. Computers and Chemical Engineering, 1997, 21, S971-S976.	2.0	47
42	Simultaneous fault diagnosis in chemical plants using a multilabel approach. AIChE Journal, 2007, 53, 2871-2884.	1.8	47
43	HIGH TEMPERATURE INCIPIENT FLUIDIZATION IN MONO AND POLYDISPERSE SYSTEMS. Chemical Engineering Communications, 1986, 41, 121-132.	1.5	46
44	Enhancing Corporate Value in the Optimal Design of Chemical Supply Chains. Industrial & Engineering Chemistry Research, 2007, 46, 7739-7757.	1.8	46
45	Material Transfer Operations in Batch Scheduling. A Critical Modeling Issue. Industrial & Engineering Chemistry Research, 2008, 47, 7721-7732.	1.8	46
46	Study of the divided wall column controllability: influence of design and operation. Computers and Chemical Engineering, 2000, 24, 901-907.	2.0	44
47	Analysis of different control possibilities for the divided wall column: feedback diagonal and dynamic matrix control. Computers and Chemical Engineering, 2001, 25, 859-866.	2.0	43
48	Towards an ontological infrastructure for chemical batch process management. Computers and Chemical Engineering, 2010, 34, 668-682.	2.0	43
49	Efficient mathematical frameworks for detailed production scheduling in food processing industries. Computers and Chemical Engineering, 2012, 42, 206-216.	2.0	43
50	Planning, scheduling and budgeting value-added chains. Computers and Chemical Engineering, 2004, 28, 45-61.	2.0	40
51	Kinetic behaviour of iron oxide sorbent in hot gas desulfurization. Fuel, 2005, 84, 1105-1109.	3.4	40
52	Scheduling and control decision-making under an integrated information environment. Computers and Chemical Engineering, 2011, 35, 774-786.	2.0	39
53	Costs for Rescheduling Actions: A Critical Issue for Reducing the Gap between Scheduling Theory and Practice. Industrial & Engineering Chemistry Research, 2008, 47, 8785-8795.	1.8	38
54	Resource-constrained production planning in semicontinuous food industries. Computers and Chemical Engineering, 2011, 35, 2929-2944.	2.0	38

#	ARTICLE	IF	CITATIONS
55	Ontological framework for enterprise-wide integrated decision-making at operational level. Computers and Chemical Engineering, 2012, 42, 217-234.	2.0	38
56	Integrating Budgeting Models into Scheduling and Planning Models for the Chemical Batch Industry. Industrial & Engineering Chemistry Research, 2003, 42, 6125-6134.	1.8	37
57	Addressing the Design of Chemical Supply Chains under Demand Uncertainty. Industrial & Engineering Chemistry Research, 2006, 45, 7566-7581.	1.8	37
58	Inhibition by product in the liquid-phase hydration of isobutene to tert-butyl alcohol: kinetics and equilibrium studies. Industrial & Engineering Chemistry Research, 1988, 27, 2224-2231.	1.8	36
59	Slow Pyrolysis of Woody Residues and an Herbaceous Biomass Crop: A Kinetic Study. Industrial & Engineering Chemistry Research, 2005, 44, 6650-6660.	1.8	36
60	Life Cycle Assessment Coupled with Process Simulation under Uncertainty for Reduced Environmental Impact: Application to Phosphoric Acid Production. Industrial & Engineering Chemistry Research, 2008, 47, 8286-8300.	1.8	36
61	Method to incorporate energy integration considerations in multiproduct batch processes. Computers and Chemical Engineering, 1994, 18, 1043-1055.	2.0	35
62	Neural network based framework for fault diagnosis in batch chemical plants. Computers and Chemical Engineering, 2000, 24, 777-784.	2.0	35
63	Decision support framework for coordinated production and transport scheduling in SCM. Computers and Chemical Engineering, 2008, 32, 1206-1224.	2.0	35
64	Optimization of pre-treatment selection for the use of woody waste in co-combustion plants. Chemical Engineering Research and Design, 2014, 92, 1539-1562.	2.7	35
65	Instrumentation design based on optimal Kalman filtering. Journal of Process Control, 2005, 15, 629-638.	1.7	34
66	Parameter estimation with genetic algorithm in control of fed-batch reactors. Chemical Engineering and Processing: Process Intensification, 2002, 41, 303-309.	1.8	32
67	Integration of Principal Component Analysis and Fuzzy Logic Systems for Comprehensive Process Fault Detection and Diagnosis. Industrial & Engineering Chemistry Research, 2006, 45, 1739-1750.	1.8	32
68	Modelling and simulation of a tyre gasification plant for synthesis gas production. Computer Aided Chemical Engineering, 2006, 21, 1771-1776.	0.3	32
