Junghui Chen

List of Publications by Year in Descending Order

243 papers	3,572 citations	29 h-index	50 g-index
262 ext. papers	4,347 ext. citations	4.4 avg, IF	6.1 L-index

#	Paper	IF	Citations
243	Developing a Conditional Variational Autoencoder to Guide Spectral Data Augmentation for Calibration Modeling. *IEEE Transactions on Instrumentation and Measurement*, **2022**, 1-1	5.2	3
242	Supervised functional modeling method for long durations of batch processes with limited batch data. *Chemical Engineering Science*, **2022**, 247, 116991	4.4	1
241	Comparative study on wavelet functional partial least squares soft sensor for complex batch processes. *Chemical Engineering Science*, **2022**, 254, 117601	4.4	1
240	Autogenerated Multilocal PLS Models without Pre-classification for Quality Monitoring of Nonlinear Processes with Unevenly Distributed Data. *Industrial & Engineering Chemistry Research*, **2022**, 61, 5898-5913	3.9	
239	Dynamic data reconciliation to enhance the performance of feedforward/feedback control systems with measurement noise. *Journal of Process Control*, **2021**, 108, 12-24	3.9	0
238	Establishing Convolutional Neural Network Kalman Recurrent Variational Autoencoder Using Infrared Imaging for Process Monitoring: An Application in Spinning Disc Processes. *IEEE Transactions on Instrumentation and Measurement*, **2021**, 1-1	5.2	1
237	Elman Neural Networks Combined with Extended Kalman Filters for Data-Driven Dynamic Data Reconciliation in Nonlinear Dynamic Process Systems. *Industrial & Engineering Chemistry Research*, **2021**, 60, 15219-15235	3.9	2
236	Statistical information based two-layer model predictive control with dynamic economy and control performance for non-Gaussian stochastic process. *Journal of the Franklin Institute*, **2021**, 358, 2279-2300	4	0
235	Linear and exponential fault-assistant feature extraction methods for process monitoring. *Control Engineering Practice*, **2021**, 109, 104732	3.9	1
234	Global-local based wavelet functional principal component analysis for fault detection and diagnosis in batch processes. *Chemometrics and Intelligent Laboratory Systems*, **2021**, 212, 104279	3.8	0
233	Robust static output feedback based iterative learning control design with a finite-frequency-range two-dimensional specification for batch processes subject to nonrepetitive disturbances. *International Journal of Robust and Nonlinear Control*, **2021**, 31, 5745-5761	3.6	0
232	Augmenting deviation of faults from the normal using fault assistant Gaussian mixture prior variational autoencoder. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 130, 103921-103921	5.3	
231	Enhancing monitoring performance of data sparse nonlinear processes through information sharing among different grades using Gaussian mixture prior variational autoencoders. *Chemometrics and Intelligent Laboratory Systems*, **2021**, 208, 104219	3.8	2
230	Supervised and semi-supervised probabilistic learning with deep neural networks for concurrent process-quality monitoring. *Neural Networks*, **2021**, 136, 54-62	9.1	6
229	Semi-Supervised Learning-Based Calibration Model Building of NIR Spectroscopy for In Situ Measurement of Biochemical Processes Under Insufficiently and Inaccurately Labeled Samples. *IEEE Transactions on Instrumentation and Measurement*, **2021**, 70, 1-12	5.2	4
228	Deep Neural Network-Embedded Stochastic Nonlinear State-Space Models and Their Applications to Process Monitoring. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, PP,	10.3	2
227	Developing variable moving window PLS models: Using case of NOx emission prediction of coal-fired power plants. *Fuel*, **2021**, 296, 120441	7.1	2

226	Convolutional Neural Networks for Multi-Stage Semiconductor Processes. *Journal of Chemical Engineering of Japan*, **2021**, 54, 449-455	0.8	1
225	Evaluating and predicting energy efficiency using slow feature partial least squares method for large-scale chemical plants. *Energy*, **2021**, 230, 120582	7.9	3
224	Self-tuning variational mode decomposition. *Journal of the Franklin Institute*, **2021**, 358, 7825-7862	4	2
223	Developing semi-supervised variational autoencoder-generative adversarial network models to enhance quality prediction performance. *Chemometrics and Intelligent Laboratory Systems*, **2021**, 217, 104385	3.8	0
