

S Joe Qin

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

348
papers

19,857
citations

67
h-index

135
g-index

390
ext. papers

23,950
ext. citations

4.3
avg, IF

7.63
L-index

#	Paper	IF	Citations
348	Sustainability of green solvents [Review and perspective]. <i>Green Chemistry</i> , 2022 , 24, 410-437	10	9
347	Integrated metal-organic framework and pressure/vacuum swing adsorption process design: Descriptor optimization. <i>AIChE Journal</i> , 2022 , 68, e17524	3.6	2
346	Fault diagnosis of dynamic processes with reconstruction and magnitude profile estimation for an industrial application. <i>Control Engineering Practice</i> , 2022 , 121, 105008	3.9	3
345	Load-flexible fixed-bed reactors by multi-period design optimization. <i>Chemical Engineering Journal</i> , 2022 , 428, 130771	14.7	1
344	Increased efficiency of charge-mediated fusion in polymer/lipid hybrid membranes.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2122468119	11.5	3
343	Fusion-Induced Growth of Biomimetic Polymersomes: Behavior of Poly(dimethylsiloxane)-Poly(ethylene oxide) Vesicles in Saline Solutions Under High Agitation. <i>Macromolecular Rapid Communications</i> , 2021 , e2100712	4.8	4
342	Computer-aided solvent screening for the fractionation of wet microalgae biomass. <i>Green Chemistry</i> , 2021 , 23, 10014-10029	10	0
341	Kernel Based Statistical Process Monitoring and Fault Detection in the Presence of Missing Data. <i>IEEE Transactions on Industrial Informatics</i> , 2021 , 1-1	11.9	0
340	A stable Lasso algorithm for inferential sensor structure learning and parameter estimation. <i>Journal of Process Control</i> , 2021 , 107, 70-82	3.9	2
339	Scale up of Transmembrane NADH Oxidation in Synthetic Giant Vesicles. <i>Bioconjugate Chemistry</i> , 2021 , 32, 897-903	6.3	2
338	Bottom-Up Synthesis of Artificial Cells: Recent Highlights and Future Challenges. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2021 , 12, 287-308	8.9	6
337	Model-based optimal design of phase change ionic liquids for efficient thermal energy storage. <i>Green Energy and Environment</i> , 2021 , 6, 392-404	5.7	8
336	Integrated ionic liquid and rate-based absorption process design for gas separation: Global optimization using hybrid models. <i>AIChE Journal</i> , 2021 , 67, e17340	3.6	8
335	Evaluation of COSMO-RS for solid-liquid equilibria prediction of binary eutectic solvent systems. <i>Green Energy and Environment</i> , 2021 , 6, 371-379	5.7	10
334	Neural recommender system for the activity coefficient prediction and UNIFAC model extension of ionic liquid-solute systems. <i>AIChE Journal</i> , 2021 , 67, e17171	3.6	14
333	Stable Lasso for Model Structure Learning of Inferential Sensor Modeling. <i>IFAC-PapersOnLine</i> , 2021 , 54, 228-233	0.7	1
332	β -Carotene extraction from <i>Dunaliella salina</i> by supercritical CO ₂ . <i>Journal of Applied Phycology</i> , 2021 , 33, 1435-1445	3.2	5