69	Production Scheduling in Multiproduct Multistage Semicontinuous Food Processes. Industrial & Engineering Chemistry Research, 2011, 50, 6316-6324.	1.8	32
70	Estimating copolymer compositions from on-line headspace analysis in emulsion polymerization. Industrial & Engineering Chemistry Research, 1987, 26, 65-72.	1.8	31
71	Fault diagnosis support system for complex chemical plants. Computers and Chemical Engineering, 2001, 25, 151-160.	2.0	31
72	Design optimisation of constructed wetlands for wastewater treatment. Resources, Conservation and Recycling, 2003, 37, 193-204.	5.3	31

#	ARTICLE	IF	CITATIONS
73	A combined scheduling/reactive scheduling strategy to minimize the effect of process operations uncertainty in batch plants. Computers and Chemical Engineering, 1996, 20, S1263-S1268.	2.0	29
74	Rationalizing the water use in the batch process industry. Computers and Chemical Engineering, 1997, 21, S971-S976.	2.0	29
75	Batch and semibatch reactor performance for an exothermic reaction. Chemical Engineering and Processing: Process Intensification, 2000, 39, 141-148.	1.8	28
76	Management of Pricing Policies and Financial Risk as a Key Element for Short Term Scheduling Optimization. Industrial & Engineering Chemistry Research, 2005, 44, 557-575.	1.8	28
77	Multiobjective optimization of multiproduct batch plants scheduling under environmental and economic concerns. AIChE Journal, 2011, 57, 2766-2782.	1.8	28
78	Proactive approach to address the uncertainty in short-term scheduling. Computers and Chemical Engineering, 2008, 32, 1689-1706.	2.0	27
79	Prospective and perspective review in integrated supply chain modelling for the chemical process industry. Current Opinion in Chemical Engineering, 2012, 1, 430-445.	3.8	27
80	Combinatorial technique for short term scheduling of multipurpose batch plants based on schedule-graph representation. Computers and Chemical Engineering, 1998, 22, S847-S850.	2.0	26
81	Linking marketing and supply chain models for improved business strategic decision support. Computers and Chemical Engineering, 2010, 34, 2107-2117.	2.0	26
82	Optimal budget and cash flows during retrofitting periods in batch chemical process industries. International Journal of Production Economics, 2005, 95, 359-372.	5.1	25
83	Integration of enterprise levels based on an ontological framework. Chemical Engineering Research and Design, 2013, 91, 1542-1556.	2.7	25
84	Scheduling intermediate storage multipurpose batch plants using the S-graph. AIChE Journal, 2004, 50, 403-417.	1.8	24
85	Instrumentation Design and Upgrade for Principal Components Analysis Monitoring. Industrial & Engineering Chemistry Research, 2004, 43, 2150-2159.	1.8	24
86	A software tool for helping in decision-making about water management in batch process industries. Waste Management, 2000, 20, 645-649.	3.7	23
87	Economic evaluation of bio-based supply chains with CO ₂ capture and utilisation. Computers and Chemical Engineering, 2017, 102, 213-225.	2.0	23
88	General approach and tool for the scheduling of complex production systems. Computers and Chemical Engineering, 1998, 22, S395-S402.	2.0	22
89	Integrated game-theory modelling for multi enterprise-wide coordination and collaboration under uncertain competitive environment. Computers and Chemical Engineering, 2017, 98, 209-235.	2.0	22
90	Estimation of copolymer composition from online headspace analysis in batch emulsion polymerization. Chemical Engineering Science, 1986, 41, 1039-1044.	1.9	21

#	ARTICLE	IF	CITATIONS
91	Towards a Carbon-Neutral Energy Sector: Opportunities and Challenges of Coordinated Bioenergy Supply Chains-A PSE Approach. <i>Energies</i> , 2015, 8, 5613-5660.	1.6	21
92	Optimal Offer Proposal Policy in an Integrated Supply Chain Management Environment. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 7405-7419.	1.8	20
93	Estimation of Liquid-Liquid Equilibrium for a Quaternary System Using the GMDH Algorithm. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 2129-2134.	1.8	20
94	Optimal integration of third-parties in a coordinated supply chain management environment. <i>Computers and Chemical Engineering</i> , 2016, 86, 48-61.	2.0	20
95	Focusing in by-product recovery and waste minimization in batch production scheduling. <i>Computers and Chemical Engineering</i> , 1994, 18, S271-S275.	2.0	19