222	Synthesizing labeled data to enhance soft sensor performance in data-scarce regions. *Control Engineering Practice*, **2021**, 115, 104903	3.9	0
221	Dual-layer feature extraction based soft sensor methods and applications to industrial polyethylene processes. *Computers and Chemical Engineering*, **2021**, 154, 107469	4	4
220	Gaussian process model based multi-source labeled data transfer learning for reducing cost of modeling target chemical processes with unlabeled data. *Control Engineering Practice*, **2021**, 117, 104941	3.9	0
219	A variable relevant multi-local PCA modeling scheme to monitor a nonlinear chemical process. *Chemical Engineering Science*, **2021**, 246, 116851	4.4	2
218	Particle filter combined with data reconciliation for nonlinear state estimation with unknown initial conditions in nonlinear dynamic process systems. *ISA Transactions*, **2020**, 103, 203-214	5.5	4
217	Wavelet based calibration model building of NIR spectroscopy for in-situ measurement of granule moisture content during fluidized bed drying. *Chemical Engineering Science*, **2020**, 226, 115867	4.4	6
216	Optimal design of organic Rankine cycles for exhaust heat recovery from light-duty vehicles in view of various exhaust gas conditions and negative aspects of mobile vehicles. *Applied Thermal Engineering*, **2020**, 179, 115645	5.8	8
215	Detection and diagnosis of oscillations in process control by fast adaptive chirp mode decomposition. *Control Engineering Practice*, **2020**, 97, 104307	3.9	15
214	Transfer learning based on incorporating source knowledge using Gaussian process models for quick modeling of dynamic target processes. *Chemometrics and Intelligent Laboratory Systems*, **2020** , 198, 103911	3.8	2
213	Developing Variational Autoencoders with Differential Entropy Soft Sensor Models for Nonlinear Processes. *IFAC-PapersOnLine*, **2020**, 53, 11932-11937	0.7	0
212	An industrial process monitoring scheme with moving window slow feature analysis. *IFAC-PapersOnLine*, **2020**, 53, 11996-12001	0.7	
211	Developing a deep learning estimator to learn nonlinear dynamic systems. *IFAC-PapersOnLine*, **2020** , 53, 158-163	0.7	
210	Monitoring Framework Based on Generalized Tensor PCA for Three-Dimensional Batch Process Data. *Industrial & Engineering Chemistry Research*, **2020**, 59, 10493-10508	3.9	7
209	Correntropy based data reconciliation and gross error detection for bilinear systems. *Chemical Engineering Science*, **2020**, 212, 115327	4.4	2

208	Wavelet functional principal component analysis for batch process monitoring. *Chemometrics and Intelligent Laboratory Systems*, **2020**, 196, 103897	3.8	15
207	A sparse loading-based contribution method for multivariate control performance diagnosis. *Journal of Process Control*, **2020**, 85, 199-213	3.9	3
206	Development of convolutional neural network based Gaussian process regression to construct a novel probabilistic virtual metrology in multi-stage semiconductor processes. *Control Engineering Practice*, **2020**, 96, 104262	3.9	9
205	Extended state observer based indirect-type ILC for single-input single-output batch processes with time- and batch-varying uncertainties. *Automatica*, **2020**, 112, 108673	5.7	9
204	Artificial evolution based cost-reference particle filter for nonlinear state and parameter estimation in process systems with unknown noise statistics and model parameters. *Journal of the Taiwan Institute of Chemical Engineers*, **2020**, 112, 377-387	5.3	1
203	Functional Soft Sensor Based on Spectra Data for Predicting Multiple Quality Variables. *IEEE Access*, **2020**, 8, 160355-160362	3.5	1
202	Diagnosis of Nonlinearity-induced Oscillations in Process Control Loops Based on Adaptive Chirp Mode Decomposition **2020**,		3
201	Deep Learning of Complex Batch Process Data and Its Application on Quality Prediction. *IEEE Transactions on Industrial Informatics*, **2020**, 16, 7233-7242	11.9	28
200	110th Anniversary: Real-Time End Point Detection of Fluidized Bed Drying Process Based on a Switching Model of Near-Infrared Spectroscopy. *Industrial & Engineering Chemistry Research*, **2019**, 58, 16777-16786	3.9	2
