

S Joe Qin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1259791/publications.pdf>

Version: 2024-02-01

374
papers

27,177
citations

7568

77
h-index

6471

157
g-index

391
all docs

391
docs citations

391
times ranked

12205
citing authors

#	ARTICLE	IF	CITATIONS
1	A survey of industrial model predictive control technology. <i>Control Engineering Practice</i> , 2003, 11, 733-764.	5.5	3,949
2	Statistical process monitoring: basics and beyond. <i>Journal of Chemometrics</i> , 2003, 17, 480-502.	1.3	1,313
3	Survey on data-driven industrial process monitoring and diagnosis. <i>Annual Reviews in Control</i> , 2012, 36, 220-234.	7.9	1,152
4	Recursive PCA for adaptive process monitoring. <i>Journal of Process Control</i> , 2000, 10, 471-486.	3.3	703
5	Recursive PLS algorithms for adaptive data modeling. <i>Computers and Chemical Engineering</i> , 1998, 22, 503-514.	3.8	524
6	Reconstruction-based contribution for process monitoring. <i>Automatica</i> , 2009, 45, 1593-1600.	5.0	510
7	An overview of subspace identification. <i>Computers and Chemical Engineering</i> , 2006, 30, 1502-1513.	3.8	482
8	Selection of the Number of Principal Components: The Variance of the Reconstruction Error Criterion with a Comparison to Other Methods. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 4389-4401.	3.7	472
9	Identification of faulty sensors using principal component analysis. <i>AIChE Journal</i> , 1996, 42, 2797-2812.	3.6	460
10	Multimode process monitoring with Bayesian inference-based finite Gaussian mixture models. <i>AIChE Journal</i> , 2008, 54, 1811-1829.	3.6	446
11	Reconstruction-Based Fault Identification Using a Combined Index. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 4403-4414.	3.7	414
12	Nonlinear PLS modeling using neural networks. <i>Computers and Chemical Engineering</i> , 1992, 16, 379-391.	3.8	383
13	Reconstruction and analysis of a carbon-core metabolic network for <i>Dunaliella salina</i> . <i>BMC Bioinformatics</i> , 2020, 21, 1.	2.6	379
14	Fault detection and diagnosis based on modified independent component analysis. <i>AIChE Journal</i> , 2006, 52, 3501-3514.	3.6	363
15	On unifying multiblock analysis with application to decentralized process monitoring. <i>Journal of Chemometrics</i> , 2001, 15, 715-742.	1.3	338
16	Subspace approach to multidimensional fault identification and reconstruction. <i>AIChE Journal</i> , 1998, 44, 1813-1831.	3.6	334
17	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. <i>Nature Materials</i> , 2018, 17, 89-96.	27.5	314
18	Geometric properties of partial least squares for process monitoring. <i>Automatica</i> , 2010, 46, 204-210.	5.0	313

#	ARTICLE	IF	CITATIONS
19	Process data analytics in the era of big data. <i>AICHE Journal</i> , 2014, 60, 3092-3100.	3.6	309
20	A novel dynamic PCA algorithm for dynamic data modeling and process monitoring. <i>Journal of Process Control</i> , 2018, 67, 1-11.	3.3	301
21	Demand reduction in building energy systems based on economic model predictive control. <i>Chemical Engineering Science</i> , 2012, 67, 92-100.	3.8	297
22	Control performance monitoring – a review and assessment. <i>Computers and Chemical Engineering</i> , 1998, 23, 173-186.	3.8	288
23	Multivariate process monitoring and fault diagnosis by multi-scale PCA. <i>Computers and Chemical Engineering</i> , 2002, 26, 1281-1293.	3.8	266
24	Decentralized Fault Diagnosis of Large-Scale Processes Using Multiblock Kernel Partial Least Squares. <i>IEEE Transactions on Industrial Informatics</i> , 2010, 6, 3-10.	11.3	252
25	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13382-13392.	13.8	234
26	Quality-relevant and process-relevant fault monitoring with concurrent projection to latent structures. <i>AICHE Journal</i> , 2013, 59, 496-504.	3.6	231
27	An Overview of Nonlinear Model Predictive Control Applications. , 2000, , 369-392.		228
28	Total projection to latent structures for process monitoring. <i>AICHE Journal</i> , 2010, 56, 168-178.	3.6	224
29	A new fault diagnosis method using fault directions in Fisher discriminant analysis. <i>AICHE Journal</i> , 2005, 51, 555-571.	3.6	214
30	Joint diagnosis of process and sensor faults using principal component analysis. <i>Control Engineering Practice</i> , 1998, 6, 457-469.	5.5	213
31	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.	11.3	211
32	Advances and opportunities in machine learning for process data analytics. <i>Computers and Chemical Engineering</i> , 2019, 126, 465-473.	3.8	209
33	A new subspace identification approach based on principal component analysis. <i>Journal of Process Control</i> , 2002, 12, 841-855.	3.3	208
34	Reconstruction-Based Contribution for Process Monitoring with Kernel Principal Component Analysis. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 7849-7857.	3.7	183
35	Determining the number of principal components for best reconstruction. <i>Journal of Process Control</i> , 2000, 10, 245-250.	3.3	182
36	Analysis and generalization of fault diagnosis methods for process monitoring. <i>Journal of Process Control</i> , 2011, 21, 322-330.	3.3	181

#	ARTICLE	IF	CITATIONS
37	Multiway Gaussian Mixture Model Based Multiphase Batch Process Monitoring. Industrial & Engineering Chemistry Research, 2009, 48, 8585-8594.	3.7	177
38	Fault Detection of Non-Linear Processes Using Kernel Independent Component Analysis. Canadian Journal of Chemical Engineering, 2007, 85, 526-536.	1.7	168
39	Multiblock Principal Component Analysis Based on a Combined Index for Semiconductor Fault Detection and Diagnosis. IEEE Transactions on Semiconductor Manufacturing, 2006, 19, 159-172.	1.7	166
40	A New Method of Dynamic Latent-Variable Modeling for Process Monitoring. IEEE Transactions on Industrial Electronics, 2014, 61, 6438-6445.	7.9	162
41	Comparison of four neural net learning methods for dynamic system identification. IEEE Transactions on Neural Networks, 1992, 3, 122-130.	4.2	161
42	Overview of Surrogate Modeling in Chemical Process Engineering. Chemie-Ingenieur-Technik, 2019, 91, 228-239.	0.8	154
43	Computer-aided design of ionic liquids as solvents for extractive desulfurization. AIChE Journal, 2018, 64, 1013-1025.	3.6	152
44	Detection and identification of faulty sensors in dynamic processes. AIChE Journal, 2001, 47, 1581-1593.	3.6	151
45	Closed-loop subspace identification: an orthogonal projection approach. Journal of Process Control, 2005, 15, 53-66.	3.3	146
46	Root cause diagnosis of plant-wide oscillations using Granger causality. Journal of Process Control, 2014, 24, 450-459.	3.3	145
47	Generalized Reconstruction-Based Contributions for Output-Relevant Fault Diagnosis With Application to the Tennessee Eastman Process. IEEE Transactions on Control Systems Technology, 2011, 19, 1114-1127.	5.2	142
48	Semiconductor manufacturing process control and monitoring: A fab-wide framework. Journal of Process Control, 2006, 16, 179-191.	3.3	139
49	Consistent dynamic PCA based on errors-in-variables subspace identification. Journal of Process Control, 2001, 11, 661-678.	3.3	135
50	A Curve Fitting Method for Detecting Valve Stiction in Oscillating Control Loops. Industrial & Engineering Chemistry Research, 2007, 46, 4549-4560.	3.7	134
51	Detection, identification, and reconstruction of faulty sensors with maximized sensitivity. AIChE Journal, 1999, 45, 1963-1976.	3.6	131
52	Systematic Method for Screening Ionic Liquids as Extraction Solvents Exemplified by an Extractive Desulfurization Process. ACS Sustainable Chemistry and Engineering, 2017, 5, 3382-3389.	6.7	116
53	Fault Detection of Nonlinear Processes Using Multiway Kernel Independent Component Analysis. Industrial & Engineering Chemistry Research, 2007, 46, 7780-7787.	3.7	115
54	A two-stage iterative learning control technique combined with real-time feedback for independent disturbance rejection. Automatica, 2004, 40, 1913-1922.	5.0	114