96	A New Framework for Batch Process Optimization Using the Flexible Recipe. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 370-379.	1.8	19
97	Metaheuristic multiobjective optimisation approach for the scheduling of multiproduct batch chemical plants. <i>Journal of Cleaner Production</i> , 2008, 16, 233-244.	4.6	19
98	Advanced simulation environment for clean power production in IGCC plants. <i>Computers and Chemical Engineering</i> , 2011, 35, 1501-1520.	2.0	19
99	Supply chain planning and scheduling integration using Lagrangian decomposition in a knowledge management environment. <i>Computers and Chemical Engineering</i> , 2015, 72, 52-67.	2.0	19
100	Dynamic Data Reconciliation Based on Wavelet Trend Analysis. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 4323-4335.	1.8	18
101	Systematic approach for the design of sustainable supply chains under quality uncertainty. <i>Energy Conversion and Management</i> , 2017, 149, 722-737.	4.4	18
102	A comprehensive approach to production planning in multipurpose batch plants. <i>Computers and Chemical Engineering</i> , 1989, 13, 1031-1047.	2.0	17
103	Optimal Reactive Scheduling of Manufacturing Plants with Flexible Batch Recipes. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 6273-6283.	1.8	17
104	Tracking the Dynamics of the Supply Chain for Enhanced Production Sustainability. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 9556-9570.	1.8	17
105	Scenario-based dynamic negotiation for the coordination of multi-enterprise supply chains under uncertainty. <i>Computers and Chemical Engineering</i> , 2016, 91, 445-470.	2.0	17
106	Effects of equipment failure uncertainty in batch production scheduling. <i>Computers and Chemical Engineering</i> , 1995, 19, 565-570.	2.0	16
107	Process integration with combined heat and power (CHP). <i>Applied Thermal Engineering</i> , 1997, 17, 1015-1034.	3.0	16
108	Prospects for integrated management and control of total sites in the batch manufacturing industry. <i>Computers and Chemical Engineering</i> , 1998, 22, 87-107.	2.0	16

#	ARTICLE	IF	CITATIONS
109	Identification of a pilot scale fluidised-bed coal gasification unit by using neural networks. Applied Thermal Engineering, 2000, 20, 1561-1575.	3.0	16
110	Advanced enterprise resource management systems for the batch industry. The TicTacToe algorithm. Computers and Chemical Engineering, 2001, 25, 517-538.	2.0	16
111	Supply Chain Management through Dynamic Model Parameters Optimization. Industrial & Engineering Chemistry Research, 2006, 45, 1708-1721.	1.8	16
112	On-line process optimization: parameter tuning for the real time evolution (RTE) approach. Computers and Chemical Engineering, 2004, 28, 661-672.	2.0	15
113	Design and Retrofit of Reliable Sensor Networks. Industrial & Engineering Chemistry Research, 2004, 43, 8026-8036.	1.8	15
114	Addressing the scheduling of chemical supply chains under demand uncertainty. AIChE Journal, 2006, 52, 3864-3881.	1.8	15
115	Sequencing intermediate products: A practical solution for multipurpose production scheduling. Computers and Chemical Engineering, 1996, 20, S1137-S1142.	2.0	14
116	Enhancing sugar cane process performance through optimal production scheduling. Chemical Engineering and Processing: Process Intensification, 2007, 46, 198-209.	1.8	14
117	Process screening framework for the synthesis of process networks from a circular economy perspective. Resources, Conservation and Recycling, 2021, 164, 105147.	5.3	14
118	Environmental considerations in batch production scheduling. Computers and Chemical Engineering, 1995, 19, 651-656.	2.0	13
119	Using mathematical knowledge management to support integrated decision-making in the enterprise. Computers and Chemical Engineering, 2014, 66, 139-150.	2.0	13
120	An efficient and simplified solution to the predesign problem of multiproduct plants. Computers and Chemical Engineering, 1989, 13, 163-174.	2.0	12
121	An efficient uncertainty representation for the design of sustainable energy generation systems. Chemical Engineering Research and Design, 2018, 131, 144-159.	2.7	12
122	Solving Large-Scale Production Scheduling and Planning in the Process Industries. , 2019, , .		12
123	On-line process fault detection and diagnosis in plants with recycle. Computers and Chemical Engineering, 1999, 23, S219-S222.	2.0	11