199	Adaptive virtual sensors using SNPER for the localized construction and elastic net regularization in nonlinear processes. *Control Engineering Practice*, **2019**, 83, 129-140	3.9	7
198	Disturbance-Based Alternate Feedback Control Scheme To Enhance Economic Performance of Batch Processes. *Industrial & Engineering Chemistry Research*, **2019**, 58, 4143-4153	3.9	0
197	Energy efficiency evaluation and prediction of large-scale chemical plants using partial least squares analysis integrated with Gaussian process models. *Energy Conversion and Management*, **2019**, 195, 690-700	10.6	6
196	PI based indirect-type iterative learning control for batch processes with time-varying uncertainties: A 2D FM model based approach. *Journal of Process Control*, **2019**, 78, 57-67	3.9	12
195	Fast economic nonlinear model predictive control strategy of Organic Rankine Cycle for waste heat recovery: Simulation-based studies. *Energy*, **2019**, 180, 520-534	7.9	15
194	Systematic Development of a New Variational Autoencoder Model Based on Uncertain Data for Monitoring Nonlinear Processes. *IEEE Access*, **2019**, 7, 22554-22565	3.5	27
193	Image-based process monitoring using deep learning framework. *Chemometrics and Intelligent Laboratory Systems*, **2019**, 189, 8-17	3.8	19
192	Using multivariate pattern segmentation to assess process performance and mine good operation conditions for dynamic chemical industry. *Chemical Engineering Science*, **2019**, 201, 339-348	4.4	3
191	Data-Driven Dynamic Modeling and Online Monitoring for Multiphase and Multimode Batch Processes with Uneven Batch Durations. *Industrial & Engineering Chemistry Research*, **2019**, 58, 13628-13641	3.9	8

190	Calibration Model Building for Online Monitoring of the Granule Moisture Content during Fluidized Bed Drying by NIR Spectroscopy. *Industrial & Engineering Chemistry Research*, **2019**, 58, 6476-6485	3.9	11
189	Development of Self-Learning Kernel Regression Models for Virtual Sensors on Nonlinear Processes. *IEEE Transactions on Automation Science and Engineering*, **2019**, 16, 286-297	4.9	7
188	Decision making scheme of integration design and control under uncertainty for enhancing the economic performance of chemical processes with multiplicity behaviors. *Chemical Engineering Research and Design*, **2019**, 150, 327-340	5.5	3
187	Enhancing performance of generalized minimum variance control via dynamic data reconciliation. *Journal of the Franklin Institute*, **2019**, 356, 8829-8854	4	2
186	Development of energy efficiency principal component analysis model for factor extraction and efficiency evaluation in large-scale chemical processes. *International Journal of Energy Research*, **2019**, 43, 814-828	4.5	8
185	A dynamic approach to energy efficiency estimation in the large-scale chemical plant. *Journal of Cleaner Production*, **2019**, 212, 1072-1085	10.3	6
184	Concurrent Fault Detection and Anomaly Location in Closed-Loop Dynamic Systems With Measured Disturbances. *IEEE Transactions on Automation Science and Engineering*, **2019**, 16, 1033-1045	4.9	1
183	Fault detection and diagnosis based on particle filters combined with interactive multiple-model estimation in dynamic process systems. *ISA Transactions*, **2019**, 85, 247-261	5.5	17
182	Multiple probability principal component analysis for process monitoring with multi-rate measurements. *Journal of the Taiwan Institute of Chemical Engineers*, **2019**, 96, 18-28	5.3	10
181	Performance Analysis of Dynamic PCA for Closed-Loop Process Monitoring and Its Improvement by Output Oversampling Scheme. *IEEE Transactions on Control Systems Technology*, **2019**, 27, 378-385	4.8	13
180	Multi-grade principal component analysis for fault detection with multiple production grades. *Chemometrics and Intelligent Laboratory Systems*, **2018**, 175, 20-29	3.8	11
179	Sequential local-based Gaussian mixture model for monitoring multiphase batch processes. *Chemical Engineering Science*, **2018**, 181, 101-113	4.4	17
178	Iterative Learning Control (ILC)-Based Economic Optimization for Batch Processes Using Helpful Disturbance Information. *Industrial & Engineering Chemistry Research*, **2018**, 57, 3717-3731	3.9	10