331	Guest Editorial Special Issue on Deep Integration of Artificial Intelligence and Data Science for Process Manufacturing. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2021 , 32, 3294-3295 ^{10.3}		
330	En route to dynamic life processes by SNARE-mediated fusion of polymer and hybrid membranes. <i>Nature Communications</i> , 2021 , 12, 4972	17.4	10
329	Plant-wide troubleshooting and diagnosis using dynamic embedded latent feature analysis. <i>Computers and Chemical Engineering</i> , 2021 , 152, 107392	4	2
328	Integration of process knowledge and statistical learning for the Dow data challenge problem. <i>Computers and Chemical Engineering</i> , 2021 , 153, 107451	4	6
327	Adaptive dynamic predictive monitoring scheme based on DLV models. <i>IFAC-PapersOnLine</i> , 2021 , 54, 91-96	0.7	
326	Hybrid Semi-parametric Modeling in Separation Processes: A Review. <i>Chemie-Ingenieur-Technik</i> , 2020 , 92, 842-855	0.8	10
325	Symmetry Breaking and Emergence of Directional Flows in Minimal Actomyosin Cortices. <i>Cells</i> , 2020 , 9,	7.9	4
324	Dynamic latent variable regression for inferential sensor modeling and monitoring. <i>Computers and Chemical Engineering</i> , 2020 , 137, 106809	4	19
323	Efficient Dynamic Latent Variable Analysis for High-Dimensional Time Series Data. <i>IEEE Transactions on Industrial Informatics</i> , 2020 , 16, 4068-4076	11.9	10
322	Selectivity and Sustainability of Electroenzymatic Process for Glucose Conversion to Gluconic Acid. <i>Catalysts</i> , 2020 , 10, 269	4	4
321	Constructing artificial respiratory chain in polymer compartments: Insights into the interplay between oxidase and the membrane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 15006-15017	11.5	22
320	Systematic Green Solvent Selection for the Hydroformylation of Long-Chain Alkenes. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 ,	8.3	2
319	On Data Science for Process Systems Modeling, Control and Operations. <i>IFAC-PapersOnLine</i> , 2020 , 53, 11325-11331	0.7	0
318	Dynamic Weighted Canonical Correlation Analysis for Auto-Regressive Modeling. <i>IFAC-PapersOnLine</i> , 2020 , 53, 200-205	0.7	1
317	Systematic Screening of Deep Eutectic Solvents as Sustainable Separation Media Exemplified by the CO ₂ Capture Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 8741-8751	8.3	29
316	Extending the UNIFAC model for ionic liquid/solute systems by combining experimental and computational databases. <i>AIChE Journal</i> , 2020 , 66, e16821	3.6	29
315	New Dynamic Predictive Monitoring Schemes Based on Dynamic Latent Variable Models. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 2353-2365	3.9	9
314	Reconstruction and analysis of a carbon-core metabolic network for <i>Dunaliella salina</i> . <i>BMC Bioinformatics</i> , 2020 , 21, 1	3.6	104

313	Subspace model identification under load disturbance with unknown transient and periodic dynamics. <i>Journal of Process Control</i> , 2020 , 85, 100-111	3.9	3
312	Bridging systems theory and data science: A unifying review of dynamic latent variable analytics and process monitoring. <i>Annual Reviews in Control</i> , 2020 , 50, 29-48	10.3	20
311	Power-to-Syngas Processes by Reactor-Separator Superstructure Optimization. <i>Computer Aided Chemical Engineering</i> , 2020 , 48, 1387-1392	0.6	
310	Precise determination of LJ parameters and Eucken correction factors for a more accurate modeling of transport properties in gases. <i>Heat and Mass Transfer</i> , 2020 , 56, 2515-2527	2.2	0
309	On the role of microkinetic network structure in the interplay between oxygen evolution reaction and catalyst dissolution. <i>Scientific Reports</i> , 2020 , 10, 14140	4.9	5
308	Porosity and Structure of Hierarchically Porous Ni/Al ₂ O ₃ Catalysts for CO ₂ Methanation. <i>Catalysts</i> , 2020 , 10, 1471	4	12
307	Multiscale Kernel Based Residual Convolutional Neural Network for Motor Fault Diagnosis Under Nonstationary Conditions. <i>IEEE Transactions on Industrial Informatics</i> , 2020 , 16, 3797-3806	11.9	82
306	Modeling inter-layer interactions for out-of-plane shape deviation reduction in additive manufacturing. <i>IIEE Transactions</i> , 2020 , 52, 721-731	3.3	4
305	Miniplant-Scale Evaluation of a Semibatch-Continuous Tandem Reactor System for the Hydroformylation of Long-Chain Olefins. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 2471-2480	3.9	3
304	The FluxMax approach for simultaneous process synthesis and heat integration: Production of hydrogen cyanide. <i>AIChE Journal</i> , 2019 , 65, e16554	3.6	11
303	Dynamic characterization of geologic CO ₂ storage aquifers from monitoring data with ensemble Kalman filter. <i>International Journal of Greenhouse Gas Control</i> , 2019 , 81, 199-215	4.2	13
302	Energy-Efficient Gas-Phase Electrolysis of Hydrogen Chloride. <i>Chemie-Ingenieur-Technik</i> , 2019 , 91, 795-808	4	4
301	Classification and Diagnosis of Bioprocess Cell Growth Productions Using Early-Stage Data. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 13469-13480	3.9	6
300	Rational design of double salt ionic liquids as extraction solvents: Separation of thiophene/n-octane as example. <i>AIChE Journal</i> , 2019 , 65, e16625	3.6	21
299	Compartments for Synthetic Cells: Osmotically Assisted Separation of Oil from Double Emulsions in a Microfluidic Chip. <i>ChemBioChem</i> , 2019 , 20, 2604-2608	3.8	11
298	Advances and opportunities in machine learning for process data analytics. <i>Computers and Chemical Engineering</i> , 2019 , 126, 465-473	4	110
297	Supervised Diagnosis of Quality and Process Faults with Canonical Correlation Analysis. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 11213-11223	3.9	11
296	Derivation of rate equations for equilibrium limited gas-solid reactions. <i>Chemical Engineering Science</i> , 2019 , 203, 76-85	4.4	1