#	ARTICLE	IF	CITATIONS
55	A multiregion fuzzy logic controller for nonlinear process control. IEEE Transactions on Fuzzy Systems, 1994, 2, 74-81.	9.8	107
56	Multiblock Concurrent PLS for Decentralized Monitoring of Continuous Annealing Processes. IEEE Transactions on Industrial Electronics, 2014, 61, 6429-6437.	7.9	107
57	Reconstruction based fault prognosis for continuous processes. Control Engineering Practice, 2010, 18, 1211-1219.	5.5	106
58	Fault detection of plasma etchers using optical emission spectra. IEEE Transactions on Semiconductor Manufacturing, 2000, 13, 374-385.	1.7	103
59	Data-driven root cause diagnosis of faults in process industries. Chemometrics and Intelligent Laboratory Systems, 2016, 159, 1-11.	3.5	102
60	Self-Validating Inferential Sensors with Application to Air Emission Monitoring. Industrial & Engineering Chemistry Research, 1997, 36, 1675-1685.	3.7	101
61	Statistical MIMO controller performance monitoring. Part I: Data-driven covariance benchmark. Journal of Process Control, 2008, 18, 277-296.	3.3	100
62	Optimal operational control for complex industrial processes. Annual Reviews in Control, 2014, 38, 81-92.	7.9	100
63	Quality Relevant Data-Driven Modeling and Monitoring of Multivariate Dynamic Processes: The Dynamic T-PLS Approach. IEEE Transactions on Neural Networks, 2011, 22, 2262-2271.	4.2	98
64	Closed-loop subspace identification using the parity space. Automatica, 2006, 42, 315-320.	5.0	97
65	Application of economic MPC to the energy and demand minimization of a commercial building. Journal of Process Control, 2014, 24, 1282-1291.	3.3	97
66	Improved nonlinear fault detection technique and statistical analysis. AIChE Journal, 2008, 54, 3207-3220.	3.6	96
67	Toward Artificial Mitochondrion: Mimicking Oxidative Phosphorylation in Polymer and Hybrid Membranes. Nano Letters, 2017, 17, 6816-6821.	9.1	96
68	Sustainability of green solvents – review and perspective. Green Chemistry, 2022, 24, 410-437.	9.0	95
69	Online monitoring of nonlinear multivariate industrial processes using filtering KICA-PCA. Control Engineering Practice, 2014, 22, 205-216.	5.5	94
70	Recent developments in multivariable controller performance monitoring. Journal of Process Control, 2007, 17, 221-227.	3.3	93
71	A novel subspace identification approach with enforced causal models. Automatica, 2005, 41, 2043-2053.	5.0	87
72	A unified geometric approach to process and sensor fault identification and reconstruction. Computers and Chemical Engineering, 1998, 22, 927-943.	3.8	84

#	ARTICLE	IF	CITATIONS
73	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.	7.9	84
74	Concurrent quality and process monitoring with canonical correlation analysis. <i>Journal of Process Control</i> , 2017, 60, 95-103.	3.3	83
75	Dynamics of CO ₂ Absorption and Desorption Processes in Alkanolamine with Cosolvent Polyethylene Glycol. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 12081-12088.	3.7	82
76	Integrated solvent and process design exemplified for a Diels-Alder reaction. <i>AIChE Journal</i> , 2015, 61, 147-158.	3.6	81
77	Decentralized Fault Diagnosis of Continuous Annealing Processes Based on Multilevel PCA. <i>IEEE Transactions on Automation Science and Engineering</i> , 2013, 10, 687-698.	5.2	80
78	Autoregressive Dynamic Latent Variable Models for Process Monitoring. <i>IEEE Transactions on Control Systems Technology</i> , 2017, 25, 366-373.	5.2	79
79	Regression on dynamic PLS structures for supervised learning of dynamic data. <i>Journal of Process Control</i> , 2018, 68, 64-72.	3.3	77
80	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	76
81	Optimal Solvent Design for Extractive Distillation Processes: A Multiobjective Optimization-Based Hierarchical Framework. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 5777-5786.	3.7	72
82	Nonlinear FIR modeling via a neural net PLS approach. <i>Computers and Chemical Engineering</i> , 1996, 20, 147-159.	3.8	69
83	Statistical MIMO controller performance monitoring. Part II: Performance diagnosis. <i>Journal of Process Control</i> , 2008, 18, 297-319.	3.3	69
84	Predictive control methods to improve energy efficiency and reduce demand in buildings. <i>Computers and Chemical Engineering</i> , 2013, 51, 77-85.	3.8	66
85	Performance monitoring of model-predictive controllers via model residual assessment. <i>Journal of Process Control</i> , 2013, 23, 473-482.	3.3	66
86	Dynamic latent variable analytics for process operations and control. <i>Computers and Chemical Engineering</i> , 2018, 114, 69-80.	3.8	66
87	Deactivation of Modified Iron Oxide Materials in the Cyclic Water Gas Shift Process for CO-Free Hydrogen Production. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 303-310.	3.7	65
88	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.	6.7	64
89	Projection based MIMO control performance monitoring: λ -covariance monitoring in state space. <i>Journal of Process Control</i> , 2003, 13, 739-757.	3.3	63
90	Closed-loop subspace identification with innovation estimation. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2003, 36, 861-866.	0.4	61