177	Economic model predictive control of distillation startup based on probabilistic approach. *Chemical Engineering Science*, **2018**, 186, 26-35	4.4	3
176	Prognostics of PEM fuel cells based on Gaussian process state space models. *Energy*, **2018**, 149, 63-73	7.9	41
175	Just-In-Time Modeling With Variable Shrinkage Based on Gaussian Processes for Semiconductor Manufacturing. *IEEE Transactions on Semiconductor Manufacturing*, **2018**, 31, 335-342	2.6	13
174	Fault diagnosis for processes with feedback control loops by shifted output sampling approach. *Journal of the Franklin Institute*, **2018**, 355, 3249-3273	4	6
173	Multilevel MVU models with localized construction for monitoring processes with large scale data. *Journal of Process Control*, **2018**, 67, 176-196	3.9	8

172	A new excitation scheme for closed-loop subspace identification using additional sampling outputs and its extension to instrumental variable method. *Journal of the Franklin Institute*, **2018**, 355, 6675-6692	4	1
171	Improving the energy cost of an absorber-stripper CO2 capture process through economic model predictive control. *International Journal of Greenhouse Gas Control*, **2018**, 76, 158-166	4.2	10
170	Integrated operation design and control of Organic Rankine Cycle systems with disturbances. *Energy*, **2018**, 163, 115-129	7.9	8
169	ILC Based Economic Batch-to-Batch Optimization for Batch Processes. *IFAC-PapersOnLine*, **2018**, 51, 768-773	0.7	
168	Economic model predictive control of an absorber-stripper CO2 capture process for improving energy cost. *IFAC-PapersOnLine*, **2018**, 51, 109-114	0.7	6
167	Image-Based Process Monitoring Using Deep Belief Networks. *IFAC-PapersOnLine*, **2018**, 51, 115-120	0.7	3
166	Novel common and special feature extraction method for modeling multi-grade processes. *IFAC-PapersOnLine*, **2018**, 51, 494-499	0.7	2
165	Kinetic parameter estimation and simulation of trickle-bed reactor for hydrodesulfurization of whole fraction low-temperature coal tar. *Fuel*, **2018**, 230, 113-125	7.1	24
164	Novel common and special features extraction for monitoring multi-grade processes. *Journal of Process Control*, **2018**, 66, 98-107	3.9	4
163	Quality prediction for multi-grade processes by just-in-time latent variable modeling with integration of common and special features. *Chemical Engineering Science*, **2018**, 191, 31-41	4.4	19
162	Dynamic soft sensors with active forward-update learning for selection of useful data from historical big database. *Chemometrics and Intelligent Laboratory Systems*, **2018**, 175, 87-103	3.8	7
161	Using hidden Markov model to identify oscillation temporal pattern for control loops. *Chemical Engineering Research and Design*, **2017**, 119, 117-129	5.5	5
160	Development of LTV subspace system identification using basis functions approach to assessing the performance of control loops for nonlinear processes. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 73, 123-134	5.3	
159	Comparative study on ATR-FTIR calibration models for monitoring solution concentration in cooling crystallization. *Journal of Crystal Growth*, **2017**, 459, 50-55	1.6	17
158	PLS-based multi-loop robust H2 control for improvement of operating efficiency of waste heat energy conversion systems with organic Rankine cycle. *Energy*, **2017**, 123, 460-472	7.9	13
157	Using clustering based logical equation set to decompose large scale chemical processes for parallel solving data reconciliation and parameter estimation problem. *Chemical Engineering Research and Design*, **2017**, 120, 396-409	5.5	5
156	Data-driven sensor fault diagnosis systems for linear feedback control loops. *Journal of Process Control*, **2017**, 54, 152-171	3.9	26
155	Active Selection of Informative Data for Sequential Quality Enhancement of Soft Sensor Models with Latent Variables. *Industrial & Engineering Chemistry Research*, **2017**, 56, 4804-4817	3.9	28

154	Robust Self-Supervised Model and Its Application for Fault Detection. *Industrial & Engineering Chemistry Research*, **2017**, 56, 7503-7515	3.9	18
153	Hybrid model based expected improvement control for cyclical operation of membrane microfiltration processes. *Chemical Engineering Science*, **2017**, 166, 77-90	4.4	
