

GÃ¼rkan Sin

List of Publications by Year in descending order

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261
papers

5,620
citations

81743

39
h-index

118652

62
g-index

265
all docs

265
docs citations

265
times ranked

4470
citing authors

#	ARTICLE	IF	CITATIONS
1	Synergistic optimization framework for the process synthesis and design of biorefineries. <i>Frontiers of Chemical Science and Engineering</i> , 2022, 16, 251-273.	2.3	9
2	Model development for the optimization of operational conditions of the pretreatment of wheat straw. <i>Chemical Engineering Journal</i> , 2022, 430, 133106.	6.6	7
3	Conceptual Process Design of an Integrated Xylitol Biorefinery With Value-Added Co-Products. <i>Frontiers in Chemical Engineering</i> , 2022, 4, .	1.3	4
4	Plant-wide assessment of alternative activated sludge configurations for biological nutrient removal under uncertain influent characteristics. <i>Science of the Total Environment</i> , 2022, 822, 153678.	3.9	8
5	Monitoring and Modeling of Creaming in Oil-in-Water Emulsions. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 4638-4647.	1.8	4
6	Uncertainty estimation in deep learning-based property models: Graph neural networks applied to the critical properties. <i>AIChE Journal</i> , 2022, 68, .	1.8	10
7	MOSKopt: A simulation-based data-driven digital twin optimizer with embedded uncertainty quantification. <i>Computer Aided Chemical Engineering</i> , 2021, 50, 649-654.	0.3	0
8	Data-Driven Control Strategies for the Autonomous Operation of the Pharmaceutical Crystallization Process. <i>Computer Aided Chemical Engineering</i> , 2021, 50, 1271-1276.	0.3	1
9	Integrated Model for Understanding N ₂ O Emissions from Wastewater Treatment Plants: A Deep Learning Approach. <i>Environmental Science & Technology</i> , 2021, 55, 2143-2151.	4.6	39
10	Comparison of Group-Contribution and Machine Learning-based Property Prediction Models with Uncertainty Quantification. <i>Computer Aided Chemical Engineering</i> , 2021, 50, 755-760.	0.3	5
11	Activated sludge models at the crossroad of artificial intelligence—A perspective on advancing process modeling. <i>Npj Clean Water</i> , 2021, 4, .	3.1	19
12	Simulation of an Industrial-Scale Reactive Liquid-Liquid Extraction Tower Using Polar PC-SAFT Toward Understanding and Improving the Hydrolysis of Triglycerides. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 4735-4743.	3.2	3
13	Independent Validation of an In Silico Tool for a Pilot-Scale Pharmaceutical Crystallization Process Development. <i>Processes</i> , 2021, 9, 640.	1.3	0
14	Model-Based Evaluation of a Data-Driven Control Strategy: Application to Ibuprofen Crystallization. <i>Processes</i> , 2021, 9, 653.	1.3	5
15	Dynamic Simulation of Natural Gas Transmission Pipeline Systems through Autoregressive Neural Networks. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 9851-9859.	1.8	7
16	Optimal design and operation of an Organic Rankine Cycle (ORC) system driven by solar energy with sensible thermal energy storage. <i>Energy Conversion and Management</i> , 2021, 244, 114494.	4.4	76
17	Towards Digitalization in Bio-Manufacturing Operations: A Survey on Application of Big Data and Digital Twin Concepts in Denmark. <i>Frontiers in Chemical Engineering</i> , 2021, 3, .	1.3	16
18	Benchmarking of Surrogate Models for the Conceptual Process Design of Biorefineries. <i>Computer Aided Chemical Engineering</i> , 2021, 50, 475-480.	0.3	3

