List of Publications by Year in descending order

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KDIST GEDNAEV

#	Article	lF	CITATIONS
1	Synergistic optimization framework for the process synthesis and design of biorefineries. Frontiers of Chemical Science and Engineering, 2022, 16, 251-273.	4.4	9
2	Model development for the optimization of operational conditions of the pretreatment of wheat straw. Chemical Engineering Journal, 2022, 430, 133106.	12.7	7
3	Separation of succinic acid from fermentation broth: Dielectric exclusion, Donnan effect and diffusion as the most influential mass transfer mechanisms. Separation and Purification Technology, 2022, 281, 119904.	7.9	8
4	Computational fluid dynamics modelling of hydrodynamics, mixing and oxygen transfer in industrial bioreactors with Newtonian broths. Biochemical Engineering Journal, 2022, 177, 108265.	3.6	23
5	Softâ€sensors application for automated feeding control in highâ€throughput mammalian cell cultures. Biotechnology and Bioengineering, 2022, 119, 1077-1090.	3.3	5
6	Economic and environmental analysis of bio-succinic acid production: From established processes to a new continuous fermentation approach with in-situ electrolytic extraction. Chemical Engineering Research and Design, 2022, 179, 401-414.	5.6	17
7	Conceptual Process Design of an Integrated Xylitol Biorefinery With Value-Added Co-Products. Frontiers in Chemical Engineering, 2022, 4, .	2.7	4
8	Plant-wide assessment of alternative activated sludge configurations for biological nutrient removal under uncertain influent characteristics. Science of the Total Environment, 2022, 822, 153678.	8.0	8
9	Dynamic Modeling and Control of a Continuous Biopharmaceutical Manufacturing Plant. Springer Optimization and Its Applications, 2022, , 323-353.	0.9	1
10	Digitalisation in chemical engineering: Industrial needs, academic best practice, and curriculum limitations. Education for Chemical Engineers, 2022, 39, 94-107.	4.8	12
11	Benchmarking strategies to control GHG production and emissions. , 2022, , 213-228.		0
12	Sampling Error of TOC swab in Pharmaceutical Cleaning Verification. Journal of Pharmaceutical and Biomedical Analysis, 2022, 215, 114763.	2.8	1
13	Prediction of mass and volumetric flows in a full-scale industrial waste treatment plant. Chemical Engineering Journal, 2022, 445, 136774.	12.7	3
14	Shaping an Open Microbiome for Butanol Production through Process Control. Fermentation, 2022, 8, 333.	3.0	1
15	Digital models in biotechnology: Towards multi-scale integration and implementation. Biotechnology Advances, 2022, 60, 108015.	11.7	14
16	Incremental design of water symbiosis networks with prior knowledge: The case of an industrial park in Kenya. Science of the Total Environment, 2021, 751, 141706.	8.0	16
17	Transforming data to information: A parallel hybrid model for realâ€time state estimation in lignocellulosic ethanol fermentation. Biotechnology and Bioengineering, 2021, 118, 579-591.	3.3	28
18	Separation of middle boiling trace compounds by distillation: An investigation of practical implications of complex column arrangements on an industrial methanol distillation case study. Asia-Pacific Journal of Chemical Engineering, 2021, 16, .	1.5	2

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19	Understanding gradients in industrial bioreactors. Biotechnology Advances, 2021, 46, 107660.	11.7	47
20	Assessment of sludge management strategies in wastewater treatment systems using a plant-wide approach. Water Research, 2021, 190, 116714.	11.3	24
21	Towards a Digital Twin: A validated Digital Model of a Pilot Scale Bioreactor producing Green Fluorescent Protein (GFP). Computer Aided Chemical Engineering, 2021, 50, 625-630.	0.5	1
22	Implementation of first-principles surface interactions in a hybrid machine learning assisted modelling of flocculation. Computer Aided Chemical Engineering, 2021, , 845-850.	0.5	3