#	ARTICLE	IF	CITATIONS
91	Sensor validation and process fault diagnosis for FCC units under MPC feedback. Control Engineering Practice, 2001, 9, 877-888.	5.5	60
92	On-line batch process monitoring using a consecutively updated multiway principal component analysis model. Computers and Chemical Engineering, 2003, 27, 1903-1912.	3.8	60
93	Data-driven Fault Detection and Diagnosis for Complex Industrial Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1115-1125.	0.4	59
94	Use of principal component analysis for sensor fault identification. Computers and Chemical Engineering, 1996, 20, S713-S718.	3.8	56
95	Out-of-equilibrium microcompartments for the bottom-up integration of metabolic functions. Nature Communications, 2018, 9, 2391.	12.8	55
96	Extending the UNIFAC model for ionic liquid-solute systems by combining experimental and computational databases. AIChE Journal, 2020, 66, e16821.	3.6	55
97	Economic model predictive control for building energy systems. , 2011, , .		54
98	A hybrid stochastic-deterministic optimization approach for integrated solvent and process design. Chemical Engineering Science, 2017, 159, 207-216.	3.8	53
99	Output Relevant Fault Reconstruction and Fault Subspace Extraction in Total Projection to Latent Structures Models. Industrial & Engineering Chemistry Research, 2010, 49, 9175-9183.	3.7	52
100	Dynamic-Inner Partial Least Squares for Dynamic Data Modeling. IFAC-PapersOnLine, 2015, 48, 117-122.	0.9	52
101	Plasma etching endpoint detection using multiple wavelengths for small open-area wafers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 66-75.	2.1	51
102	Simultaneous design of the optimal reaction and process concept for multiphase systems. Chemical Engineering Science, 2014, 115, 69-87.	3.8	51
103	Adaptive actuator fault compensation for linear systems with matching and unmatching uncertainties. Journal of Process Control, 2009, 19, 985-990.	3.3	50
104	Synthesis of Single-Crystal Gold Nano- and Microprisms Using a Solvent-Reductant-Template Ionic Liquid. European Journal of Inorganic Chemistry, 2008, 2008, 3769-3775.	2.0	49
105	Rational design of double salt ionic liquids as extraction solvents: Separation of thiophene/n-octane as example. AIChE Journal, 2019, 65, e16625.	3.6	48
106	Recursive Least Squares Estimation for Run-to-Run Control With Metrology Delay and Its Application to STI Etch Process. IEEE Transactions on Semiconductor Manufacturing, 2005, 18, 309-319.	1.7	47
107	Dynamic concurrent kernel CCA for strip-thickness relevant fault diagnosis of continuous annealing processes. Journal of Process Control, 2018, 67, 12-22.	3.3	47
108	On the Stability of MIMO EWMA Run-to-Run Controllers With Metrology Delay. IEEE Transactions on Semiconductor Manufacturing, 2006, 19, 78-86.	1.7	46

#	ARTICLE	IF	CITATIONS
109	Discriminating between disturbance and process model mismatch in model predictive control. Journal of Process Control, 2009, 19, 1610-1616.	3.3	46
110	Hydrogen and Carbon Monoxide Production by Chemical Looping over Iron-Aluminium Oxides. Energy Technology, 2016, 4, 304-313.	3.8	45
111	Comprehensive monitoring of nonlinear processes based on concurrent kernel projection to latent structures. IEEE Transactions on Automation Science and Engineering, 2016, 13, 1129-1137.	5.2	45
112	Dynamic Nonlinear Partial Least Squares Modeling Using Gaussian Process Regression. Industrial & Engineering Chemistry Research, 2019, 58, 16676-16686.	3.7	44
113	Minimum variance performance map for constrained model predictive control. Journal of Process Control, 2009, 19, 1199-1204.	3.3	43
114	Adaptive actuator/component fault compensation for nonlinear systems. AIChE Journal, 2008, 54, 2404-2412.	3.6	42
115	Comparison of flocculation methods for harvesting Dunaliella. Bioresource Technology, 2015, 196, 145-152.	9.6	42
116	Thermomorphic solvent selection for homogeneous catalyst recovery based on COSMO-RS. Chemical Engineering and Processing: Process Intensification, 2016, 99, 97-106.	3.6	42
117	Model-based Optimal Sabatier Reactor Design for Power-to-Gas Applications. Energy Technology, 2017, 5, 911-921.	3.8	42
118	Neural recommender system for the activity coefficient prediction and UNIFAC model extension of ionic liquid-solute systems. AIChE Journal, 2021, 67, e17171.	3.6	42
119	VLE and LLE Data for the System Cyclohexane + Cyclohexene + Water + Cyclohexanol. Journal of Chemical & Engineering Data, 2004, 49, 1675-1681.	1.9	41
120	Fault Diagnosis in the Feedback-Invariant Subspace of Closed-Loop Systems. Industrial & Engineering Chemistry Research, 2005, 44, 2359-2368.	3.7	41
121	Achieving state estimation equivalence for misassigned disturbances in offset-free model predictive control. AIChE Journal, 2009, 55, 396-407.	3.6	41
122	Evaluation of COSMO-RS for solid-liquid equilibria prediction of binary eutectic solvent systems. Green Energy and Environment, 2021, 6, 371-379.	8.7	41
123	Total PLS Based Contribution Plots for Fault Diagnosis. Zidonghua Xuebao/Acta Automatica Sinica, 2009, 35, 759-765.	0.3	41
124	Continuous Crystallization in a Helically Coiled Flow Tube: Analysis of Flow Field, Residence Time Behavior, and Crystal Growth. Industrial & Engineering Chemistry Research, 2017, 56, 3699-3712.	3.7	40
125	Prediction of acid dissociation constants of organic compounds using group contribution methods. Chemical Engineering Science, 2018, 183, 95-105.	3.8	40
126	Dynamic latent variable regression for inferential sensor modeling and monitoring. Computers and Chemical Engineering, 2020, 137, 106809.	3.8	39

#	ARTICLE	IF	CITATIONS
127	Efficient Dynamic Latent Variable Analysis for High-Dimensional Time Series Data. IEEE Transactions on Industrial Informatics, 2020, 16, 4068-4076.	11.3	39
128	Constructing artificial respiratory chain in polymer compartments: Insights into the interplay between boxidase and the membrane. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15006-15017.	7.1	37
129	Fault Detection and Operation Mode Identification Based on Pattern Classification with Variable Selection. Industrial & Engineering Chemistry Research, 2004, 43, 1701-1710.	3.7	36
130	Steady-state analysis of the Anaerobic Digestion Model No. 1 (ADM1). Nonlinear Dynamics, 2013, 73, 535-549.	5.2	36
131	Optimal design of solvents for extractive reaction processes. AIChE Journal, 2016, 62, 3238-3249.	3.6	36
132	Polymer-Based Module for NAD ⁺ Regeneration with Visible Light. ChemBioChem, 2019, 20, 2593-2596.	2.6	36
133	Dynamic Behavior of a PEM Fuel Cell During Electrochemical CO Oxidation on a PtRu Anode. Topics in Catalysis, 2008, 51, 89-97.	2.8	35
134	Dynamic flux balance modeling to increase the production of high-value compounds in green microalgae. Biotechnology for Biofuels, 2016, 9, 165.	6.2	34
135	Thermodynamic analysis and optimization of RWGS processes for solar syngas production from CO ₂ . AIChE Journal, 2017, 63, 15-22.	3.6	34
136	Two-Step Reactive Distillation Process for Cyclohexanol Production from Cyclohexene. Industrial & Engineering Chemistry Research, 2009, 48, 9534-9545.	3.7	32
137	Valorization of the aqueous phase obtained from hydrothermally treated Dunaliella salina remnant biomass. Bioresource Technology, 2016, 219, 64-71.	9.6	32
138	Unevenly Sampled Dynamic Data Modeling and Monitoring With an Industrial Application. IEEE Transactions on Industrial Informatics, 2017, 13, 2203-2213.	11.3	32
139	Supervised Diagnosis of Quality and Process Faults with Canonical Correlation Analysis. Industrial & Engineering Chemistry Research, 2019, 58, 11213-11223.	3.7	32
140	Hybrid Semi-parametric Modeling in Separation Processes: A Review. Chemie-Ingenieur-Technik, 2020, 92, 842-855.	0.8	31
141	Fault diagnosis of continuous annealing processes using a reconstruction-based method. Control Engineering Practice, 2012, 20, 511-518.	5.5	30
142	Offline Predictive Control of Out-of-Plane Shape Deformation for Additive Manufacturing. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	2.2	30
143	Model-based optimal design of phase change ionic liquids for efficient thermal energy storage. Green Energy and Environment, 2021, 6, 392-404.	8.7	30
144	Computer simulation of gas generation and transport in landfills. V: Use of artificial neural network and the genetic algorithm for short- and long-term forecasting and planning. Chemical Engineering Science, 2011, 66, 2646-2659.	3.8	29