124	Handling the increasing complexity of detailed batch process simulation and optimisation. Computers and Chemical Engineering, 1999, 23, S929-S943.	2.0	11
125	Managing risk through a flexible recipe framework. AIChE Journal, 2008, 54, 728-740.	1.8	11
126	Intraparticle mass transfer in the liquid-phase hydration of isobutene: effects of liquid viscosity and excess product. Industrial & Engineering Chemistry Research, 1990, 29, 1485-1492.	1.8	10

#	ARTICLE	IF	CITATIONS
127	Economic optimization of the water reuse network in batch process industries. Computers and Chemical Engineering, 1999, 23, S153-S156.	2.0	10
128	Batch distillation: simulation and experimental validation. Chemical Engineering and Processing: Process Intensification, 2004, 43, 1239-1252.	1.8	10
129	Statistical and simulation tools for designing an optimal blanketing system of a multiple-tank facility. Chemical Engineering Journal, 2009, 152, 122-132.	6.6	10
130	On the solution of the retrofitting problem for multiproduct batch/simicontinuous chemical plants. Computers and Chemical Engineering, 1989, 13, 483-490.	2.0	9
131	Integrated on line production and financial scheduling with intelligent autonomous agent based information system. Computers and Chemical Engineering, 1998, 22, S271-S277.	2.0	9
132	Fluidization of Waste-Wood Particles with Mechanical Agitation of the Bed. Industrial & Engineering Chemistry Research, 2001, 40, 393-397.	1.8	9
133	An Extended Formulation for the Flexible Short-Term Scheduling of Multiproduct Semicontinuous Plants. Industrial & Engineering Chemistry Research, 2009, 48, 2009-2019.	1.8	9
134	Completion times in multipurpose batch plants with set-up, transfer and clean-up times. Computers and Chemical Engineering, 1996, 20, S1143-S1148.	2.0	8
135	SCHEDULING OF CONTINUOUS PARALLEL LINES IN THE EVAPORATION SECTION OF SUGAR PLANTS. Chemical Engineering Communications, 2004, 191, 1121-1146.	1.5	8
136	Solubilities and enthalpies of absorption of isobutene into tert-butyl alcohol-water mixtures. Journal of Chemical & Engineering Data, 1987, 32, 169-171.	1.0	7
137	A trickle-bed process for hydration of isobutene to tert-butyl alcohol: A study of reactor performance. The Chemical Engineering Journal, 1988, 37, 43-52.	0.4	7
138	Batch production control in a computer integrated manufacturing environment. Journal of Process Control, 1994, 4, 281-290.	1.7	7
139	Supply chain monitoring: a statistical approach. Computer Aided Chemical Engineering, 2005, 20, 1375-1380.	0.3	7
140	A rigorous approach to coordinate production and transport scheduling in a multi-site system. Computer Aided Chemical Engineering, 2006, 21, 2171-2176.	0.3	7
141	Simultaneous fault diagnosis in chemical plants using support Vector Machines. Computer Aided Chemical Engineering, 2007, 24, 1253-1258.	0.3	7
142	Empowering financial tradeoff with joint financial and supply chain planning models. Mathematical and Computer Modelling, 2007, 46, 12-23.	2.0	7
143	A powerful improvement on the methodology for solving large-scale pipeline networks. Computers and Chemical Engineering, 1988, 12, 261-265.	2.0	6
144	Waste analysis and minimization in batch and semibatch reactor operation through dynamic simulation and neural networks. Computers and Chemical Engineering, 1998, 22, S977-S980.	2.0	6

#	ARTICLE	IF	CITATIONS
145	BATCH AND SEMIBATCH REACTORS MODELLING AND VALIDATION BASED ON ON-LINE pH MEASUREMENT. Chemical Engineering Communications, 2000, 178, 49-65.	1.5	6
146	Obtention of the Optimal Feeding Profile in a Fed-Batch Reactor Using Genetic Algorithms. Industrial & Engineering Chemistry Research, 2001, 40, 1488-1494.	1.8	6
147	Proposal To Speed Up the Implementation of an Abnormal Situation Management in the Chemical Process Industry. Industrial & Engineering Chemistry Research, 2002, 41, 817-824.	1.8	6
148	Decision-Making Strategy and Tool for Sensor Network Design and Retrofit. Industrial & Engineering Chemistry Research, 2004, 43, 1711-1722.	1.8	6
149	Extended Modeling Framework for Heat and Power Integration in Batch and Semi-continuous Processes. Chemical Product and Process Modeling, 2007, 2, .	0.5	6
150	An integrated framework for on-line supervised optimization. Computers and Chemical Engineering, 2007, 31, 401-409.	2.0	6