23	Programming skills across the (bio)engineering curriculum – a students' perspective. Computer Aided Chemical Engineering, 2021, 50, 2039-2044.	0.5	2
24	Modelling and Dynamic Optimization of beer fermentation towards optimal flavor and operation. Computer Aided Chemical Engineering, 2021, 50, 599-604.	0.5	0
25	Sustainable bio-succinic acid production: superstructure optimization, techno-economic, and lifecycle assessment. Energy and Environmental Science, 2021, 14, 3542-3558.	30.8	65
26	Unsupervised Monitoring of Flocculation Processes based on Recurrence Theory. Computer Aided Chemical Engineering, 2021, 50, 1389-1394.	0.5	0
27	Digital Twin in biomanufacturing: challenges and opportunities towards its implementation. Systems Microbiology and Biomanufacturing, 2021, 1, 257-274.	2.9	43
28	Analysis of the response of the cell membrane of Saccharomyces cerevisiae during the detoxification of common lignocellulosic inhibitors. Scientific Reports, 2021, 11, 6853.	3.3	14
29	Model-Based Evaluation of a Data-Driven Control Strategy: Application to Ibuprofen Crystallization. Processes, 2021, 9, 653.	2.8	5
30	Evaluating Resource Recovery Options in Wastewater Treatment Plants Using Mathematical Models. , 2021, , 45-69.		0
31	Particle-Scale Modeling to Understand Liquid Distribution in Twin-Screw Wet Granulation. Pharmaceutics, 2021, 13, 928.	4.5	6
32	Long-term operation assessment of a full-scale membrane-aerated biofilm reactor under Nordic conditions. Science of the Total Environment, 2021, 779, 146366.	8.0	32
33	A framework for the development of Pedagogical Process Simulators (P2Si) using explanatory models and gamification. Computers and Chemical Engineering, 2021, 151, 107350.	3.8	10
34	Automated Compartment Model Development Based on Data from Flow-Following Sensor Devices. Processes, 2021, 9, 1651.	2.8	7
35	Development of dynamic compartment models for industrial aerobic fed-batch fermentation processes. Chemical Engineering Journal, 2021, 420, 130402.	12.7	28
36	Assessment of alkaline stabilization processes in industrial waste streams using a model-based approach. Journal of Environmental Management, 2021, 293, 112806.	7.8	3

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37	Alone or together? A review on pure and mixed microbial cultures for butanol production. Renewable and Sustainable Energy Reviews, 2021, 147, 111244.	16.4	27
38	Towards Digitalization in Bio-Manufacturing Operations: A Survey on Application of Big Data and Digital Twin Concepts in Denmark. Frontiers in Chemical Engineering, 2021, 3, .	2.7	16
39	Microbial biofilms in biorefinery – Towards a sustainable production of low-value bulk chemicals and fuels. Biotechnology Advances, 2021, 50, 107766.	11.7	12
40	Characterization of mixing performance in bioreactors using flow-following sensor devices. Chemical Engineering Research and Design, 2021, 174, 471-485.	5.6	9
41	Techno-economic and environmental impact assessment of biogas production and fertiliser recovery from pelagic Sargassum: A biorefinery concept for Barbados. Energy Conversion and Management, 2021, 245, 114605.	9.2	16
42	Mechanisms, status, and challenges of thermal hydrolysis and advanced thermal hydrolysis processes in sewage sludge treatment. Chemosphere, 2021, 281, 130890.	8.2	58
43	Modelling and control of an integrated high purity methanol distillation configuration. Chemical Engineering and Processing: Process Intensification, 2021, 169, 108640.	3.6	5
44	Fault diagnosis of chemical processes based on joint recurrence quantification analysis. Computers and Chemical Engineering, 2021, 155, 107549.	3.8	7
45	Co-cultivation of a novel Fusarium striatum strain and a xylose consuming Saccharomyces cerevisiae yields an efficient process for simultaneous detoxification and fermentation of lignocellulosic hydrolysates. Chemical Engineering Journal, 2021, 426, 131575.	12.7	10