295	Polymer-Based Module for NAD Regeneration with Visible Light. <i>ChemBioChem</i> , 2019 , 20, 2593-2596	3.8	18
294	Optimal Solvent Design for Extractive Distillation Processes: A Multiobjective Optimization-Based Hierarchical Framework. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 5777-5786	3.9	38
293	Directed Growth of Biomimetic Microcompartments. <i>Advanced Biology</i> , 2019 , 3, e1800314	3.5	14
292	Dynamic Nonlinear Partial Least Squares Modeling Using Gaussian Process Regression. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 16676-16686	3.9	28
291	Back Cover: Bottom-Up Synthetic Biology: Towards the Modular Design of Artificial Cells from Functional Modules (Adv. Biosys. 6/2019). <i>Advanced Biology</i> , 2019 , 3, 1970062	3.5	
290	Latent Variable Regression for Process and Quality Modeling 2019 ,		4
289	Systematic Selection of Green Solvents and Process Optimization for the Hydroformylation of Long-Chain Olefines. <i>Processes</i> , 2019 , 7, 882	2.9	5
288	Surrogate Modeling for Liquid-Liquid Equilibria Using a Parameterization of the Binodal Curve. <i>Processes</i> , 2019 , 7, 753	2.9	4
287	Overview of Surrogate Modeling in Chemical Process Engineering. <i>Chemie-Ingenieur-Technik</i> , 2019 , 91, 228-239	0.8	75
286	Distributed Approach for Temporal-Spatial Charging Coordination of Plug-in Electric Taxi Fleet. <i>IEEE Transactions on Industrial Informatics</i> , 2019 , 15, 3185-3195	11.9	13
285	Effect of the MEA design on the performance of PEMWE single cells with different sizes. <i>Journal of Applied Electrochemistry</i> , 2018 , 48, 701-711	2.6	13
284	Ultra-low loading Pt-sputtered gas diffusion electrodes for oxygen reduction reaction. <i>Journal of Applied Electrochemistry</i> , 2018 , 48, 221-232	2.6	18
283	Transmembrane NADH Oxidation with Tetracyanoquinodimethane. <i>Langmuir</i> , 2018 , 34, 5435-5443	4	9
282	Prediction of acid dissociation constants of organic compounds using group contribution methods. <i>Chemical Engineering Science</i> , 2018 , 183, 95-105	4.4	31
281	Comparative study on monitoring schemes for non-Gaussian distributed processes. <i>Journal of Process Control</i> , 2018 , 67, 69-82	3.9	22
280	Dynamic concurrent kernel CCA for strip-thickness relevant fault diagnosis of continuous annealing processes. <i>Journal of Process Control</i> , 2018 , 67, 12-22	3.9	36
279	A novel dynamic PCA algorithm for dynamic data modeling and process monitoring. <i>Journal of Process Control</i> , 2018 , 67, 1-11	3.9	157
278	Computer-aided design of ionic liquids as solvents for extractive desulfurization. <i>AIChE Journal</i> , 2018 , 64, 1013-1025	3.6	97