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19	Comprehensive development, uncertainty and sensitivity analysis of a model for the hydrolysis of rapeseed oil. <i>Computers and Chemical Engineering</i> , 2020, 133, 106631.	2.0	5
20	Covariance-Based Uncertainty Analysis of Reference Equations of State. <i>Journal of Chemical & Engineering Data</i> , 2020, 65, 503-522.	1.0	4
21	Development of an integrated network for waste-to-energy and central utility systems considering air pollutant emissions pinch analysis. <i>Journal of Cleaner Production</i> , 2020, 252, 119746.	4.6	14
22	Effect of Selective Size Extraction of Microalgae from a Photobioreactor. <i>Computer Aided Chemical Engineering</i> , 2020, , 331-336.	0.3	1
23	Development and Application of Simulation-based Methods for Engineering Optimization Under Uncertainty. <i>Computer Aided Chemical Engineering</i> , 2020, 48, 451-456.	0.3	3
24	Robust Monitoring of Lactic Acid Bacteria with Sequential Monte Carlo. <i>Computer Aided Chemical Engineering</i> , 2020, 48, 1615-1620.	0.3	0
25	Surrogate Modelling Based Uncertainty and Sensitivity Analysis for the Downstream Process Design of a Xylitol Biorefinery. <i>Computer Aided Chemical Engineering</i> , 2020, , 1663-1668.	0.3	3
26	An integrated framework for plant data-driven process modeling using deep-learning with Monte-Carlo simulations. <i>Computers and Chemical Engineering</i> , 2020, 143, 107071.	2.0	20
27	Stochastic simulation-based superstructure optimization framework for process synthesis and design under uncertainty. <i>Computers and Chemical Engineering</i> , 2020, 143, 107118.	2.0	15
28	Identification of behavioural model input data sets for WWTP uncertainty analysis. <i>Water Science and Technology</i> , 2020, 81, 1558-1568.	1.2	5
29	Comprehensive evaluation of a data driven control strategy: Experimental application to a pharmaceutical crystallization process. <i>Chemical Engineering Research and Design</i> , 2020, 163, 248-261.	2.7	20
30	Unravelling the environmental and economic impacts of innovative technologies for the enhancement of biogas production and sludge management in wastewater systems. <i>Journal of Environmental Management</i> , 2020, 270, 110965.	3.8	14
31	Assessment of the fate of organic micropollutants in novel wastewater treatment plant configurations through an empirical mechanistic model. <i>Science of the Total Environment</i> , 2020, 716, 137079.	3.9	4
32	A process synthesis tool for WWTP – An application to design sustainable energy recovery facilities. <i>Chemical Engineering Research and Design</i> , 2020, 156, 353-370.	2.7	11
33	Modeling of Polyhydroxyalkanoate Synthesis from Biogas by <i>Methylocystis hirsuta</i> . <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 3906-3912.	3.2	12
34	Comprehensive sensitivity analysis and process risk assessment of large scale pharmaceutical crystallization processes. <i>Computers and Chemical Engineering</i> , 2020, 135, 106746.	2.0	11
35	Dynamic model validation and advanced polymer control for rotating belt filtration as primary treatment of domestic wastewaters. <i>Chemical Engineering Science</i> , 2020, 217, 115510.	1.9	8
36	Editorial: Applications of Monte Carlo Method in Chemical, Biochemical and Environmental Engineering. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	9