#	ARTICLE	IF	CITATIONS
145	Effect of the MEA design on the performance of PEMWE single cells with different sizes. Journal of Applied Electrochemistry, 2018, 48, 701-711.	2.9	29
146	Comparative study on monitoring schemes for non-Gaussian distributed processes. Journal of Process Control, 2018, 67, 69-82.	3.3	29
147	Dynamic-Inner Canonical Correlation and Causality Analysis for High Dimensional Time Series Data. IFAC-PapersOnLine, 2018, 51, 476-481.	0.9	29
148	Integrated ionic liquid and CO_2 -based absorption process design for gas separation: Global optimization using hybrid models. AIChE Journal, 2021, 67, e17340.	3.6	29
149	Variance component analysis based fault diagnosis of multi-layer overlay lithography processes. IIE Transactions, 2009, 41, 764-775.	2.1	28
150	Probabilistic reactor design in the framework of elementary process functions. Computers and Chemical Engineering, 2016, 94, 45-59.	3.8	28
151	Bottom-Up Synthesis of Artificial Cells: Recent Highlights and Future Challenges. Annual Review of Chemical and Biomolecular Engineering, 2021, 12, 287-308.	6.8	28
152	A strong tracking predictor for nonlinear processes with input time delay. Computers and Chemical Engineering, 2004, 28, 2523-2540.	3.8	27
153	Dynamic latent variable modeling for statistical process monitoring. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 12886-12891.	0.4	27
154	Measurement and simulation of mass transfer and backmixing behavior in a gas-liquid helically coiled tubular reactor. Chemical Engineering Science, 2017, 170, 410-421.	3.8	27
155	MIMO control performance monitoring using left/right diagonal interactors. Journal of Process Control, 2009, 19, 1267-1276.	3.3	26
156	Integrated reaction-extraction process for the hydroformylation of long-chain alkenes with a homogeneous catalyst. Computers and Chemical Engineering, 2017, 105, 212-223.	3.8	26
157	Optimal industrial load control in smart grid: A case study for oil refineries. , 2013, , .		25
158	Nonstationarity and cointegration tests for fault detection of dynamic processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 10616-10621.	0.4	25
159	Directed Growth of Biomimetic Microcompartments. Advanced Biology, 2019, 3, e1800314.	3.0	25
160	Distributed Approach for Temporal-Spatial Charging Coordination of Plug-in Electric Taxi Fleet. IEEE Transactions on Industrial Informatics, 2019, 15, 3185-3195.	11.3	25
161	Porosity and Structure of Hierarchically Porous Ni/Al ₂ O ₃ Catalysts for CO ₂ Methanation. Catalysts, 2020, 10, 1471.	3.5	25
162	Sensor Fault Detection via Multiscale Analysis and Nonparametric Statistical Inference. Industrial & Engineering Chemistry Research, 1998, 37, 1024-1032.	3.7	24

#	ARTICLE	IF	CITATIONS
163	Nonlinear Frequency Response Analysis of the Ferrocyanide Oxidation Kinetics. Part II. Measurement Routine and Experimental Validation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17352-17358.	3.1	24
164	New Dynamic Predictive Monitoring Schemes Based on Dynamic Latent Variable Models. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 2353-2365.	3.7	24
165	Adaptive generic model control for a class of nonlinear time-varying processes with input time delay. <i>Journal of Process Control</i> , 2004, 14, 517-531.	3.3	23
166	Concurrent Canonical Correlation Analysis Modeling for Quality-Relevant Monitoring. <i>IFAC-PapersOnLine</i> , 2016, 49, 1044-1049.	0.9	23
167	Nonlinear frequency response analysis for the diagnosis of carbon monoxide poisoning in PEM fuel cell anodes. <i>Journal of Applied Electrochemistry</i> , 2011, 41, 1021-1032.	2.9	22
168	Electrochemical Membrane Reactors for Sustainable Chlorine Recycling. <i>Membranes</i> , 2012, 2, 510-528.	3.0	22
169	Evaluation of Different Process Concepts for the Indirect Hydration of Cyclohexene to Cyclohexanol. <i>Organic Process Research and Development</i> , 2013, 17, 343-358.	2.7	22
170	Feasibility of an Electrochemical Membrane Reactor for the Partial Oxidation of n-Butane to Maleic Anhydride. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 4551-4558.	3.7	21
171	Projection based MIMO control performance monitoring: "measured disturbances and setpoint changes". <i>Journal of Process Control</i> , 2005, 15, 89-102.	3.3	21
172	Ultra-low loading Pt-sputtered gas diffusion electrodes for oxygen reduction reaction. <i>Journal of Applied Electrochemistry</i> , 2018, 48, 221-232.	2.9	21
173	β -Carotene extraction from <i>Dunaliella salina</i> by supercritical CO ₂ . <i>Journal of Applied Phycology</i> , 2021, 33, 1435-1445.	2.8	21
174	En route to dynamic life processes by SNARE-mediated fusion of polymer and hybrid membranes. <i>Nature Communications</i> , 2021, 12, 4972.	12.8	21
175	A dynamic growth model of <i>Dunaliella salina</i> : Parameter identification and profile likelihood analysis. <i>Bioresource Technology</i> , 2014, 173, 21-31.	9.6	20
176	Quantitative single cell analysis uncovers the life/death decision in CD95 network. <i>PLoS Computational Biology</i> , 2018, 14, e1006368.	3.2	20
177	Graph neural networks for the prediction of infinite dilution activity coefficients. , 2022, 1, 216-225.		20
178	Partial least squares regression for recursive system identification. , 0, , .		19
179	Recursive PCA for Adaptive Process Monitoring. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1999, 32, 6686-6691.	0.4	19
180	On-line data compression and error analysis using wavelet technology. <i>AIChE Journal</i> , 2000, 46, 119-132.	3.6	19