151	Enhancing dynamic data reconciliation performance through time delays identification. Chemical Engineering and Processing: Process Intensification, 2007, 46, 1251-1263.	1.8	6
152	Multi-Site Scheduling/Batching and Production Planning for Batch Process Industries. Computer Aided Chemical Engineering, 2009, 27, 2109-2114.	0.3	6
153	A Bi-Level Decomposition Methodology for Scheduling Batch Chemical Production Facilities. Computer Aided Chemical Engineering, 2009, 27, 681-686.	0.3	6
154	Multiobjective evolutionary optimization of batch process scheduling under environmental and economic concerns. AIChE Journal, 2013, 59, 429-444.	1.8	6
155	A new look at energy integration in multiproduct batch processes. Computers and Chemical Engineering, 1993, 17, S15-S20.	2.0	6
156	Modelling and simulation of styrene-acrylonitrile emulsion polymerization kinetics. The Chemical Engineering Journal, 1987, 34, 1-9.	0.4	5
157	Viscosities of aqueous tert-butyl alcohol solutions. Journal of Chemical & Engineering Data, 1991, 36, 55-57.	1.0	5
158	Enhanced modeling and integrated simulation of gasification and purification gas units targeted to clean power production. Computer Aided Chemical Engineering, 2008, , 793-798.	0.3	5
159	Enhancing Abnormal Events Management by the Use of Quantitative Process Hazards Analysis Results. Industrial & Engineering Chemistry Research, 2009, 48, 3921-3933.	1.8	5
160	An Efficient Mathematical Framework for Detailed Production Scheduling in Food Industries. Computer Aided Chemical Engineering, 2011, 29, 960-964.	0.3	5
161	Operational, Tactical and Strategical Integration for Enterprise Decision-Making. Computer Aided Chemical Engineering, 2012, , 397-401.	0.3	5
162	Flexible Batch Process and Plant Design Using Mixed-Logic Dynamic Optimization: Single-Product Plants. Industrial & Engineering Chemistry Research, 2014, 53, 17182-17199.	1.8	5

#	ARTICLE	IF	CITATIONS
163	Scenario-Based Price Negotiations vs. Game Theory in the Optimization of Coordinated Supply Chains. Computer Aided Chemical Engineering, 2015, 37, 1859-1864.	0.3	5
164	Optimization of process operations in the leather industry. Computers and Chemical Engineering, 1992, 16, S221-S228.	2.0	4
165	Use of neural networks for predicting the performance of discontinuous gas-solid chilling machines. Computers and Chemical Engineering, 1996, 20, S297-S302.	2.0	4
166	Improved batch process performance by evolutionary modelling. Computers in Industry, 1998, 36, 271-278.	5.7	4
167	Utilization of processing time windows to enhance planning and scheduling in short term multipurpose batch plants. Computers and Chemical Engineering, 2000, 24, 353-359.	2.0	4
168	Off-Line and On-Line Approach for Optimal Maintenance Management of Continuous Parallel Processes with Decreasing Performance. Industrial & Engineering Chemistry Research, 2003, 42, 1761-1772.	1.8	4
169	Financial risk control in a discrete event supply chain. Computer Aided Chemical Engineering, 2003, 14, 479-484.	0.3	4
170	On-line fault diagnosis support for real time evolution applied to multi-component distillation. Computer Aided Chemical Engineering, 2005, 20, 961-966.	0.3	4
171	Multi-objective optimization of dairy supply chain. Computer Aided Chemical Engineering, 2007, , 781-786.	0.3	4
172	A MILP Scheduling Model for Multi-stage Batch Plants. Computer Aided Chemical Engineering, 2009, , 369-374.	0.3	4
173	Managing financial risk in the coordination of supply chain and product development decisions. Computer Aided Chemical Engineering, 2009, 26, 1027-1032.	0.3	4
174	Using S-graph to address uncertainty in batch plants. Clean Technologies and Environmental Policy, 2010, 12, 105-115.	2.1	4
175	Decentralized Manufacturing Supply Chains Coordination under Uncertain Competitiveness. Procedia Engineering, 2015, 132, 942-949.	1.2	4
176	Knowledge Management to Support the Integration of Scheduling and Supply Chain Planning using Lagrangean Decomposition. Computer Aided Chemical Engineering, 2015, , 989-994.	0.3	4
177	Supervised Life-Cycle Assessment Using Automated Process Inventory Based on Process Recipes. ACS Sustainable Chemistry and Engineering, 2018, 6, 11246-11254.	3.2	4
178	Editorial: Perspectives of Chemicals Synthesis as a Green Alternative to Fossil Fuels. Frontiers in Energy Research, 2021, 9, .	1.2	4