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37	Design of control framework based on deep reinforcement learning and Monte-Carlo sampling in downstream separation. <i>Computers and Chemical Engineering</i> , 2020, 140, 106910.	2.0	21
38	Computer-aided molecular product-process design under property uncertainties â€” A Monte Carlo based optimization strategy. <i>Computers and Chemical Engineering</i> , 2019, 122, 247-257.	2.0	12
39	A compartment model for risk-based monitoring of lactic acid bacteria cultivations. <i>Biochemical Engineering Journal</i> , 2019, 151, 107293.	1.8	14
40	Impact of granule size distribution on nitrous oxide production in autotrophic nitrogen removal granular reactor. <i>Science of the Total Environment</i> , 2019, 689, 700-708.	3.9	16
41	Assessment of Full-Scale N ₂ O Emission Characteristics and Testing of Control Concepts in an Activated Sludge Wastewater Treatment Plant with Alternating Aerobic and Anoxic Phases. <i>Environmental Science & Technology</i> , 2019, 53, 12485-12494.	4.6	32
42	A Modular Modelling Environment for Computer-Aided Process Design. <i>Computer Aided Chemical Engineering</i> , 2019, 47, 23-28.	0.3	0
43	Scale-up Modeling of a Pharmaceutical Antisolvent Crystallization via a Hybrid Method of Computational Fluid Dynamics and Compartmental Modeling. <i>Computer Aided Chemical Engineering</i> , 2019, 46, 709-714.	0.3	3
44	Towards development of a decision support tool for conceptual design of wastewater treatment plants using stochastic simulation optimization. <i>Computer Aided Chemical Engineering</i> , 2019, 46, 325-330.	0.3	3
45	Uncertainty in the prediction of the thermophysical behavior of new halogenated working fluids. <i>Fluid Phase Equilibria</i> , 2019, 485, 220-233.	1.4	7
46	Nitrous oxide production in autotrophic nitrogen removal granular sludge: A modeling study. <i>Biotechnology and Bioengineering</i> , 2019, 116, 1280-1291.	1.7	32
47	Output uncertainty of dynamic growth models: Effect of uncertain parameter estimates on model reliability. <i>Biochemical Engineering Journal</i> , 2019, 150, 107247.	1.8	25
48	Meta-modeling based efficient global sensitivity analysis for wastewater treatment plants â€” An application to the BSM2 model. <i>Computers and Chemical Engineering</i> , 2019, 127, 233-246.	2.0	50
49	The Monte Carlo driven and machine learning enhanced process simulator. <i>Computers and Chemical Engineering</i> , 2019, 125, 324-338.	2.0	13
50	Predicting the oxidant demand in full-scale drinking water treatment using an artificial neural network: Uncertainty and sensitivity analysis. <i>Chemical Engineering Research and Design</i> , 2019, 125, 317-327.	2.7	24
51	Solubility Prediction of Different Forms of Pharmaceuticals in Single and Mixed Solvents Using Symmetric Electrolyte Nonrandom Two-Liquid Segment Activity Coefficient Model. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 4267-4276.	1.8	7
52	Design of smart liquid-liquid extraction columns for downstream separations of biopharmaceuticals using deep Q-learning algorithm. <i>Computer Aided Chemical Engineering</i> , 2019, 46, 271-276.	0.3	1
53	Splitting Triglycerides with a Counter-Current Liquidâ€”Liquid Spray Column: Modeling, Global Sensitivity Analysis, Parameter Estimation and Optimization. <i>Processes</i> , 2019, 7, 881.	1.3	3
54	Nitrite effect on the phosphorus uptake activity of phosphate accumulating organisms (PAOs) in pilot-scale SBR and MBR reactors. <i>Water S A</i> , 2019, 34, 249.	0.2	22

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55	Economic Risk Analysis and Critical Comparison of Biodiesel Production Systems. <i>Biofuel and Biorefinery Technologies</i> , 2019, , 127-148.	0.1	2
56	CFD predicted pH gradients in lactic acid bacteria cultivations. <i>Biotechnology and Bioengineering</i> , 2019, 116, 769-780.	1.7	31
57	Puncture of an import gasoline pipelineâ€™ Spray effects may evaporate more fuel than a Buncefield-type tank overflow event. <i>Chemical Engineering Research and Design</i> , 2019, 122, 33-47.	2.7	7
58	Global Uncertainty and Sensitivity Analysis for Robust Design of a Rotary Kiln Process. <i>Computer Aided Chemical Engineering</i> , 2019, 46, 805-810.	0.3	1
59	Morris screening for FMECA of valve failure modes on offshore gas reinjection. <i>Computer Aided Chemical Engineering</i> , 2019, , 1315-1320.	0.3	0
60	Landâ€™use planning risk estimates for a chemical industrial park in China â€™ A longitudinal study. <i>Process Safety Progress</i> , 2018, 37, 124-133.	0.4	6
61	Multiscale modeling of poly(lactic acid) production: From reaction conditions to rheology of polymer melt. <i>Chemical Engineering Journal</i> , 2018, 336, 361-375.	6.6	19
62	Design and preliminary operation of a hybrid syngas/solar PV/battery power system for off-grid applications: A case study in Thailand. <i>Chemical Engineering Research and Design</i> , 2018, 131, 346-361.	2.7	25
63	A probabilistic model-based soft sensor to monitor lactic acid bacteria fermentations. <i>Biochemical Engineering Journal</i> , 2018, 135, 49-60.	1.8	26
64	Organic carbon recovery modeling for a rotating belt filter and its impact assessment on a plant-wide scale. <i>Chemical Engineering Journal</i> , 2018, 334, 1965-1976.	6.6	27
65	Property Prediction of Pharmaceuticals for Designing of Downstream Separation Processes. <i>Computer Aided Chemical Engineering</i> , 2018, 43, 287.	0.3	3
66	Systematic framework development for the construction of surrogate models for wastewater treatment plants. <i>Computer Aided Chemical Engineering</i> , 2018, 44, 1909-1914.	0.3	5
67	From property uncertainties to process simulation uncertainties â€™ Monte Carlo methods in SimSci PRO/II process simulator. <i>Computer Aided Chemical Engineering</i> , 2018, , 1489-1494.	0.3	5
68	Prediction of Environmental Properties Using a Hybrid Group Contribution Approach. <i>Computer Aided Chemical Engineering</i> , 2018, , 1723-1728.	0.3	2
69	Superstructure Optimization of Oleochemical Processes with Surrogate Models. <i>Computer Aided Chemical Engineering</i> , 2018, , 277-282.	0.3	8
70	Implementation of a Radial Basis Function control strategy for the crystallization of Ibuprofen under uncertainty. <i>Computer Aided Chemical Engineering</i> , 2018, 44, 565-570.	0.3	3
71	Reverse Engineering of Working Fluid Selection for Industrial Heat Pump Based on Monte Carlo Sampling and Uncertainty Analysis. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 13463-13477.	1.8	12
72	Dynamic Plantwide Modeling, Uncertainty, and Sensitivity Analysis of a Pharmaceutical Upstream Synthesis: Ibuprofen Case Study. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 10026-10037.	1.8	19