46	Integration of first-principle models and machine learning in a modeling framework: An application to flocculation. Chemical Engineering Science, 2021, 245, 116864.	3.8	17
47	Special Issue on "Recent Advances in Population Balance Modeling― Processes, 2021, 9, 122.	2.8	2
48	An uncertainty-aware hybrid modelling approach using probabilistic machine learning. Computer Aided Chemical Engineering, 2021, 50, 591-597.	0.5	1
49	Exceptionally rich keratinolytic enzyme profile found in the rare actinomycetes Amycolatopsis keratiniphila D2T. Applied Microbiology and Biotechnology, 2021, 105, 8129-8138.	3.6	8
50	From second generation feed-stocks to innovative fermentation and downstream techniques for succinic acid production. Critical Reviews in Environmental Science and Technology, 2020, 50, 1829-1873.	12.8	37
51	Resource recovery from waste streams in a water-energy-food nexus perspective: Toward more sustainable food processing. Food and Bioproducts Processing, 2020, 119, 133-147.	3.6	47
52	Model-based analysis of biocatalytic processes and performance of microbioreactors with integrated optical sensors. New Biotechnology, 2020, 56, 27-37.	4.4	12
53	Model-Based Tools for Pharmaceutical Manufacturing Processes. Processes, 2020, 8, 49.	2.8	5
54	Towards one-step design of tailored enzymatic nanobiosensors. Analyst, The, 2020, 145, 1014-1024.	3.5	18

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55	A novel use for an old problem: The Tennessee Eastman challenge process as an activating teaching tool. Education for Chemical Engineers, 2020, 30, 20-31.	4.8	18
56	Integration of Computational Chemistry and Artificial Intelligence for Multi-scale Modeling of Bioprocesses. Computer Aided Chemical Engineering, 2020, 48, 295-300.	0.5	6
57	A Hybrid Model Predictive Control Strategy using Neural Network Based Soft Sensors for Particle Processes. Computer Aided Chemical Engineering, 2020, 48, 1177-1182.	0.5	3
58	Surrogate Modelling Based Uncertainty and Sensitivity Analysis for the Downstream Process Design of a Xylitol Biorefinery. Computer Aided Chemical Engineering, 2020, , 1663-1668.	0.5	3
59	An E-learning Bot for Bioprocess Systems Engineering. Computer Aided Chemical Engineering, 2020, 48, 2023-2028.	0.5	4
60	Electrochemical tuning of alcohol oxidase and dehydrogenase catalysis via biosensing towards butanol-1 detection in fermentation media. Biosensors and Bioelectronics, 2020, 170, 112702.	10.1	9
61	Stochastic simulation-based superstructure optimization framework for process synthesis and design under uncertainty. Computers and Chemical Engineering, 2020, 143, 107118.	3.8	15
62	Big Data Generation for Time Dependent Processes: The Tennessee Eastman Process for Generating Large Quantities of Process Data. Computer Aided Chemical Engineering, 2020, , 1309-1314.	0.5	6
63	Promoting the co-utilisation of glucose and xylose in lignocellulosic ethanol fermentations using a data-driven feed-back controller. Biotechnology for Biofuels, 2020, 13, 190.	6.2	9
64	The Role of Big Data in Industrial (Bio)chemical Process Operations. Industrial & Engineering Chemistry Research, 2020, 59, 15283-15297.	3.7	41
65	Towards smart biomanufacturing: a perspective on recent developments in industrial measurement and monitoring technologies for bio-based production processes. Journal of Industrial Microbiology and Biotechnology, 2020, 47, 947-964.	3.0	66
66	Why Is Batch Processing Still Dominating the Biologics Landscape? Towards an Integrated Continuous Bioprocessing Alternative. Processes, 2020, 8, 1641.	2.8	21
67	Flow-following sensor devices: A tool for bridging data and model predictions in large-scale fermentations. Computational and Structural Biotechnology Journal, 2020, 18, 2908-2919.	4.1	19