#	ARTICLE	IF	CITATIONS
181	Bias-eliminated subspace model identification under time-varying deterministic type load disturbance. <i>Journal of Process Control</i> , 2015, 25, 41-49.	3.3	19
182	Compartments for Synthetic Cells: Osmotically Assisted Separation of Oil from Double Emulsions in a Microfluidic Chip. <i>ChemBioChem</i> , 2019, 20, 2604-2608.	2.6	19
183	VLE and LLE Data Set for the System Cyclohexane + Cyclohexene + Water + Cyclohexanol + Formic Acid + Formic Acid Cyclohexyl Ester. <i>Journal of Chemical & Engineering Data</i> , 2005, 50, 1277-1282.	1.9	18
184	Decentralized Fault Diagnosis of Large-scale Processes Using Multiblock Kernel Principal Component Analysis. <i>Zidonghua Xuebao/Acta Automatica Sinica</i> , 2010, 36, 593-597.	1.5	18
185	Reactor configurations for biogas plants – a model based analysis. <i>Chemical Engineering Science</i> , 2013, 104, 413-426.	3.8	18
186	Dynamic time warping based causality analysis for root-cause diagnosis of nonstationary fault processes. <i>IFAC-PapersOnLine</i> , 2015, 48, 1288-1293.	0.9	18
187	Diagnostic concept for dynamically operated biogas production plants. <i>Renewable Energy</i> , 2016, 96, 479-489.	8.9	18
188	Optimal Reactor Design via Flux Profile Analysis for an Integrated Hydroformylation Process. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 11507-11518.	3.7	18
189	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.	4.6	18
190	Load-flexible fixed-bed reactors by multi-period design optimization. <i>Chemical Engineering Journal</i> , 2022, 428, 130771.	12.7	18
191	Data-Based Hybrid Tension Estimation and Fault Diagnosis of Cold Rolling Continuous Annealing Processes. <i>IEEE Transactions on Neural Networks</i> , 2011, 22, 2284-2295.	4.2	17
192	Decentralized Fault Diagnosis of Large-scale Processes Using Multiblock Kernel Principal Component Analysis. <i>Zidonghua Xuebao/Acta Automatica Sinica</i> , 2010, 36, 593-597.	0.3	17
193	Single-machine scheduling with advanced process control constraints. <i>Journal of Scheduling</i> , 2012, 15, 165-179.	1.9	16
194	Multi-directional reconstruction based contributions for root-cause diagnosis of dynamic processes. , 2014, , .		16
195	Crystal Population Growth in a Continuous Helically Coiled Flow Tube Crystallizer. <i>Chemical Engineering and Technology</i> , 2017, 40, 1584-1590.	1.5	16
196	Linear Programming Approach for Structure Optimization of Renewable-to-Chemicals (R2Chem) Production Networks. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 9889-9902.	3.7	16
197	Unified Analysis of Diagnosis Methods for Process Monitoring. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009, 42, 1007-1012.	0.4	15
198	Computer simulation of gas generation and transport in landfills: V – Dynamic updating of the model using the ensemble Kalman filter. <i>Chemical Engineering Science</i> , 2012, 74, 69-78.	3.8	15

#	ARTICLE	IF	CITATIONS
199	The FluxMax approach for simultaneous process synthesis and heat integration: Production of hydrogen cyanide. <i>AIChE Journal</i> , 2019, 65, e16554.	3.6	15
200	Modeling inter-layer interactions for out-of-plane shape deviation reduction in additive manufacturing. <i>IJSE Transactions</i> , 2020, 52, 721-731.	2.4	15
201	Kernel-Based Statistical Process Monitoring and Fault Detection in the Presence of Missing Data. <i>IEEE Transactions on Industrial Informatics</i> , 2022, 18, 4477-4487.	11.3	15
202	Stability analysis and optimal tuning of EWMA controllers – Gain adaptation vs. intercept adaptation. <i>Journal of Process Control</i> , 2010, 20, 134-142.	3.3	14
203	Development of a Novel Catalytic Distillation Process for Cyclohexanol Production: Mini Plant Experiments and Complementary Process Simulations. <i>Organic Process Research and Development</i> , 2011, 15, 527-539.	2.7	14
204	Fast evaluation of univariate aggregation integrals on equidistant grids. <i>Computers and Chemical Engineering</i> , 2015, 74, 115-127.	3.8	14
205	Miniemulsion-Based Process for Controlling the Size and Shape of Zinc Oxide Nanoparticles. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 10293-10300.	3.7	14
206	An Interpolating Model Predictive Control Strategy with Application to a Waste Treatment Plant. <i>Computers and Chemical Engineering</i> , 1997, 21, S881-S886.	3.8	14
207	Digitization in Catalysis Research: Towards a Holistic Description of a Ni/Al ₂ O ₃ Reference Catalyst for CO ₂ Methanation. <i>ChemCatChem</i> , 2022, 14, .	3.7	14
208	Multiscale Simulation of the Indirect Internal Reforming Unit (IIR) in a Molten Carbonate Fuel Cell (MCFC). <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 4332-4341.	3.7	13
209	Impact of the Gold Support on the Electrocatalytic Oxidation of Sugars at Enzyme-Modified Electrodes. <i>Electroanalysis</i> , 2011, 23, 927-930.	2.9	13
210	Root cause diagnosis of plant-wide oscillations using Granger causality. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 160-165.	0.4	13
211	Subspace identification with non-steady Kalman filter parameterization. <i>Journal of Process Control</i> , 2014, 24, 1337-1345.	3.3	13
212	Reduction of microkinetic reaction models for reactor optimization exemplified for hydrogen production from methane. <i>Chemical Engineering Journal</i> , 2015, 281, 981-994.	12.7	13
213	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.	7.1	13
214	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.	0.4	12
215	Out-of-plane geometric error prediction for additive manufacturing. , 2015, , .		12
216	Transmembrane NADH Oxidation with Tetracyanoquinodimethane. <i>Langmuir</i> , 2018, 34, 5435-5443.	3.5	12

#	ARTICLE	IF	CITATIONS
217	Integration of process knowledge and statistical learning for the Dow data challenge problem. Computers and Chemical Engineering, 2021, 153, 107451.	3.8	12
218	Integrated metal-organic framework and pressure/vacuum swing adsorption process design: Descriptor optimization. AIChE Journal, 2022, 68, e17524.	3.6	12
219	Fault diagnosis of dynamic processes with reconstruction and magnitude profile estimation for an industrial application. Control Engineering Practice, 2022, 121, 105008.	5.5	12
220	Rational Screening of Deep Eutectic Solvents for the Direct Extraction of α -Tocopherol from Deodorized Distillates. ACS Sustainable Chemistry and Engineering, 2022, 10, 8216-8227.	6.7	12
221	Subspace model predictive control and a case study. , 2002, , .		11
222	Reconstruction-based contribution for process monitoring with kernel principal component analysis. , 2010, , .		11
223	Data Driven Conceptual Process Design for the Hydroformylation of 1-Dodecene in a Thermomorphic Solvent System. Industrial & Engineering Chemistry Research, 2015, 54, 6761-6771.	3.7	11
224	A Short-Cut Method for the Quantification of Crystallization Kinetics. 1. Method Development. Crystal Growth and Design, 2016, 16, 6743-6755.	3.0	11
225	Map-Reduce Decentralized PCA for Big Data Monitoring and Diagnosis of Faults in High-Speed Train Bearings. IFAC-PapersOnLine, 2018, 51, 144-149.	0.9	11
226	A Platform for Fault Diagnosis of High-Speed Train based on Big Data. IFAC-PapersOnLine, 2018, 51, 309-314.	0.9	11
227	Control and Monitoring of Semiconductor Manufacturing Processes: Challenges and Opportunities. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 125-136.	0.4	10
228	Combined Branch and Bound Method and Exergy Analysis for Energy System Design. Industrial & Engineering Chemistry Research, 2012, 51, 14428-14437.	3.7	10
229	Concurrent Monitoring and Diagnosis of Process and Quality Faults with Canonical Correlation Analysis. IFAC-PapersOnLine, 2017, 50, 7999-8004.	0.9	10
230	Energy-Efficient Gas-Phase Electrolysis of Hydrogen Chloride. Chemie-Ingenieur-Technik, 2019, 91, 795-808.	0.8	10
231	A New Approach to Closed-Loop Autotuning for Proportional-Integral-Derivative Controllers. Industrial & Engineering Chemistry Research, 1998, 37, 2462-2468.	3.7	9
232	Error based criterion for on-line wavelet data compression. Journal of Process Control, 2001, 11, 717-731.	3.3	9
233	An alternative PLS algorithm for the monitoring of industrial process. , 2001, , .		9
234	Parallel QR Implementation of Subspace Identification with Parsimonious Models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 1591-1596.	0.4	9