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73	A water treatment case study for quantifying model performance with multilevel flow modeling. Nuclear Engineering and Technology, 2018, 50, 532-541.	1.1	5
74	Process Synthesis, Design, and Control of Wastewater Treatment Plants. , 2018, , .		1
75	Modeling for Process Risk Assessment in Industrial Bioprocesses. , 2018, , .		1
76	Model-based process development for a continuous lactic acid bacteria fermentation. Computer Aided Chemical Engineering, 2018, 43, 1601-1606.	0.3	4
77	Scale-up Modeling of a Pharmaceutical Crystallization Process via Compartmentalization Approach. Computer Aided Chemical Engineering, 2018, 44, 181-186.	0.3	11
78	Controlling sewer systems â€” a critical review based on systems in three EU cities. Urban Water Journal, 2017, 14, 435-442.	1.0	29
79	Uncertainty assessment of equations of state with application to an organic Rankine cycle. Molecular Physics, 2017, 115, 1225-1244.	0.8	24
80	Understanding N ₂ O formation mechanisms through sensitivity analyses using a plant-wide benchmark simulation model. Chemical Engineering Journal, 2017, 317, 935-951.	6.6	29
81	A novel modelâ€”based control strategy for aerobic filamentous fungal fedâ€”batch fermentation processes. Biotechnology and Bioengineering, 2017, 114, 1459-1468.	1.7	16
82	A review of control strategies for manipulating the feed rate in fed-batch fermentation processes. Journal of Biotechnology, 2017, 245, 34-46.	1.9	136
83	Model-based plantwide optimization of large scale lignocellulosic bioethanol plants. Biochemical Engineering Journal, 2017, 124, 13-25.	1.8	9
84	Supply Chain Optimization of Integrated Glycerol Biorefinery: <i>GlyThink</i> Model Development and Application. Industrial & Engineering Chemistry Research, 2017, 56, 6711-6727.	1.8	13
85	Biorefinery Sustainability Analysis. Lecture Notes in Energy, 2017, , 161-200.	0.2	2
86	Mechanistic Fermentation Models for Process Design, Monitoring, and Control. Trends in Biotechnology, 2017, 35, 914-924.	4.9	71
87	Calibration of the comprehensive NDHA-N ₂ O dynamics model for nitrifier-enriched biomass using targeted respirometric assays. Water Research, 2017, 126, 29-39.	5.3	12
88	Optimal Design and Planning of Glycerol-Based Biorefinery Supply Chains under Uncertainty. Industrial & Engineering Chemistry Research, 2017, 56, 11870-11893.	1.8	18
89	A novel fuzzy-logic control strategy minimizing N ₂ O emissions. Water Research, 2017, 123, 479-494.	5.3	28
90	Application of a mechanistic model as a tool for onâ€”line monitoring of pilot scale filamentous fungal fermentation processesâ€”The importance of evaporation effects. Biotechnology and Bioengineering, 2017, 114, 589-599.	1.7	15