179	Copolymer reactor operation for uniform product composition – analysis of continuous stirred-tank reactors. Chemical Engineering and Processing: Process Intensification, 1986, 20, 85-94.	1.8	3
180	Solution of integer optimization problems subjected to non-linear restrictions: An improved algorithm. Computers and Chemical Engineering, 1988, 12, 443-448.	2.0	3

#	ARTICLE	IF	CITATIONS
181	SOLVENT PRODUCTION ENHANCEMENT THROUGH MEDIUM OPTIMIZATION. Chemical Engineering Communications, 1989, 86, 145-158.	1.5	3
182	Management of financial and consumer satisfaction risks in supply chain design. Computer Aided Chemical Engineering, 2003, 14, 419-424.	0.3	3
183	Supply chain management through a combined simulation-optimisation approach. Computer Aided Chemical Engineering, 2005, , 1405-1410.	0.3	3
184	Fault diagnosis based on support vector machines and systematic comparison to existing approaches. Computer Aided Chemical Engineering, 2006, , 1209-1214.	0.3	3
185	Optimal Production Scheduling and Lot-sizing In Yoghurt Production Lines. Computer Aided Chemical Engineering, 2010, 28, 1153-1158.	0.3	3
186	Raw Materials Supply. Green Energy and Technology, 2011, , 23-54.	0.4	3
187	Strategic Planning of Biomass Supply Chain Networks for Co-combustion Plants. Computer Aided Chemical Engineering, 2015, , 453-474.	0.3	3
188	Building pharmacokinetic compartmental models using a superstructure approach. Computers and Chemical Engineering, 2017, 107, 92-99.	2.0	3
189	Integration of a multilevel control system in an ontological information environment. Computer Aided Chemical Engineering, 2011, 29, 648-652.	0.3	3
190	Plant design and optimization for the production of furfural from xylose solutions. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 687-693.	0.6	2
191	Modeling and experimental validation of both mass transfer and tray hydraulics in batch distillation. Computers and Chemical Engineering, 1996, 20, S575-S580.	2.0	2
192	Fault diagnosis system support for reactive scheduling in multipurpose batch chemical plants. Computer Aided Chemical Engineering, 2000, , 745-750.	0.3	2
193	Real Time Batch Process Optimization within the environment of the Flexible Recipe. Computer Aided Chemical Engineering, 2002, 10, 757-762.	0.3	2
194	Integrating pricing policies and risk management into scheduling of batch plants. Computer Aided Chemical Engineering, 2003, 15, 469-474.	0.3	2
195	Improving of wavelets filtering approaches. Computer Aided Chemical Engineering, 2005, 20, 1369-1374.	0.3	2
196	Closing the information loop in recipe-based batch production. Computer Aided Chemical Engineering, 2005, , 1381-1386.	0.3	2
197	A mathematical programming approach including flexible recipes to batch operation rescheduling. Computer Aided Chemical Engineering, 2006, 21, 1377-1382.	0.3	2
198	A novel continuous-time MILP approach for short-term scheduling of multipurpose pipeless batch plants. Computer Aided Chemical Engineering, 2007, 24, 595-600.	0.3	2

#	ARTICLE	IF	CITATIONS
199	Optimal location of gasification plants for electricity production in rural areas. Computer Aided Chemical Engineering, 2011, 29, 1809-1813.	0.3	2
200	Single- & Multi-site Production & Distribution Planning in Food Processing Industries. Computer Aided Chemical Engineering, 2012, , 1030-1034.	0.3	2
201	Mathematical Knowledge Management for Enterprise Decision Making. Computer Aided Chemical Engineering, 2013, , 637-642.	0.3	2
202	Sustainable Design and Operation of a Reactive Distillation System Used for the Production of Cosmetic Ingredients. Computer Aided Chemical Engineering, 2015, 36, 85-107.	0.3	2
203	ANSI/ISA 88-95 Standards Based-Approach for Improved Integration of Recipes and Operational Tasks Supported by Knowledge Management. Computer Aided Chemical Engineering, 2017, 40, 2335-2340.	0.3	2
204	Advanced Model Design Based on Intelligent System Characterization And Problem Definition. Computer Aided Chemical Engineering, 2019, 46, 1045-1050.	0.3	2
205	A Systematic Model for Process Development Activities to Support Process Intelligence. Processes, 2021, 9, 600.	1.3	2
206	Operations Research Ontology for the Integration of Analytic Methods and Transactional Data. Advances in Intelligent Systems and Computing, 2016, , 139-151.	0.5	2