277	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. <i>Nature Materials</i> , 2018 , 17, 89-96	27	211
276	Linear Programming Approach for Structure Optimization of Renewable-to-Chemicals (R2Chem) Production Networks. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 9889-9902	3.9	11
275	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 13382-13392	16.4	155
274	Process Variability Source Analysis for a Multi-step Bio-process. <i>Computer Aided Chemical Engineering</i> , 2018 , 2497-2502	0.6	
273	Out-of-equilibrium microcompartments for the bottom-up integration of metabolic functions. <i>Nature Communications</i> , 2018 , 9, 2391	17.4	41
272	Dynamic latent variable analytics for process operations and control. <i>Computers and Chemical Engineering</i> , 2018 , 114, 69-80	4	33
271	Thermodynamic Network Flow Approach for Chemical Process Synthesis. <i>Computer Aided Chemical Engineering</i> , 2018 , 43, 881-886	0.6	2
270	Regularized LTI System Identification with Multiple Regularization Matrix. <i>IFAC-PapersOnLine</i> , 2018 , 51, 180-185	0.7	6
269	Hybrid Latent Variable Modeling of High Dimensional Time Series Data. <i>IFAC-PapersOnLine</i> , 2018 , 51, 563-568	0.7	1
268	DiCCA with Discrete-Fourier Transforms for Power System Events Detection and Localization. <i>IFAC-PapersOnLine</i> , 2018 , 51, 726-731	0.7	2
267	Map-Reduce Decentralized PCA for Big Data Monitoring and Diagnosis of Faults in High-Speed Train Bearings. <i>IFAC-PapersOnLine</i> , 2018 , 51, 144-149	0.7	8
266	A Platform for Fault Diagnosis of High-Speed Train based on Big Data. <i>IFAC-PapersOnLine</i> , 2018 , 51, 309-314	0.7	4
265	Dynamic-Inner Canonical Correlation and Causality Analysis for High Dimensional Time Series Data. <i>IFAC-PapersOnLine</i> , 2018 , 51, 476-481	0.7	14
264	Maximizing Fault Detectability with Closed-Loop Control. <i>IFAC-PapersOnLine</i> , 2018 , 51, 696-701	0.7	
263	Quantitative single cell analysis uncovers the life/death decision in CD95 network. <i>PLoS Computational Biology</i> , 2018 , 14, e1006368	5	15
262	Identification of Key Transport Phenomena in High-Temperature Reactors: Flow and Heat Transfer Characteristics. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 15884-15897	3.9	4
261	Mechanisms behind overshoots in mean cluster size profiles in aggregation-breakup processes. <i>Journal of Colloid and Interface Science</i> , 2018 , 528, 336-348	9.3	5
260	Regression on dynamic PLS structures for supervised learning of dynamic data. <i>Journal of Process Control</i> , 2018 , 68, 64-72	3.9	41