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91	Uncertainty and Sensitivity Analysis for an Ibuprofen Synthesis Model Based on Hoechst Path. Computer Aided Chemical Engineering, 2017, 40, 163-168.	0.3	1
92	A Consistent Methodology Based Parameter Estimation for a Lactic Acid Bacteria Fermentation Model. Computer Aided Chemical Engineering, 2017, 40, 2221-2226.	0.3	1
93	Uncertainty & sensitivity analysis of economic assessment of lactic acid production from crude glycerol â€™ impact of price correlations. Computer Aided Chemical Engineering, 2017, , 2911-2916.	0.3	0
94	Techno-economic analysis of resource recovery technologies for wastewater treatment plants. Computer Aided Chemical Engineering, 2017, 40, 1945-1950.	0.3	3
95	Powder stickiness in milk drying: uncertainty and sensitivity analysis for process understanding. Computer Aided Chemical Engineering, 2017, , 2743-2748.	0.3	1
96	Methodology for Plantwide Design and Optimization of Wastewater Treatment Plants. Computer Aided Chemical Engineering, 2017, 40, 859-864.	0.3	0
97	Multi-scale Modeling Approach for Design and Optimization of Oleochemical Processes. Computer Aided Chemical Engineering, 2017, 40, 1885-1890.	0.3	0
98	A simplified kinetic and mass transfer modelling of the thermal hydrolysis of vegetable oils. Computer Aided Chemical Engineering, 2017, 40, 1177-1182.	0.3	1
99	Monte Carlo Based Framework to Support HAZOP Study. Computer Aided Chemical Engineering, 2017, 40, 2233-2238.	0.3	6
100	Using MFM methodology to generate and define major accident scenarios for quantitative risk assessment studies. Computer Aided Chemical Engineering, 2017, 40, 589-594.	0.3	0
101	Data Validation and Modelling of Thermodynamic Properties of Systems with Active Pharmaceutical Ingredients (APIs) in Complex Media for Skin Absorption Processes. Computer Aided Chemical Engineering, 2017, 40, 247-252.	0.3	1
102	Computational chemical product design problems under property uncertainties. Computer Aided Chemical Engineering, 2017, , 973-978.	0.3	2
103	An Empirical Model for Carbon Recovery in a Rotating Belt Filter and Its Application in the Frame of Plantwide Evaluation. Lecture Notes in Civil Engineering, 2017, , 30-36.	0.3	1
104	Superstructure-based optimization tool for plant design and retrofitting. , 2017, , 581-598.		0
105	Synthesis of preliminary system designs for offshore oil and gas production. Computer Aided Chemical Engineering, 2016, , 1419-1424.	0.3	1
106	Global sensitivity analysis of computer-aided molecular design problem for the development of novel working fluids for power cycles. Computer Aided Chemical Engineering, 2016, 38, 283-288.	0.3	6
107	Mechanistic Models for Process Development and Optimization of Fed-batch Fermentation Systems. Computer Aided Chemical Engineering, 2016, , 1311-1316.	0.3	1
108	Economic risk-based analysis: Effect of technical and market price uncertainties on the production of glycerol-based isobutanol. Computer Aided Chemical Engineering, 2016, 38, 319-324.	0.3	1