207	SEGREGATION AND APPARENT MINIMUM FLUIDIZATION VELOCITY IN PARTICULATE FLUIDIZATION. Chemical Engineering Communications, 1983, 23, 125-136.	1.5	1
208	"Improved equation for the calculation of minimum fluidization velocity." Reply to comments. Industrial & Engineering Chemistry Research, 1987, 26, 634-635.	1.8	1
209	Using rate-based approach under consideration of different contacting regimes for multicomponent batch distillation simulation. Computers and Chemical Engineering, 1998, 22, S645-S648.	2.0	1
210	Minimising waste generation using neural networks based dynamic optimisation. Computers and Chemical Engineering, 1999, 23, S463-S466.	2.0	1
211	Fluidization of Scrap-Wood Materials: The Influence of the Degree of Thermal Decomposition on the Hydrodynamic Properties. Industrial & Engineering Chemistry Research, 1999, 38, 3115-3120.	1.8	1
212	Robust mixed stochastic enumerative search technique for batch sequencing problems. Computer Aided Chemical Engineering, 2000, 8, 1129-1134.	0.3	1
213	Decision-making framework for the scheduling of cleaning/maintenance tasks in continuous parallel lines with time-decreasing performance. Computer Aided Chemical Engineering, 2001, 9, 913-918.	0.3	1
214	An Open Software Architecture for Steady-State Data Reconciliation and Parameter Estimation. Computer Aided Chemical Engineering, 2002, 10, 853-858.	0.3	1
215	Managing financial risk in scheduling of batch plants. Computer Aided Chemical Engineering, 2003, 14, 41-46.	0.3	1
216	Integrating budgeting models into APS systems in batch chemical industries. Computer Aided Chemical Engineering, 2003, 14, 359-364.	0.3	1

#	ARTICLE	IF	CITATIONS
217	A holistic framework for supply chain management. Computer Aided Chemical Engineering, 2003, 14, 413-418.	0.3	1
218	Production Scheduling. , 0, , 481-516.		1
219	Modeling in the Process Life Cycle. , 0, , 667-693.		1
220	Sistema de Optimizaci3n en L3nea y Diagn3sis de Fallos para Procesos Qu3micos. Informacion Tecnol3gica (discontinued), 2007, 18, .	0.1	1
221	A novel proactive-reactive scheduling approach in chemical multiproduct batch plants. Computer Aided Chemical Engineering, 2008, 25, 435-440.	0.3	1
222	Minimizing water and energy use in the batch and semi-continuous processes in the food and beverage industry. , 2008, , 256-303.		1
223	Linking Marketing and Supply Chain Models for Improved Business Strategic Decision Support. Computer Aided Chemical Engineering, 2009, 27, 1995-2000.	0.3	1
224	Dealing with Uncertainty in Polymer Manufacturing by Using Linear Regression Metrics and Sensitivity Analysis. Computer Aided Chemical Engineering, 2009, , 725-730.	0.3	1
225	Scheduling and control decision-making under an integrated information environment. Computer Aided Chemical Engineering, 2010, 28, 1195-1200.	0.3	1
226	Forecasting CO2 emissions due to gasifier degradation by time-series analysis. Computer Aided Chemical Engineering, 2013, , 427-432.	0.3	1
227	Integration of Methods for Optimization in a Knowledge Management Framework. Computer Aided Chemical Engineering, 2014, , 859-864.	0.3	1
228	Enterprise-Wide Scheduling Framework Supported by Knowledge Management. Computer Aided Chemical Engineering, 2015, 37, 983-988.	0.3	1
229	Optimal bio-based supply chain with carbon capture and use: An economic and environmental approach. Computer Aided Chemical Engineering, 2017, 40, 2665-2670.	0.3	1
230	<i>110th Anniversary</i>: Knowledge-Based Recipe Management for Production Processes. Industrial & Engineering Chemistry Research, 2019, 58, 19985-19996.	1.8	1
231	Recipe Management based on ISA-88 using Semantic Technologies. Computer Aided Chemical Engineering, 2017, 40, 2293-2298.	0.3	1
232	Expanding the Horizons of Manufacturing, towards Wide Integration, Smart System, and Tools. Processes, 2022, 10, 772.	1.3	1
233	Comments on "Comments on recent publications on 'Minimum fluidization velocity at high temperatures'". Industrial & Engineering Chemistry Research, 1988, 27, 367-367.	1.8	0
234	A time-windows approach for enhancing the capabilities of batch scheduling systems: An application to simulated annealing search. Computer Aided Chemical Engineering, 2000, 8, 1069-1074.	0.3	0

#	ARTICLE	IF	CITATIONS
235	<title>Advanced order management in ERM systems: the tic-tac-toe algorithm</title>. , 2000, 4192, 228.		0