259	A hybrid stochastic-deterministic optimization approach for integrated solvent and process design. <i>Chemical Engineering Science</i> , 2017 , 159, 207-216	4.4	40
258	Autoregressive Dynamic Latent Variable Models for Process Monitoring. <i>IEEE Transactions on Control Systems Technology</i> , 2017 , 25, 366-373	4.8	52
257	Measurement and simulation of mass transfer and backmixing behavior in a gas-liquid helically coiled tubular reactor. <i>Chemical Engineering Science</i> , 2017 , 170, 410-421	4.4	23
256	Systematic Method for Screening Ionic Liquids as Extraction Solvents Exemplified by an Extractive Desulfurization Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 3382-3389	8.3	92
255	Continuous Crystallization in a Helically Coiled Flow Tube: Analysis of Flow Field, Residence Time Behavior, and Crystal Growth. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 3699-3712	3.9	32
254	Unevenly Sampled Dynamic Data Modeling and Monitoring With an Industrial Application. <i>IEEE Transactions on Industrial Informatics</i> , 2017 , 13, 2203-2213	11.9	23
253	Model-based Optimal Sabatier Reactor Design for Power-to-Gas Applications. <i>Energy Technology</i> , 2017 , 5, 911-921	3.5	31
252	Toward Artificial Mitochondrion: Mimicking Oxidative Phosphorylation in Polymer and Hybrid Membranes. <i>Nano Letters</i> , 2017 , 17, 6816-6821	11.5	71
251	Economic linear objective function approach for structure optimization of renewables-to-chemicals (R2Chem) networks. <i>Computer Aided Chemical Engineering</i> , 2017 , 40, 1975-1980	0.6	3
250	Optimal Reactor Design via Flux Profile Analysis for an Integrated Hydroformylation Process. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 11507-11518	3.9	16
249	Concurrent quality and process monitoring with canonical correlation analysis. <i>Journal of Process Control</i> , 2017 , 60, 95-103	3.9	56
248	Distributed optimization of multi-building energy systems with spatially and temporally coupled constraints 2017 ,		7
247	Quality-relevant fault detection of nonlinear processes based on kernel concurrent canonical correlation analysis 2017 ,		5
246	Crystal Population Growth in a Continuous Helically Coiled Flow Tube Crystallizer. <i>Chemical Engineering and Technology</i> , 2017 , 40, 1584-1590	2	12
245	Thermodynamic analysis and optimization of RWGS processes for solar syngas production from CO ₂ . <i>AIChE Journal</i> , 2017 , 63, 15-22	3.6	24
244	CO ₂ methanation: Optimal start-up control of a fixed-bed reactor for power-to-gas applications. <i>AIChE Journal</i> , 2017 , 63, 23-31	3.6	59
243	Integrated reaction-extraction process for the hydroformylation of long-chain alkenes with a homogeneous catalyst. <i>Computers and Chemical Engineering</i> , 2017 , 105, 212-223	4	20
242	Concurrent Monitoring and Diagnosis of Process and Quality Faults with Canonical Correlation Analysis. <i>IFAC-PapersOnLine</i> , 2017 , 50, 7999-8004	0.7	5

241	Physics-Based Surrogate Models for Optimal Control of a CO ₂ Methanation Reactor. <i>Computer Aided Chemical Engineering</i> , 2017 , 40, 127-132	0.6	1
240	Sliding window games for cooperative building temperature control using a distributed learning method. <i>Frontiers of Engineering Management</i> , 2017 , 4, 304	2.7	5
239	Dynamic Optimization of Constrained Semi-Batch Processes using Pontryagin's Minimum Principle and Parsimonious Parameterization. <i>Computer Aided Chemical Engineering</i> , 2017 , 40, 2041-2046	0.6	
238	Computationally Efficient Steady-State Process Simulation by Applying a Simultaneous Dynamic Method. <i>Computer Aided Chemical Engineering</i> , 2016 , 38, 517-522	0.6	3
237	Prescriptive analytics for understanding of out-of-plane deformation in additive manufacturing 2016 ,		7
236	Data-driven root cause diagnosis of faults in process industries. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2016 , 159, 1-11	3.8	60
235	Probabilistic reactor design in the framework of elementary process functions. <i>Computers and Chemical Engineering</i> , 2016 , 94, 45-59	4	26
234	A Short-Cut Method for the Quantification of Crystallization Kinetics. 1. Method Development. <i>Crystal Growth and Design</i> , 2016 , 16, 6743-6755	3.5	9
233	Deep causal mining for plant-wide oscillations with multilevel Granger causality analysis 2016 ,		5
232	2016 ,		3
231	Thermomorphic solvent selection for homogeneous catalyst recovery based on COSMO-RS. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016 , 99, 97-106	3.7	36
230	Comprehensive monitoring of nonlinear processes based on concurrent kernel projection to latent structures. <i>IEEE Transactions on Automation Science and Engineering</i> , 2016 , 13, 1129-1137	4.9	28
229	Nonlinear Model Order Reduction for Catalytic Tubular Reactors. <i>Computer Aided Chemical Engineering</i> , 2016 , 38, 2373-2378	0.6	1
228	Optimal design of solvents for extractive reaction processes. <i>AIChE Journal</i> , 2016 , 62, 3238-3249	3.6	27
227	Hydrogen and Carbon Monoxide Production by Chemical Looping over Iron-Aluminium Oxides. <i>Energy Technology</i> , 2016 , 4, 304-313	3.5	31
226	Offline Predictive Control of Out-of-Plane Shape Deformation for Additive Manufacturing. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2016 , 138,	3.3	25
225	Material development and process optimization for gas-phase hydrogen chloride electrolysis with oxygen depolarized cathode. <i>Journal of Applied Electrochemistry</i> , 2016 , 46, 755-767	2.6	6
224	Binding kinetics and multi-bond: Finding correlations by synthesizing interactions between ligand-coated bionanoparticles and receptor surfaces. <i>Analytical Biochemistry</i> , 2016 , 505, 8-17	3.1	1