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109	Group-contribution based property estimation and uncertainty analysis for flammability-related properties. <i>Journal of Hazardous Materials</i> , 2016, 318, 783-793.	6.5	36
110	Functional unfold principal component regression methodology for analysis of industrial batch process data. <i>AIChE Journal</i> , 2016, 62, 1986-1994.	1.8	13
111	A methodological approach to the design of optimising control strategies for sewer systems. <i>Environmental Modelling and Software</i> , 2016, 83, 103-115.	1.9	20
112	Economic Risk Assessment of Early Stage Designs for Glycerol Valorization in Biorefinery Concepts. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 6801-6814.	1.8	37
113	Control of wastewater N2O emissions by balancing the microbial communities using a fuzzy-logic approach. <i>IFAC-PapersOnLine</i> , 2016, 49, 1157-1162.	0.5	24
114	Assessing the environmental sustainability of early stage design for bioprocesses under uncertainties: An analysis of glycerol bioconversion. <i>Journal of Cleaner Production</i> , 2016, 139, 1245-1260.	4.6	35
115	An integrated knowledge-based and optimization tool for the sustainable selection of wastewater treatment process concepts. <i>Environmental Modelling and Software</i> , 2016, 84, 177-192.	1.9	25
116	Systematic design of membership functions for fuzzy-logic control: A case study on one-stage partial nitrification/anammox treatment systems. <i>Water Research</i> , 2016, 102, 346-361.	5.3	12
117	Modeling a production scale milk drying process: parameter estimation, uncertainty and sensitivity analysis. <i>Chemical Engineering Science</i> , 2016, 152, 301-310.	1.9	12
118	Working fluid selection for organic Rankine cycles – Impact of uncertainty of fluid properties. <i>Energy</i> , 2016, 109, 987-997.	4.5	52
119	A framework for techno-economic & environmental sustainability analysis by risk assessment for conceptual process evaluation. <i>Biochemical Engineering Journal</i> , 2016, 116, 146-156.	1.8	34
120	Economic risk analysis and critical comparison of optimal biorefinery concepts. <i>Biofuels, Bioproducts and Biorefining</i> , 2016, 10, 435-445.	1.9	33
121	Uncertainty analysis of the CPA and a quadrupolar CPA equation of state – With emphasis on CO2. <i>Fluid Phase Equilibria</i> , 2016, 414, 29-47.	1.4	12
122	Systematic design of an optimal control system for the SHARON-Anammox process. <i>Journal of Process Control</i> , 2016, 39, 1-10.	1.7	21
123	A Comprehensive Methodology for Development, Parameter Estimation, and Uncertainty Analysis of Group Contribution Based Property Models – An Application to the Heat of Combustion. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 602-613.	1.0	57
124	Optimal WWTP process selection for treatment of domestic wastewater – A realistic full-scale retrofitting study. <i>Chemical Engineering Journal</i> , 2016, 286, 447-458.	6.6	40
125	Dynamic modeling and validation of a biomass hydrothermal pretreatment process – a demonstration scale study. <i>AIChE Journal</i> , 2015, 61, 4235-4250.	1.8	17
126	Validation of a functional model for integration of safety into process system design. <i>Computer Aided Chemical Engineering</i> , 2015, 37, 293-298.	0.3	8

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127	Development of Computer Aided Modelling Templates for Model Re-use in Chemical and Biochemical Process and Product Design: Import and export of models. Computer Aided Chemical Engineering, 2015, , 953-958.	0.3	2
128	Optimization-based methodology for wastewater treatment plant synthesis â€“ a full scale retrofitting case study. Computer Aided Chemical Engineering, 2015, , 1241-1246.	0.3	1
129	Extending the benchmark simulation model nÂ°2 with processes for nitrous oxide production and side-stream nitrogen removal. Computer Aided Chemical Engineering, 2015, 37, 2477-2482.	0.3	6
130	Outlier treatment for improving parameter estimation of group contribution based models for upper flammability limit. Computer Aided Chemical Engineering, 2015, , 503-508.	0.3	3
131	Aeration control by monitoring the microbiological activity using fuzzy logic diagnosis and control. Application to a complete autotrophic nitrogen removal reactor. Journal of Process Control, 2015, 30, 22-33.	1.7	18
132	Methods and tools for sustainable chemical process design. , 2015, , 277-321.		3
133	Optimal Design of Algae Biorefinery Processing Networks for the production of Protein, Ethanol and Biodiesel. Computer Aided Chemical Engineering, 2015, , 1151-1156.	0.3	8
134	A comprehensive sensitivity and uncertainty analysis of a milk drying process. Computer Aided Chemical Engineering, 2015, , 2225-2230.	0.3	2
135	Multivariate Analysis of Industrial Scale Fermentation Data. Computer Aided Chemical Engineering, 2015, 37, 1667-1672.	0.3	2
136	Computer-aided modelling template: Concept and application. Computers and Chemical Engineering, 2015, 83, 232-247.	2.0	23
137	Sustainable Process Design under uncertainty analysis: targeting environmental indicators. Computer Aided Chemical Engineering, 2015, 37, 2579-2584.	0.3	7
138	A generic methodology for the optimisation of sewer systems using stochastic programming and self-optimizing control. Journal of Environmental Management, 2015, 155, 193-203.	3.8	11
139	Upgrading of lignocellulosic biorefinery to value-added chemicals: Sustainability and economics of bioethanol-derivatives. Biomass and Bioenergy, 2015, 75, 282-300.	2.9	38
140	Regulatory control analysis and design for sewer systems. Environmental Modelling and Software, 2015, 66, 153-166.	1.9	14
141	A Framework for Sustainable Design of Algal Biorefineries: Economic Aspects and Life Cycle Analysis. , 2015, , 511-535.		3
142	A mathematical programming framework for early stage design of wastewater treatment plants. Environmental Modelling and Software, 2015, 64, 164-176.	1.9	29
143	Systematic network synthesis and design: Problem formulation, superstructure generation, data management and solution. Computers and Chemical Engineering, 2015, 72, 68-86.	2.0	40
144	A novel control strategy for single-stage autotrophic nitrogen removal in SBR. Chemical Engineering Journal, 2015, 260, 64-73.	6.6	11