236	Dynamic cross-functional factory-to-business links in the batch industry. Computer Aided Chemical Engineering, 2001, 9, 835-840.	0.3	0
237	Ad-hoc scheduling /planning strategies in distributed computing systems: An application to pipeless batch plants. Computer Aided Chemical Engineering, 2001, 9, 841-846.	0.3	0
238	Planning and scheduling the value-added chain. Computer Aided Chemical Engineering, 2002, 10, 625-630.	0.3	0
239	On line optimisation of maintenance tasks management using RTE approach. Computer Aided Chemical Engineering, 2002, 10, 787-792.	0.3	0
240	On-line process optimisation: Parameter tuning for the real time evolution (RTE) approach. Computer Aided Chemical Engineering, 2003, , 917-922.	0.3	0
241	Integrating production and transport scheduling for supply chain management under market uncertainty. Computer Aided Chemical Engineering, 2004, 18, 919-924.	0.3	0
242	Combining Complementary Scheduling Approaches into an Enhanced Modular Software. Computer Aided Chemical Engineering, 2004, 18, 889-894.	0.3	0
243	Virtual plant-wide management and optimisation of responsive manufacturing networks (VIP-NET): An EC collaborative research project. Computer Aided Chemical Engineering, 2004, 18, 913-918.	0.3	0
244	Integrating short-term budgeting into multi-site scheduling. Computer Aided Chemical Engineering, 2005, , 1663-1668.	0.3	0
245	An optimization framework to computer-aided design of reliable measurement systems. Computer Aided Chemical Engineering, 2006, , 1293-1298.	0.3	0
246	Rigorous scheduling resolution of complex multipurpose batch plants: S-Graph vs. MILP. Computer Aided Chemical Engineering, 2006, 21, 2033-2038.	0.3	0
247	A novel combined approach for supply chain modeling and analysis. Computer Aided Chemical Engineering, 2006, , 2207-2212.	0.3	0
248	A joint control framework for supply chain planning. Computer Aided Chemical Engineering, 2007, , 715-720.	0.3	0
249	Integrating process operations and finances for the optimal design of chemical supply chains. Computer Aided Chemical Engineering, 2007, 24, 721-726.	0.3	0
250	Exploring and improving clustering based strategies for chemical process supervision. Computer Aided Chemical Engineering, 2007, 24, 285-290.	0.3	0
251	Exploiting the use of a flexible recipe framework to manage financial risk. Computer Aided Chemical Engineering, 2007, , 643-648.	0.3	0
252	Towards an ontological infrastructure for chemical batch process management. Computer Aided Chemical Engineering, 2009, 26, 883-888.	0.3	0

#	ARTICLE	IF	CITATIONS
253	Modelling Superstructure for Conceptual Design of Syngas Generation and Treatment. Green Energy and Technology, 2011, , 169-199.	0.4	0
254	Sustainable design of a reactive distillation system. Computer Aided Chemical Engineering, 2012, 30, 61-65.	0.3	0
255	Knowledge Management Framework for Assessing Environmental Impact in the Enterprise. Computer Aided Chemical Engineering, 2014, 33, 997-1002.	0.3	0
256	Decision-Support System for Integration of Transactional Systems and Analytical Models in the Pharmaceutical Industry. Advances in Intelligent Systems and Computing, 2017, , 177-186.	0.5	0
257	Decision support platform based on intelligent mathematical modeling agents. Computer Aided Chemical Engineering, 2018, 43, 1225-1230.	0.3	0
258	A Combined Bi-objective Optimization and Bayesian Framework to Postulate Pharmacometric Compartmental Models. Frontiers in Energy Research, 2019, 7, .	1.2	0
259	Bridging the Gap Between Production, Finances, and Risk in Supply Chain Optimization. , 0, , 1-44.		0
260	CAPE Role in Engineering Innovation: Part 2-The Coming Revolution. Advances in Intelligent Systems and Computing, 2017, , 91-99.	0.5	0
261	CAPE Role in Engineering Innovation: Part 1-The evolution. Advances in Intelligent Systems and Computing, 2017, , 79-89.	0.5	0
262	Resource-Constrained Production Planning and Scheduling in Multistage Semicontinuous Process Industries. , 2019, , 115-139.		0
263	Production Scheduling in Large-Scale Multistage Batch Process Industries. , 2019, , 169-188.		0
264	Production Planning and Scheduling of Parallel Continuous Processes. , 2019, , 73-94.		0
265	Production Scheduling in Multistage Semicontinuous Process Industries. , 2019, , 97-113.		0
266	Improved problem constraints modeling based using classification. Computer Aided Chemical Engineering, 2019, 46, 493-498.	0.3	0