68	Towards a digital twin: a hybrid dataâ€driven and mechanistic digital shadow to forecast the evolution of lignocellulosic fermentation. Biofuels, Bioproducts and Biorefining, 2020, 14, 1046-1060.	3.7	39
69	Automated Electrochemical Glucose Biosensor Platform as an Efficient Tool Toward On-Line Fermentation Monitoring: Novel Application Approaches and Insights. Frontiers in Bioengineering and Biotechnology, 2020, 8, 436.	4.1	23
70	Distinguishing Commercial Beers Using a Solution-Based Sensor Array Derived from Nanoscale Polydiacetylene Vesicles. ACS Applied Nano Materials, 2020, 3, 3439-3448.	5.0	16
71	Assessment of the fate of organic micropollutants in novel wastewater treatment plant configurations through an empirical mechanistic model. Science of the Total Environment, 2020, 716, 137079.	8.0	4
72	A process synthesis tool for WWTP – An application to design sustainable energy recovery facilities. Chemical Engineering Research and Design, 2020, 156, 353-370.	5.6	11

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73	Modeling and system identification of an unconventional bioreactor used for single cell protein production. Chemical Engineering Journal, 2020, 390, 124438.	12.7	4
74	Application of Organic-Inorganic Hybrids in Chemical Analysis, Bio- and Environmental Monitoring. Applied Sciences (Switzerland), 2020, 10, 1458.	2.5	19
75	Two novel S1 peptidases from Amycolatopsis keratinophila subsp. keratinophila D2T degrading keratinous slaughterhouse by-products. Applied Microbiology and Biotechnology, 2020, 104, 2513-2522.	3.6	5
76	Dynamic model validation and advanced polymer control for rotating belt filtration as primary treatment of domestic wastewaters. Chemical Engineering Science, 2020, 217, 115510.	3.8	8
77	Monitoring yeast fermentations by nonlinear infrared technology and chemometrics—understanding process correlations and indirect predictions. Applied Microbiology and Biotechnology, 2020, 104, 5315-5335.	3.6	11
78	Towards the Development of Digital Twins for the Bio-manufacturing Industry. Advances in Biochemical Engineering/Biotechnology, 2020, 176, 1-34.	1.1	25
79	Hybrid machine learning assisted modelling framework for particle processes. Computers and Chemical Engineering, 2020, 140, 106916.	3.8	33
80	Design and Application of an Electrochemical Sensor for Ammonium Monitoring in Bioprocesses. ECS Meeting Abstracts, 2020, MA2020-01, 2073-2073.	0.0	0
81	Benchmarking real-time monitoring strategies for ethanol production from lignocellulosic biomass. Biomass and Bioenergy, 2019, 127, 105296.	5.7	25
82	A compartment model for risk-based monitoring of lactic acid bacteria cultivations. Biochemical Engineering Journal, 2019, 151, 107293.	3.6	14
83	Assessing the effects of intra-granule precipitation in a full-scale industrial anaerobic digester. Water Science and Technology, 2019, 79, 1327-1337.	2.5	12
84	Dynamic investigation and modeling of the nitrogen cometabolism in Methylococcus capsulatus () Tj ETQq0 0 C) rg <u></u> 8 <u>7</u> /Ov	erlock 10 Tf 5
85	Quantitative Flow Cytometry to Understand Population Heterogeneity in Response to Changes in Substrate Availability in Escherichia coli and Saccharomyces cerevisiae Chemostats. Frontiers in Bioengineering and Biotechnology, 2019, 7, 187.	4.1	28
86	Novel strategies for predictive particle monitoring and control using advanced image analysis. Computer Aided Chemical Engineering, 2019, , 1435-1440.	0.5	7
87	Facilitating learning by failure through a pedagogical model-based tool for bioprocesses. Computer Aided Chemical Engineering, 2019, 46, 1825-1830.	0.5	1
88	Towards development of a decision support tool for conceptual design of wastewater treatment plants using stochastic simulation optimization. Computer Aided Chemical Engineering, 2019, 46, 325-330.	0.5	3
89	Achieving value from process intensification through better process control. , 2019, , .		0