223	Diagnostic concept for dynamically operated biogas production plants. <i>Renewable Energy</i> , 2016 , 96, 4798-489	16
222	Bi-level Demand Response Game with Information Sharing among Consumers**The work is supported in part by Alberta Innovates Technology Futures (AITF) postdoctoral fellowship.. <i>IFAC-PapersOnLine</i> , 2016 , 49, 663-668	0.7 5
221	Dynamic flux balance modeling to increase the production of high-value compounds in green microalgae. <i>Biotechnology for Biofuels</i> , 2016 , 9, 165	7.8 19
220	Concurrent Canonical Correlation Analysis Modeling for Quality-Relevant Monitoring. <i>IFAC-PapersOnLine</i> , 2016 , 49, 1044-1049	0.7 20
219	Valorization of the aqueous phase obtained from hydrothermally treated <i>Dunaliella salina</i> remnant biomass. <i>Bioresource Technology</i> , 2016 , 219, 64-71	11 22
218	Fault Detection of Multimode Processes Using Concurrent Projection to Latent Structures. <i>IFAC-PapersOnLine</i> , 2016 , 49, 705-710	0.7 1
217	Rational selection of experimental readout and intervention sites for reducing uncertainties in computational model predictions. <i>BMC Bioinformatics</i> , 2015 , 16, 13	3.6 3
216	Fast evaluation of univariate aggregation integrals on equidistant grids. <i>Computers and Chemical Engineering</i> , 2015 , 74, 115-127	4 12
215	Miniemulsion-Based Process for Controlling the Size and Shape of Zinc Oxide Nanoparticles. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 10293-10300	3.9 12
214	Comparison of flocculation methods for harvesting <i>Dunaliella</i> . <i>Bioresource Technology</i> , 2015 , 196, 145-521	32
213	Data Driven Conceptual Process Design for the Hydroformylation of 1-Dodecene in a Thermomorphic Solvent System. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 6761-6771	3.9 11
212	Reduction of microkinetic reaction models for reactor optimization exemplified for hydrogen production from methane. <i>Chemical Engineering Journal</i> , 2015 , 281, 981-994	14.7 9
211	Dynamic time warping based causality analysis for root-cause diagnosis of nonstationary fault processes. <i>IFAC-PapersOnLine</i> , 2015 , 48, 1288-1293	0.7 13
210	Bias-eliminated subspace model identification under time-varying deterministic type load disturbance. <i>Journal of Process Control</i> , 2015 , 25, 41-49	3.9 14
209	Drill-down diagnosis of deficient models in MPC. <i>IFAC-PapersOnLine</i> , 2015 , 48, 759-764	0.7 1
208	Fault Diagnosis Using Concurrent Projection to Latent Structures. <i>IFAC-PapersOnLine</i> , 2015 , 48, 1276-1281	17 2
207	Integrated solvent and process design exemplified for a Diels-Alder reaction. <i>AIChE Journal</i> , 2015 , 61, 147-158	3.6 66
206	Out-of-plane geometric error prediction for additive manufacturing 2015 ,	10