152	Robust particle filter for state estimation using measurements with different types of gross errors. *ISA Transactions*, **2017**, 69, 281-295	5.5	18
151	Similarity based robust probability latent variable regression model and its kernel extension for process monitoring. *Chemometrics and Intelligent Laboratory Systems*, **2017**, 161, 88-95	3.8	3
150	Application of improved multivariate empirical mode decomposition to plant-wide oscillations characterization **2017**,		5
149	Flame Images for Oxygen Content Prediction of Combustion Systems Using DBN. *Energy & Fuels*, **2017**, 31, 8776-8783	4.1	85
148	Probabilistic uncertainty based simultaneous process design and control with iterative expected improvement model. *Computers and Chemical Engineering*, **2017**, 106, 609-620	4	4
147	Melt index prediction with a mixture of Gaussian process regression with embedded clustering and variable selections. *Journal of Applied Polymer Science*, **2017**, 134, 45237	2.9	7
146	Multiple Fault Detection Using Multi-rate Probability Principal Component Analysis Models. *IFAC-PapersOnLine*, **2017**, 50, 14752-14757	0.7	6
145	Predictor-based output feedback control design for sampled systems with input delay subject to disturbance. *IET Control Theory and Applications*, **2017**, 11, 3329-3340	2.5	12
144	Indirect iterative learning control design based on 2DOF IMC for batch processes with input delay **2017**,		3
143	Valve stiction detection using the bootstrap Hammerstein system identification **2017**,		1
142	Dynamic Data Reconciliation for Enhancing Performance of Minimum Variance Control in Univariate and Multivariate Systems. *Industrial & Engineering Chemistry Research*, **2016**, 55, 10990-11002	3.9	5
141	Window-Based Stepwise Sequential Phase Partition for Nonlinear Batch Process Monitoring. *Industrial & Engineering Chemistry Research*, **2016**, 55, 9229-9243	3.9	16
140	Active learning assisted strategy of constructing hybrid models in repetitive operations of membrane filtration processes: Using case of mixture of bentonite clay and sodium alginate. *Journal of Membrane Science*, **2016**, 515, 245-257	9.6	8
139	Plant-Wide Industrial Process Monitoring: A Distributed Modeling Framework. *IEEE Transactions on Industrial Informatics*, **2016**, 12, 310-321	11.9	84
138	Enhancing quality of statistic monitoring models by training set design with active learning approach. *Chemometrics and Intelligent Laboratory Systems*, **2016**, 151, 201-218	3.8	2
137	Single Neuron Stochastic Predictive PID Control Algorithm for Nonlinear and Non-Gaussian Systems Using the Survival Information Potential Criterion. *Entropy*, **2016**, 18, 218	2.8	5

136	Time-varying oscillation detector based on improved LMD and robust Lempel-Ziv complexity. *Control Engineering Practice*, **2016**, 51, 48-57	3.9	28
135	PID based nonlinear processes control model uncertainty improvement by using Gaussian process model. *Journal of Process Control*, **2016**, 42, 77-89	3.9	10
134	Developments of two supervised maximum variance unfolding algorithms for process classification. *Chemometrics and Intelligent Laboratory Systems*, **2016**, 159, 31-44	3.8	9
133	Hybrid model based control for membrane filtration process. *IFAC-PapersOnLine*, **2016**, 49, 1085-1090	0.7	2
132	GA based decomposition of large scale distributed model predictive control systems. *Control Engineering Practice*, **2016**, 57, 111-125	3.9	7
131	Robust iterative learning control for batch processes with input delay subject to time-varying uncertainties. *IET Control Theory and Applications*, **2016**, 10, 1904-1915	2.5	35
130	Performance assessment of cascade control loops with non-Gaussian disturbances using entropy information. *Chemical Engineering Research and Design*, **2015**, 104, 68-80	5.5	13
129	Ensemble local kernel learning for online prediction of distributed product outputs in chemical processes. *Chemical Engineering Science*, **2015**, 137, 140-151	4.4	21
128	Programming Strategies of Sequential Incremental-Scale Subproblems for Large Scale Data Reconciliation and Parameter Estimation with Multi-Operational Conditions. *Industrial & Engineering Chemistry Research*, **2015**, 54, 5697-5709	3.9	5