90	Cleaning of toothpaste from vessel walls by impinging liquid jets and their falling films: Quantitative modelling of soaking effects. Chemical Engineering Science, 2019, 208, 115148.	3.8	12

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91	Output uncertainty of dynamic growth models: Effect of uncertain parameter estimates on model reliability. Biochemical Engineering Journal, 2019, 150, 107247.	3.6	25
92	Meta-modeling based efficient global sensitivity analysis for wastewater treatment plants – An application to the BSM2 model. Computers and Chemical Engineering, 2019, 127, 233-246.	3.8	50
93	An exploration of barriers for commercializing phosphorus recovery technologies. Journal of Cleaner Production, 2019, 229, 1342-1354.	9.3	64
94	Evaluation of anaerobic digestion post-treatment options using an integrated model-based approach. Water Research, 2019, 156, 264-276.	11.3	16
95	An integrated strategy for the effective production of bristle protein hydrolysate by the keratinolytic filamentous bacterium Amycolatopsis keratiniphila D2. Waste Management, 2019, 89, 94-102.	7.4	18
96	Model-Based Cost Optimization of Double-Effect Water-Lithium Bromide Absorption Refrigeration Systems. Processes, 2019, 7, 50.	2.8	7
97	Sensors for biosensors: a novel tandem monitoring in a droplet towards efficient screening of robust design and optimal operating conditions. Analyst, The, 2019, 144, 2511-2522.	3.5	17
98	An Industrial Perspective on Scale-Down Challenges Using Miniaturized Bioreactors. Trends in Biotechnology, 2019, 37, 697-706.	9.3	28
99	The effect of acetate on population heterogeneity in different cellular characteristics of <scp><i>Escherichia coli</i></scp> in aerobic batch cultures. Biotechnology Progress, 2019, 35, e2796.	2.6	8
100	Plant-wide model-based analysis of iron dosage strategies for chemical phosphorus removal in wastewater treatment systems. Water Research, 2019, 155, 12-25.	11.3	78
101	Systematic decision-support methodology for identifying promising platform technologies towards circular economy. Computer Aided Chemical Engineering, 2019, , 1513-1518.	0.5	0
102	Hypothesis-driven compartment model for stirred bioreactors utilizing computational fluid dynamics and multiple pH sensors. Chemical Engineering Journal, 2019, 356, 161-169.	12.7	14
103	A CFD based automatic method for compartment model development. Computers and Chemical Engineering, 2019, 123, 236-245.	3.8	31
104	Economic Risk Analysis and Critical Comparison of Biodiesel Production Systems. Biofuel and Biorefinery Technologies, 2019, , 127-148.	0.3	2
105	Resource recovery from bio-based production processes in developing Asia. Sustainable Production and Consumption, 2019, 17, 196-214.	11.0	21
106	CFD predicted pH gradients in lactic acid bacteria cultivations. Biotechnology and Bioengineering, 2019, 116, 769-780.	3.3	31
107	Investigation of the cleaning of egg yolk deposits from tank surfaces using continuous and pulsed flows. Food and Bioproducts Processing, 2019, 113, 154-167.	3.6	21
108	BIOPRO-Sim: A benchmark simulation model for bio-manufacturing processes. Computer Aided Chemical Engineering, 2019, , 961-966.	0.5	0

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109	Developing a framework to model the primary drying step of a continuous freeze-drying process based on infrared radiation. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 127, 159-170.	4.3	11
110	Multi-function microfluidic platform for sensor integration. New Biotechnology, 2018, 47, 8-17.	4.4	8
111	Improved Prediction of Phosphorus Dynamics in Biotechnological Processes by Considering Precipitation and Polyphosphate Formation: A Case Study on Antibiotic Production withStreptomyces coelicolor. Industrial & Engineering Chemistry Research, 2018, 57, 9740-9749.	3.7	1