205	PLS-based Similarity Analysis for Mode Identification in Multimode Manufacturing Processes. <i>IFAC-PapersOnLine</i> , 2015 , 48, 777-782	0.7	6
204	Dynamic-Inner Partial Least Squares for Dynamic Data Modeling. <i>IFAC-PapersOnLine</i> , 2015 , 48, 117-122	0.7	26
203	Simultaneous design of the optimal reaction and process concept for multiphase systems. <i>Chemical Engineering Science</i> , 2014 , 115, 69-87	4.4	47
202	Ensembles-based and GA-based optimization for landfill gas production. <i>AIChE Journal</i> , 2014 , 60, 2063-2071	3.7	6
201	A New Method of Dynamic Latent-Variable Modeling for Process Monitoring. <i>IEEE Transactions on Industrial Electronics</i> , 2014 , 61, 6438-6445	8.9	109
200	Multiblock Concurrent PLS for Decentralized Monitoring of Continuous Annealing Processes. <i>IEEE Transactions on Industrial Electronics</i> , 2014 , 61, 6429-6437	8.9	84
199	A dynamic growth model of <i>Dunaliella salina</i> : parameter identification and profile likelihood analysis. <i>Bioresour. Technol.</i> , 2014 , 173, 21-31	11	17
198	Process data analytics in the era of big data. <i>AIChE Journal</i> , 2014 , 60, 3092-3100	3.6	226
197	Multi-directional reconstruction based contributions for root-cause diagnosis of dynamic processes 2014 ,		13
196	Application of economic MPC to the energy and demand minimization of a commercial building. <i>Journal of Process Control</i> , 2014 , 24, 1282-1291	3.9	73
195	Subspace identification with non-steady Kalman filter parameterization. <i>Journal of Process Control</i> , 2014 , 24, 1337-1345	3.9	10
194	Root cause diagnosis of plant-wide oscillations using Granger causality. <i>Journal of Process Control</i> , 2014 , 24, 450-459	3.9	99
193	Optimal operational control for complex industrial processes. <i>Annual Reviews in Control</i> , 2014 , 38, 81-92	10.3	59
192	Quality-Relevant Monitoring and Diagnosis with Dynamic Concurrent Projection to Latent Structures. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 2740-2745		7
191	Nonstationarity and cointegration tests for fault detection of dynamic processes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 10616-10621		17
190	Guest Editorial Integrated Optimization of Industrial Automation. <i>IEEE Transactions on Automation Science and Engineering</i> , 2014 , 11, 963-964	4.9	
189	Model-based prediction of optimal conditions for 1-octene hydroformylation. <i>Chemical Engineering Science</i> , 2014 , 115, 58-68	4.4	7
188	Avidity of influenza virus: model-based identification of adsorption kinetics from surface plasmon resonance experiments. <i>Journal of Chromatography A</i> , 2014 , 1326, 125-9	4.5	8

187	Online monitoring of nonlinear multivariate industrial processes using filtering KICABCA. <i>Control Engineering Practice</i> , 2014 , 22, 205-216	3.9	71
186	Combined Indices for ICA and Their Applications to Multivariate Process Fault Diagnosis. <i>Zidonghua Xuebao/Acta Automatica Sinica</i> , 2014 , 39, 494-501		5
185	Data-Driven Fault Diagnosis of Shaft Furnace Roasting Processes Using Reconstruction and Reconstruction-Based Contribution Approaches. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 8897-8902		
184	Steady-state analysis of the Anaerobic Digestion Model No. 1 (ADM1). <i>Nonlinear Dynamics</i> , 2013 , 73, 535-549	5	29
183	Predictive control methods to improve energy efficiency and reduce demand in buildings. <i>Computers and Chemical Engineering</i> , 2013 , 51, 77-85	4	58
182	Reactor configurations for biogas plants in model based analysis. <i>Chemical Engineering Science</i> , 2013 , 104, 413-426	4.4	16
181	Decentralized Fault Diagnosis of Continuous Annealing Processes Based on Multilevel PCA. <i>IEEE Transactions on Automation Science and Engineering</i> , 2013 , 10, 687-698	4.9	67
180	Quality-relevant and process-relevant fault monitoring with concurrent projection to latent structures. <i>AICHE Journal</i> , 2013 , 59, 496-504	3.6	179
179	Evaluation of Different Process Concepts for the Indirect Hydration of Cyclohexene to Cyclohexanol. <i>Organic Process Research and Development</i> , 2013 , 17, 343-358	3.9	18
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