#	ARTICLE	IF	CITATIONS
235	Model-based prediction of optimal conditions for 1-octene hydroformylation. Chemical Engineering Science, 2014, 115, 58-68.	3.8	9
236	Avidity of influenza virus: Model-based identification of adsorption kinetics from surface plasmon resonance experiments. Journal of Chromatography A, 2014, 1326, 125-129.	3.7	9
237	Prescriptive analytics for understanding of out-of-plane deformation in additive manufacturing. , 2016, , .		9
238	On the role of microkinetic network structure in the interplay between oxygen evolution reaction and catalyst dissolution. Scientific Reports, 2020, 10, 14140.	3.3	9
239	Plant-wide troubleshooting and diagnosis using dynamic embedded latent feature analysis. Computers and Chemical Engineering, 2021, 152, 107392.	3.8	9
240	Combined Indices for ICA and Their Applications to Multivariate Process Fault Diagnosis. Zidonghua Xuebao/Acta Automatica Sinica, 2014, 39, 494-501.	0.3	9
241	COMPARISONS OF SUBSPACE IDENTIFICATION METHODS FOR SYSTEMS OPERATING ON CLOSED-LOOP. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 494-499.	0.4	8
242	Feasibility Study of the Oxidative Dehydrogenation of Ethane in an Electrochemical Packed-Bed Membrane Reactor. Industrial & Engineering Chemistry Research, 2007, 46, 8665-8673.	3.7	8
243	Fault Diagnosis and Isolation of Multi-Input-Multi-Output Networked Control Systems. Industrial & Engineering Chemistry Research, 2008, 47, 2636-2642.	3.7	8
244	Reconstruction-based Contribution for Process Monitoring. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 7889-7894.	0.4	8
245	PLS-based Similarity Analysis for Mode Identification in Multimode Manufacturing Processes. IFAC-PapersOnLine, 2015, 48, 777-782.	0.9	8
246	Mechanisms behind overshoots in mean cluster size profiles in aggregation-breakup processes. Journal of Colloid and Interface Science, 2018, 528, 336-348.	9.4	8
247	Subspace model identification under load disturbance with unknown transient and periodic dynamics. Journal of Process Control, 2020, 85, 100-111.	3.3	8
248	Selectivity and Sustainability of Electroenzymatic Process for Glucose Conversion to Gluconic Acid. Catalysts, 2020, 10, 269.	3.5	8
249	A new approach to closed loop autotuning for PID controllers. , 1998, , .		7
250	On the selection of variables for qualitative modelling of dynamical systems. International Journal of General Systems, 2002, 31, 435-467.	2.5	7
251	Computationally efficient modeling of wafer temperatures in a low-pressure chemical vapor deposition furnace. IEEE Transactions on Semiconductor Manufacturing, 2003, 16, 342-350.	1.7	7
252	Material development and process optimization for gas-phase hydrogen chloride electrolysis with oxygen depolarized cathode. Journal of Applied Electrochemistry, 2016, 46, 755-767.	2.9	7

#	ARTICLE	IF	CITATIONS
253	Bi-level Demand Response Game with Information Sharing among Consumers**The work is supported in part by Alberta Innovates Technology Futures (AITF) postdoctoral fellowship.. IFAC-PapersOnLine, 2016, 49, 663-668.	0.9	7
254	Distributed optimization of multi-building energy systems with spatially and temporally coupled constraints. , 2017, , .		7
255	Regularized LTI System Identification with Multiple Regularization Matrix. IFAC-PapersOnLine, 2018, 51, 180-185.	0.9	7
256	Classification and Diagnosis of Bioprocess Cell Growth Productions Using Early-Stage Data. Industrial & Engineering Chemistry Research, 2019, 58, 13469-13480.	3.7	7
257	Symmetry Breaking and Emergence of Directional Flows in Minimal Actomyosin Cortices. Cells, 2020, 9, 1432.	4.1	7
258	Systematic Green Solvent Selection for the Hydroformylation of Long-Chain Alkenes. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	7
259	Latent vector autoregressive modeling and feature analysis of high dimensional and noisy data from dynamic systems. AIChE Journal, 2022, 68, .	3.6	7
260	Interpolating optimizing process control. Journal of Process Control, 1997, 7, 129-138.	3.3	6
261	ON THE ROLE OF FUTURE HORIZON IN CLOSED-LOOP SUBSPACE IDENTIFICATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1080-1084.	0.4	6
262	Improving industrial mpc performance with data-driven disturbance modeling. , 2011, , .		6
263	A renewable energy integration application in a MicroGrid based on model predictive control. , 2012, , .		6
264	Ensembles-based and GA-based optimization for landfill gas production. AIChE Journal, 2014, 60, 2063-2071.	3.6	6
265	Quality-relevant fault detection of nonlinear processes based on kernel concurrent canonical correlation analysis. , 2017, , .		6
266	Identification of Key Transport Phenomena in High-Temperature Reactors: Flow and Heat Transfer Characteristics. Industrial & Engineering Chemistry Research, 2018, 57, 15884-15897.	3.7	6
267	Systematic Selection of Green Solvents and Process Optimization for the Hydroformylation of Long-Chain Olefines. Processes, 2019, 7, 882.	2.8	6
268	Surrogate Modeling for Liquid-Liquid Equilibria Using a Parameterization of the Binodal Curve. Processes, 2019, 7, 753.	2.8	6
269	A stable Lasso algorithm for inferential sensor structure learning and parameter estimation. Journal of Process Control, 2021, 107, 70-82.	3.3	6
270	Fusion-Induced Growth of Biomimetic Polymersomes: Behavior of Poly(dimethylsiloxane)-Poly(ethylene Terephthalate) Overlapped 2022, 43, e2100712.	3.9	6