112	Liquidâ€ŧoâ€solid ratio control as an advanced process control solution for continuous twinâ€screw wet granulation. AICHE Journal, 2018, 64, 2500-2514.	3.6	19
113	Global Sensitivity Analysis as Good Modelling Practices tool for the identification of the most influential process parameters of the primary drying step during freeze-drying. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 123, 108-116.	4.3	8
114	Configuration optimization of series flow double-effect water-lithium bromide absorption refrigeration systems by cost minimization. Energy Conversion and Management, 2018, 158, 359-372.	9.2	40
115	Caught in-between: System for in-flow inactivation of enzymes as an intermediary step in "plug-and-play―microfluidic platforms. New Biotechnology, 2018, 47, 39-49.	4.4	4
116	"Connecting worlds – a view on microfluidics for a wider application― Biotechnology Advances, 2018, 36, 1341-1366.	11.7	36
117	Occurrence, characterisation and fate of (nano)particulate Ti and Ag in two Norwegian wastewater treatment plants. Water Research, 2018, 141, 19-31.	11.3	46
118	A probabilistic model-based soft sensor to monitor lactic acid bacteria fermentations. Biochemical Engineering Journal, 2018, 135, 49-60.	3.6	26
119	CFD modelling of axial mixing in the intermediate and final rinses of cleaning-in-place procedures of straight pipes. Journal of Food Engineering, 2018, 221, 95-105.	5.2	15
120	Experimental and computational evaluation of area selectively immobilized horseradish peroxidase in a microfluidic device. Chemical Engineering Journal, 2018, 332, 16-23.	12.7	13
121	Mechanistic modeling of cyclic voltammetry: A helpful tool for understanding biosensor principles and supporting design optimization. Sensors and Actuators B: Chemical, 2018, 259, 945-955.	7.8	22
122	Organic carbon recovery modeling for a rotating belt filter and its impact assessment on a plant-wide scale. Chemical Engineering Journal, 2018, 334, 1965-1976.	12.7	27
123	Exploring the effects of ZVI addition on resource recovery in the anaerobic digestion process. Chemical Engineering Journal, 2018, 335, 703-711.	12.7	56
124	A fast and simple method to estimate relative, hyphal tensileâ€strength of filamentous fungi used to assess the effect of autophagy. Biotechnology and Bioengineering, 2018, 115, 597-605.	3.3	3
125	A Genome-Scale Metabolic Model for Methylococcus capsulatus (Bath) Suggests Reduced Efficiency Electron Transfer to the Particulate Methane Monooxygenase. Frontiers in Microbiology, 2018, 9, 2947.	3.5	40
126	Integrated Process Design and Control of Cyclic Distillation Columns. IFAC-PapersOnLine, 2018, 51, 542-547.	0.9	13

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127	Key control handles in integrated urban wastewater systems for improving receiving water quality. Urban Water Journal, 2018, 15, 790-800.	2.1	6
128	A Methodology for Development of a Pedagogical Simulation Tool used in Fermentation Applications. Computer Aided Chemical Engineering, 2018, 44, 1621-1626.	0.5	2
129	Exploring the potential of electroless and electroplated noble metal–semiconductor hybrids within bio- and environmental sensing. Analyst, The, 2018, 143, 5646-5669.	3.5	10
130	Investigation of the effect of uncertain growth kinetics on a CFD based model for the growth of S. cerevisiae in an industrial bioreactor. Chemical Engineering Research and Design, 2018, 140, 12-22.	5.6	7
131	A shortcut approach for decision-making and operational analysis of an integrated end-to-end continuous pharmaceutical process. Computer Aided Chemical Engineering, 2018, , 2107-2112.	0.5	3
132	Implementation of a Radial Basis Function control strategy for the crystallization of Ibuprofen under uncertainty. Computer Aided Chemical Engineering, 2018, 44, 565-570.	0.5	3