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145	A Framework for the Modelling of Biphasic Reacting Systems. <i>Computer Aided Chemical Engineering</i> , 2014, 34, 249-254.	0.3	6
146	A computer-aided framework for development, identification and management of physiologically-based pharmacokinetic models. <i>Computers and Chemical Engineering</i> , 2014, 71, 677-698.	2.0	19
147	Superstructure Development and Optimization under Uncertainty for Design and Retrofit of Municipal Wastewater Treatment Plants. <i>Computer Aided Chemical Engineering</i> , 2014, , 37-42.	0.3	5
148	Toward a Computer-Aided Synthesis and Design of Biorefinery Networks: Data Collection and Management Using a Generic Modeling Approach. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 19-29.	3.2	20
149	A Dynamic Model for Cellulosic Biomass Hydrolysis: a Comprehensive Analysis and Validation of Hydrolysis and Product Inhibition Mechanisms. <i>Applied Biochemistry and Biotechnology</i> , 2014, 172, 2815-2837.	1.4	28
150	Development of novel control strategies for single-stage autotrophic nitrogen removal: A process oriented approach. <i>Computers and Chemical Engineering</i> , 2014, 66, 71-81.	2.0	13
151	Industrial Process Water Treatment and Reuse: A Framework for Synthesis and Design. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 5160-5171.	1.8	29
152	Influence of selecting secondary settling tank sub-models on the calibration of WWTP models â€” A global sensitivity analysis using BSM2. <i>Chemical Engineering Journal</i> , 2014, 241, 28-34.	6.6	23
153	An integrated qualitative and quantitative modeling framework for computerâ€”assisted HAZOP studies. <i>AIChE Journal</i> , 2014, 60, 4150-4173.	1.8	20
154	Effect of Market Price Uncertainties on the Design of Optimal Biorefinery Systemsâ€”A Systematic Approach. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 6021-6032.	1.8	44
155	Significance of settling model structures and parameter subsets in modelling WWTPs under wet-weather flow and filamentous bulking conditions. <i>Water Research</i> , 2014, 63, 209-221.	5.3	15
156	Uncertainty Analysis in Raw Material and Utility Cost of Biorefinery Synthesis and Design. <i>Computer Aided Chemical Engineering</i> , 2014, , 49-54.	0.3	2
157	Hazard identification by extended multilevel flow modelling with function roles. <i>International Journal of Process Systems Engineering</i> , 2014, 2, 203.	0.2	3
158	Financial Risk Analysis in the Synthesis and Design of Processing Networks. <i>Computer Aided Chemical Engineering</i> , 2014, 33, 1-6.	0.3	2
159	Computer-Aided Template for Model Reuse, Development and Maintenance. <i>Computer Aided Chemical Engineering</i> , 2014, , 817-822.	0.3	6
160	Application of the Generic Modelling Template Approach to Unsaturated Fatty Acid Oxidation and Crystallization Systems. <i>Computer Aided Chemical Engineering</i> , 2014, , 309-314.	0.3	0
161	Introducing uncertainty analysis of nucleation and crystal growth models in Process Analytical Technology (PAT) system design of crystallization processes. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2013, 85, 911-929.	2.0	8
162	Hazard Identification of the Offshore Three-Phase Separation Process Based on Multilevel Flow Modeling and HAZOP. <i>Lecture Notes in Computer Science</i> , 2013, , 421-430.	1.0	2

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164	Dynamic modeling and validation of a lignocellulosic enzymatic hydrolysis process â€” A demonstration scale study. <i>Bioresource Technology</i> , 2013, 150, 393-403.	4.8	18
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