#	ARTICLE	IF	CITATIONS
271	A statistical perspective of neural networks for process modeling and control. , 0, , .		5
272	Determining the Number of Principal Components for Best Reconstruction. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 357-362.	0.4	5
273	Adaptive run-to-run control and monitoring for a rapid thermal processor. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 301.	1.6	5
274	Optimal Structured Residual Approach for Improved Faulty Sensor Diagnosis. Industrial & Engineering Chemistry Research, 2005, 44, 2117-2124.	3.7	5
275	Fisher Discriminant Analysis for Semiconductor Batch Tool Matching. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 9144-9148.	0.4	5
276	Online dropout detection in subcutaneously implanted continuous glucose monitoring. , 2010, , .		5
277	Progressive Parametrization in Subspace Identification Models with finite horizons. , 2010, , .		5
278	Performance Synthesis of Multiple Input~Multiple Output (MIMO) Exponentially Weighted Moving Average (EWMA) Run-to-Run Controllers with Metrology Delay. Industrial & Engineering Chemistry Research, 2011, 50, 1400-1409.	3.7	5
279	Monitoring of Dynamic Processes with Subspace Identification and Principal Component Analysis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 684-689.	0.4	5
280	Rational selection of experimental readout and intervention sites for reducing uncertainties in computational model predictions. BMC Bioinformatics, 2015, 16, 13.	2.6	5
281	Deep causal mining for plant-wide oscillations with multilevel Granger causality analysis. , 2016, , .		5
282	A comparison study of data-driven projection to latent structures modeling and monitoring methods on high-speed train operation. , 2016, , .		5
283	Miniplant-Scale Evaluation of a Semibatch-Continuous Tandem Reactor System for the Hydroformylation of Long-Chain Olefins. Industrial & Engineering Chemistry Research, 2019, 58, 2471-2480.	3.7	5
284	Extracting a low-dimensional predictable time series. Optimization and Engineering, 2022, 23, 1189-1214.	2.4	5
285	Sliding window games for cooperative building temperature control using a distributed learning method. Frontiers of Engineering Management, 2017, 4, 304.	6.1	5
286	Latent State Space Modeling of High-Dimensional Time Series With a Canonical Correlation Objective. , 2022, 6, 3469-3474.		5
287	Modified Independent Component Analysis for Multivariate Statistical Process Monitoring. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1133-1138.	0.4	4
288	Monitoring Non-normal Data with Principal Component Analysis and Adaptive Density Estimation. , 2007, , .		4

#	ARTICLE	IF	CITATIONS
289	KPCA based multi-spectral segments feature extraction and GA based Combinatorial optimization for frequency spectrum data modeling. , 2011, , .		4
290	Concurrent projection to latent structures for output-relevant and input-relevant fault monitoring. , 2012, , .		4
291	Hybrid Inferential Modeling for Vapor Pressure of Hydrocarbon Mixtures in Oil Production. Industrial & Engineering Chemistry Research, 2013, 52, 12420-12425.	3.7	4
292	Experimental study of economic model predictive control in building energy systems. , 2013, , .		4
293	DiCCA with Discrete-Fourier Transforms for Power System Events Detection and Localization. IFAC-PapersOnLine, 2018, 51, 726-731.	0.9	4
294	Latent Variable Regression for Process and Quality Modeling. , 2019, , .		4
295	Computer-aided solvent screening for the fractionation of wet microalgae biomass. Green Chemistry, 2021, 23, 10014-10029.	9.0	4
296	Effect of planarization of the bottom superconducting yttrium-barium-copper-oxide layer in the multilayer structure. IEEE Transactions on Applied Superconductivity, 1999, 9, 2418-2421.	1.7	3
297	Drug dosage adjustment via run-to-run control. , 2002, , .		3
298	<title>Computationally efficient modeling of wafer temperatures in an LPCVD furnace</title>. , 2003, 5044, 97.		3
299	Stability control for a class of complex chaos systems. Chaos, Solitons and Fractals, 2009, 39, 1463-1471.	5.1	3
300	Reconstruction based fault prognosis for continuous processe. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1019-1024.	0.4	3
301	Dynamics of bionanoparticle targeting in mixtures of human tumour cells by validated population balance modelling. Soft Matter, 2010, 6, 1203.	2.7	3
302	An adaptive chaotic PSO for parameter optimization and feature extraction of LS-SVM based modelling. , 2011, , .		3
303	Control performance monitoring via model residual assessment. , 2012, , .		3
304	Control Performance Monitoring of Excessive Oscillations of an Offshore Production Facility. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 25-32.	0.4	3
305	Advanced Streaming Data Cleansing. , 2013, , .		3
306	Computationally Efficient Steady-State Process Simulation by Applying a Simultaneous Dynamic Method. Computer Aided Chemical Engineering, 2016, 38, 517-522.	0.5	3

#	ARTICLE	IF	CITATIONS
307	Physics-Based Surrogate Models for Optimal Control of a CO ₂ Methanation Reactor. Computer Aided Chemical Engineering, 2017, 40, 127-132.	0.5	3
308	Economic linear objective function approach for structure optimization of renewables-to-chemicals (R2Chem) networks. Computer Aided Chemical Engineering, 2017, 40, 1975-1980.	0.5	3
309	Thermodynamic Network Flow Approach for Chemical Process Synthesis. Computer Aided Chemical Engineering, 2018, 43, 881-886.	0.5	3
310	Scale up of Transmembrane NADH Oxidation in Synthetic Giant Vesicles. Bioconjugate Chemistry, 2021, 32, 897-903.	3.6	3
311	Feature Selection of Frequency Spectrum for Modeling Difficulty to Measure Process Parameters. Lecture Notes in Computer Science, 2012, , 82-91.	1.3	3
312	Computational Screening of Metal-Organic Frameworks for Ethylene Purification from Ethane/Ethylene/Acetylene Mixture. Nanomaterials, 2022, 12, 869.	4.1	3
313	Model Predictive Control of FCC Units with Integrated Sensor Validation and Process Fault Diagnosis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 563-568.	0.4	2
314	Canonical Correlation Partial Least Squares. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 1603-1608.	0.4	2
315	A NEW SUBSPACE IDENTIFICATION METHOD FOR CLOSED-LOOP SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1056-1061.	0.4	2
316	Control performance monitoring of LP-MPC cascade systems. , 2011, , .		2
317	Discussion on: "Post-Optimality Approach to Prevent Cycling in Linear MPC Target Calculation" European Journal of Control, 2012, 18, 570-571.	2.6	2
318	Feedback-Invariant Approach to Time-Delay Estimation for Performance Monitoring. Industrial & Engineering Chemistry Research, 2012, 51, 9094-9100.	3.7	2
319	Drill-down diagnosis of deficient models in MPC. IFAC-PapersOnLine, 2015, 48, 759-764.	0.9	2
320	Fault Diagnosis Using Concurrent Projection to Latent Structures. IFAC-PapersOnLine, 2015, 48, 1276-1281.	0.9	2
321	Binding kinetics and multi-bond: Finding correlations by synthesizing interactions between ligand-coated bionanoparticles and receptor surfaces. Analytical Biochemistry, 2016, 505, 8-17.	2.4	2
322	Fault Detection of Multimode Processes Using Concurrent Projection to Latent Structures. IFAC-PapersOnLine, 2016, 49, 705-710.	0.9	2
323	Hybrid Latent Variable Modeling of High Dimensional Time Series Data. IFAC-PapersOnLine, 2018, 51, 563-568.	0.9	2
324	Bottom-Up Synthetic Biology: Towards the Modular Design of Artificial Cells from Functional Modules. Advanced Biology, 2019, 3, 1900095.	3.0	2