133	A Systematic Methodology for Comprehensive Economic Assessment of Process Control Structures. Industrial & Engineering Chemistry Research, 2018, 57, 13116-13130.	3.7	19
134	BIOPRO World Talent Campus: A week of real world challenge for biotechnology post-graduate students. Education for Chemical Engineers, 2018, 25, 1-8.	4.8	3
135	Anomaly Analysis in Cleaning-in-Place Operations of an Industrial Brewery Fermenter. Industrial & Engineering Chemistry Research, 2018, 57, 12871-12883.	3.7	4
136	Dynamic Plantwide Modeling, Uncertainty, and Sensitivity Analysis of a Pharmaceutical Upstream Synthesis: Ibuprofen Case Study. Industrial & Engineering Chemistry Research, 2018, 57, 10026-10037.	3.7	19
137	Modelâ€based analysis and optimization of a fullâ€scale industrial highâ€rate anaerobic bioreactor. Biotechnology and Bioengineering, 2018, 115, 2726-2739.	3.3	13
138	Modeling for Process Risk Assessment in Industrial Bioprocesses. , 2018, , .		1
139	Model-based process development for a continuous lactic acid bacteria fermentation. Computer Aided Chemical Engineering, 2018, 43, 1601-1606.	0.5	4
140	Resource recovery from organic solid waste using hydrothermal processing: Opportunities and challenges. Renewable and Sustainable Energy Reviews, 2018, 96, 64-75.	16.4	117
141	Biocatalyst Screening with a Twist: Application of Oxygen Sensors Integrated in Microchannels for Screening Whole Cell Biocatalyst Variants. Bioengineering, 2018, 5, 30.	3.5	9
142	Efficient Computational Design of a Scaffold for Cartilage Cell Regeneration. Bioengineering, 2018, 5, 33.	3.5	8
143	Enzymatic keratin hydrolysis: Dynamic modelling, parameter estimation and validation. Computer Aided Chemical Engineering, 2018, 43, 1553-1558.	0.5	1
144	Screening of organic solvents for bioprocesses using aqueous-organic two-phase systems. Biotechnology Advances, 2018, 36, 1801-1814.	11.7	67

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145	Removal of benzaldehyde from a water/ethanol mixture by applying scavenging techniques. Green Processing and Synthesis, 2017, 6, 353-361.	3.4	2
146	Understanding N 2 O formation mechanisms through sensitivity analyses using a plant-wide benchmark simulation model. Chemical Engineering Journal, 2017, 317, 935-951.	12.7	29
147	A novel modelâ€based control strategy for aerobic filamentous fungal fedâ€batch fermentation processes. Biotechnology and Bioengineering, 2017, 114, 1459-1468.	3.3	16
148	Plant-wide modelling of phosphorus transformations in wastewater treatment systems: Impacts of control and operational strategies. Water Research, 2017, 113, 97-110.	11.3	82
149	A review of control strategies for manipulating the feed rate in fed-batch fermentation processes. Journal of Biotechnology, 2017, 245, 34-46.	3.8	136
150	Adding Value to Bioethanol through a Purification Process Revamp. Industrial & Engineering Chemistry Research, 2017, 56, 5692-5704.	3.7	7
151	Evaluation of mixing and mass transfer in a stirred pilot scale bioreactor utilizing CFD. Chemical Engineering Science, 2017, 171, 19-26.	3.8	58
152	Supply Chain Optimization of Integrated Glycerol Biorefinery: <i>GlyThink</i> Model Development and Application. Industrial & Engineering Chemistry Research, 2017, 56, 6711-6727.	3.7	13
153	A model library for simulation and benchmarking of integrated urban wastewater systems. Environmental Modelling and Software, 2017, 93, 282-295.	4.5	22
154	CFD Modeling of Flow and Ion Exchange Kinetics in a Rotating Bed Reactor System. Industrial & Engineering Chemistry Research, 2017, 56, 3853-3865.	3.7	12
155	Biorefinery Sustainability Analysis. Lecture Notes in Energy, 2017, , 161-200.	0.3	2
156	Shape optimization as a tool to design biocatalytic microreactors. Chemical Engineering Journal, 2017, 322, 215-223.	12.7	14
157	Modelling an industrial anaerobic granular reactor using a multi-scale approach. Water Research, 2017, 126, 488-500.	11.3	29
158	Quantitative risk assessment via uncertainty analysis in combination with error propagation for the determination of the dynamic Design Space of the primary drying step during freeze-drying. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 121, 32-41.	4.3	26
159	Untargeted GCâ€MS Metabolomics Reveals Changes in the Metabolite Dynamics of Industrial Scale Batch Fermentations of Streptoccoccus thermophilus Broth. Biotechnology Journal, 2017, 12, 1700400.	3.5	10
160	Mechanistic Fermentation Models for Process Design, Monitoring, and Control. Trends in Biotechnology, 2017, 35, 914-924.	9.3	71
161	Optimal Design and Planning of Glycerol-Based Biorefinery Supply Chains under Uncertainty. Industrial & Engineering Chemistry Research, 2017, 56, 11870-11893.	3.7	18
162	Application of iterative robust modelâ€based optimal experimental design for the calibration of biocatalytic models. Biotechnology Progress, 2017, 33, 1278-1293.	2.6	9

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163	A novel fuzzy-logic control strategy minimizing N2O emissions. Water Research, 2017, 123, 479-494.	11.3	28
164	Resource recovery from bio-based production processes: a future necessity?. Current Opinion in Chemical Engineering, 2017, 18, 1-9.	7.8	37
165	Application of a mechanistic model as a tool for onâ€line monitoring of pilot scale filamentous fungal fermentation processes—The importance of evaporation effects. Biotechnology and Bioengineering, 2017, 114, 589-599.	3.3	15
166	Dynamic modelling of pectin extraction describing yield and functional characteristics. Journal of Food Engineering, 2017, 192, 61-71.	5.2	32
167	Mixing and mass transfer in a pilot scale Uâ€loop bioreactor. Biotechnology and Bioengineering, 2017, 114, 344-354.	3.3	64
168	Development of in situ product removal strategies in biocatalysis applying scaledâ€down unit operations. Biotechnology and Bioengineering, 2017, 114, 600-609.	3.3	22
169	Uncertainty and Sensitivity Analysis for an Ibuprofen Synthesis Model Based on Hoechst Path. Computer Aided Chemical Engineering, 2017, 40, 163-168.	0.5	1
170	A Consistent Methodology Based Parameter Estimation for a Lactic Acid Bacteria Fermentation Model. Computer Aided Chemical Engineering, 2017, 40, 2221-2226.	0.5	1
171	Uncertainty & sensitivity analysis of economic assessment of lactic acid production from crude glycerol – impact of price correlations. Computer Aided Chemical Engineering, 2017, , 2911-2916.	0.5	Ο
172	Perspectives on Resource Recovery from Bio-Based Production Processes: From Concept to Implementation. Processes, 2017, 5, 48.	2.8	24
173	An Efficient Experimental Design Strategy for Modelling and Characterization of Processes. Computer Aided Chemical Engineering, 2017, , 2827-2832.	0.5	1
174	Reverse osmosis for water purification and reuse in the biotechnological industry: Process design, operation and economic guidelines. Computer Aided Chemical Engineering, 2017, , 391-396.	0.5	4
175	Improving the Prediction of Phosphate Dynamics in Biotechnological Processes: A Case Study Based on Antibiotic Production Using Streptomyces coelicolor. Computer Aided Chemical Engineering, 2017, 40, 2869-2874.	0.5	1
176	ZVI Addition in Continuous Anaerobic Digestion Systems Dramatically Decreases P Recovery Potential: Dynamic Modelling. Lecture Notes in Civil Engineering, 2017, , 211-217.	0.4	2
177	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.	0.4	1
178	Superstructure-based optimization tool for plant design and retrofitting. , 2017, , 581-598.		0
179	Modelling and simulation of a U-loop Reactor for Single Cell Protein Production. Computer Aided Chemical Engineering, 2016, 38, 1287-1292.	0.5	5
180	Quantifying the importance of flow maldistribution in numbered-up microreactors. Computer Aided Chemical Engineering, 2016, 38, 1225-1230.	0.5	4

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