#	ARTICLE	IF	CITATIONS
325	Derivation of rate equations for equilibrium limited gas-solid reactions. Chemical Engineering Science, 2019, 203, 76-85.	3.8	2
326	Dynamic-Inner Canonical Correlation Analysis based Process Monitoring. , 2020, , .		2
327	Precise determination of LJ parameters and Eucken correction factors for a more accurate modeling of transport properties in gases. Heat and Mass Transfer, 2020, 56, 2515-2527.	2.1	2
328	Stable Lasso for Model Structure Learning of Inferential Sensor Modeling. IFAC-PapersOnLine, 2021, 54, 228-233.	0.9	2
329	Guest Editorial Special Issue on Deep Integration of Artificial Intelligence and Data Science for Process Manufacturing. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 3294-3295.	11.3	2
330	Guest Editorial: Industrial Artificial Intelligence for Smart Manufacturing. IEEE Transactions on Industrial Informatics, 2021, 17, 8319-8323.	11.3	2
331	An Alternative Stiction-modelling Approach and Comparison of Different Stiction Models. Advances in Industrial Control, 2010, , 37-59.	0.5	2
332	On Data Science for Process Systems Modeling, Control and Operations. IFAC-PapersOnLine, 2020, 53, 11325-11331.	0.9	2
333	Latent Vector Autoregressive Modeling for Reduced Dimensional Dynamic Feature Extraction and Prediction. , 2021, , .		2
334	<title>Modeling of OES data to estimate etch rate for etching equipment</title>,. Proceedings of SPIE, 1997, , .	0.8	1
335	A model Reduction Method for Monitoring Large-scale Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 425-430.	0.4	1
336	Adaptive run to run control for intermittent batch operations. , 2002, , .		1
337	<title>Recursive least squares estimation and its application to shallow trench isolation</title>. , 2003, , .		1
338	A TWO-STAGE ALGORITHM FOR COMBINED ITERATIVE LEARNING CONTROL WITH REAL-TIME FEEDBACK; A STATE SPACE FORMULATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 225-230.	0.4	1
339	ELECTRICAL PARAMETER CONTROL FOR SEMICONDUCTOR DEVICE MANUFACTURING: A FABWIDE APPROACH. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 135-140.	0.4	1
340	Subspace methods for system identification. Automatica, 2007, 43, 748-749.	5.0	1
341	Sensor Fault Compensation for Nonlinear Systems Using Fuzzy Adaptive Sliding Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 13217-13222.	0.4	1
342	Actuator Fault Compensation Control for Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11160-11165.	0.4	1

#	ARTICLE	IF	CITATIONS
343	Guest Editorial Special Section on Industrial Control. IEEE Transactions on Industrial Informatics, 2010, 6, 1-2.	11.3	1
344	Output-relevant fault reconstruction based on total PLS. , 2010, , .		1
345	Subspace system identification for CO ₂ recovery processes. , 2011, , .		1
346	Soft sensing of sodium aluminate solution component concentrations via on-line clustering and fuzzy modeling. , 2011, , .		1
347	Improved genetic algorithm for magnetic material two-stage multi-product production scheduling: A case study. , 2012, , .		1
348	Non-stationary Kalman filter parametrization of subspace models with applications to MPC. , 2012, , .		1
349	Model predictive control of building energy systems with balanced model reduction. , 2012, , .		1
350	Feature selection based on concurrent projection to latent structures for high dimensional spectra data. , 2016, , .		1
351	Nonlinear Model Order Reduction for Catalytic Tubular Reactors. Computer Aided Chemical Engineering, 2016, 38, 2373-2378.	0.5	1
352	Dynamic Weighted Canonical Correlation Analysis for Auto-Regressive Modeling. IFAC-PapersOnLine, 2020, 53, 200-205.	0.9	1
353	Introduction to the Special Issue on Advanced Control of Chemical Processes. Control Engineering Practice, 2001, 9, 817-818.	5.5	0
354	Information criterion for determination time window length of dynamic PCA for process monitoring. Computer Aided Chemical Engineering, 2003, 14, 461-466.	0.5	0
355	MULTIVARIABLE CONTROLLER PERFORMANCE MONITORING. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 593-600.	0.4	0
356	Tension soft sensor of continuous annealing lines using cascade frequency domain observer with combined PCA and neural networks error compensation. , 2010, , .		0
357	Fault Diagnosis of Continuous Annealing Processes Using Reconstruction-based Block Contribution. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4362-4367.	0.4	0
358	Modeling CO ₂ recovery for optimal dynamic operations. , 2011, , .		0
359	Guest Editorial Integrated Optimization of Industrial Automation. IEEE Transactions on Automation Science and Engineering, 2014, 11, 963-964.	5.2	0
360	Maximizing Fault Detectability with Closed-Loop Control. IFAC-PapersOnLine, 2018, 51, 696-701.	0.9	0

#	ARTICLE	IF	CITATIONS
361	Process Variability Source Analysis for a Multi-step Bio-process. Computer Aided Chemical Engineering, 2018, , 2497-2502.	0.5	0
362	Back Cover: Bottomâ€Up Synthetic Biology: Towards the Modular Design of Artificial Cells from Functional Modules (Adv. Biosys. 6/2019). Advanced Biology, 2019, 3, 1970062.	3.0	0
363	Dynamic Processes Modeling and Monitoring based on a Novel Dynamic Latent Variable Model. , 2019, , .		0
364	Power-to-Syngas Processes by Reactor-Separator Superstructure Optimization. Computer Aided Chemical Engineering, 2020, 48, 1387-1392.	0.5	0
365	Adaptive dynamic predictive monitoring scheme based on DLV models. IFAC-PapersOnLine, 2021, 54, 91-96.	0.9	0
366	Fault Detection for MIMO Networked Control System. , 2007, , 1080-1084.		0
367	Curve Fitting for Detecting Valve Stiction. Advances in Industrial Control, 2010, , 149-163.	0.5	0
368	Nonlinear Design of Stimulus Experiments for Optimal Discrimination of Biochemical Systems. Computer Aided Chemical Engineering, 2012, 31, 540-544.	0.5	0
369	Data-Driven Fault Diagnosis of Shaft Furnace Roasting Processes Using Reconstruction and Reconstruction-Based Contribution Approaches. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 8897-8902.	0.4	0
370	Dynamic Optimization of Constrained Semi-Batch Processes using Pontryaginâ€™s Minimum Principle and Parsimonious Parameterization. Computer Aided Chemical Engineering, 2017, 40, 2041-2046.	0.5	0
371	A Guide to Concentration Alternating Frequency Response Analysis of Fuel Cells. Journal of Visualized Experiments, 2019, , .	0.3	0
372	Multiscale process systems engineeringâ€™analysis and design of chemical and energy systems from molecular design up to process optimization. Frontiers of Chemical Science and Engineering, 2022, 16, 137-140.	4.4	0
373	A Non-iterative Partial Least Squares Algorithm for Supervised Learning with Collinear Data. , 2021, , .		0
374	Monolithic Al ₂ O ₃ Xerogels with Hierarchical Mesoâ€Macropore System as Catalyst Supports for Methanation of CO ₂ . ChemCatChem, 0, , .	3.7	0