127	Auto-Switch Gaussian Process Regression-Based Probabilistic Soft Sensors for Industrial Multigrade Processes with Transitions. *Industrial & Engineering Chemistry Research*, **2015**, 54, 5037-5047	3.9	52
126	Multiloop robust H∞ control design based on the dynamic PLS approach to chemical processes. *Chemical Engineering Research and Design*, **2015**, 100, 518-529	5.5	4
125	Self-active and recursively selective Gaussian process models for nonlinear distributed parameter systems. *Chemical Engineering Science*, **2015**, 123, 125-136	4.4	5
124	Spatial batch optimal design based on self-learning gaussian process models for LPCVD processes. *Chinese Journal of Chemical Engineering*, **2015**, 23, 1958-1964	3.2	1
123	Modeling of a membrane reactor system for crude palm oil transesterification. Part I: Chemical and phase equilibrium. *AICHE Journal*, **2015**, 61, 1968-1980	3.6	6
122	Modeling of a membrane reactor system for crude palm oil transesterification. Part II: Transport phenomena. *AICHE Journal*, **2015**, 61, 1981-1996	3.6	6
121	Recursive Gaussian Process Regression Model for Adaptive Quality Monitoring in Batch Processes. *Mathematical Problems in Engineering*, **2015**, 2015, 1-9	1.1	7
120	Correntropy based data reconciliation and gross error detection and identification for nonlinear dynamic processes. *Computers and Chemical Engineering*, **2015**, 75, 120-134	4	31
119	Semi-supervised PLVR models for process monitoring with unequal sample sizes of process variables and quality variables. *Journal of Process Control*, **2015**, 26, 1-16	3.9	33

118	Correntropy Kernel Learning for Nonlinear System Identification with Outliers. *Industrial & Engineering Chemistry Research*, **2014**, 53, 5248-5260	3.9	30
117	Minimum entropy-based performance assessment of feedback control loops subjected to non-Gaussian disturbances. *Journal of Process Control*, **2014**, 24, 1660-1670	3.9	26
116	ILC strategy for progress improvement of economic performance in industrial model predictive control systems. *Journal of Process Control*, **2014**, 24, 107-118	3.9	4
115	Methodology of data reconciliation and parameter estimation for process systems with multi-operating conditions. *Chemometrics and Intelligent Laboratory Systems*, **2014**, 137, 110-119	3.8	15
114	Simultaneous data reconciliation and gross error detection for dynamic systems using particle filter and measurement test. *Computers and Chemical Engineering*, **2014**, 69, 66-74	4	27
113	Texture analysis of UTDR images for enhancement of monitoring and diagnosis of membrane filtration. *Chemometrics and Intelligent Laboratory Systems*, **2014**, 138, 142-152	3.8	2
112	Robust PID based indirect-type iterative learning control for batch processes with time-varying uncertainties. *Journal of Process Control*, **2014**, 24, 95-106	3.9	43
111	Pervasive Knowledge Discovery by Just-in-Time Learning to Solve Simultaneous Data Reconciliation and Parameter Estimation of Industrial Processes. *Industrial & Engineering Chemistry Research*, **2014**, 53, 10194-10205	3.9	4
110	Rapid distributed model predictive control design using singular value decomposition for linear systems. *Journal of Process Control*, **2014**, 24, 1135-1148	3.9	9
109	Process-Quality Monitoring Using Semi-supervised Probability Latent Variable Regression Models. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 8272-8277		3
108	Optimal selection of the decomposition structure based on GA for distributed model predictive control systems **2014**,		1
107	Performance Assessment of Controlled Organic Rankine Cycle System. *Energy Procedia*, **2014**, 61, 691-694	2.3	1
106	Probabilistic latent variable regression model for process-quality monitoring. *Chemical Engineering Science*, **2014**, 116, 296-305	4.4	37
105	Cost reduction of CO2 capture processes using reinforcement learning based iterative design: A pilot-scale absorption–stripping system. *Separation and Purification Technology*, **2014**, 122, 149-158	8.3	4
104	Modeling analysis of membrane reactor for biodiesel production. *AICHE Journal*, **2013**, 59, 258-271	3.6	5
103	Modeling study of chemical phase equilibrium of canola oil transesterification in a CSTR. *Chemical Engineering Science*, **2013**, 87, 371-380	4.4	11
102	An integrated approach to active model adaptation and on-line dynamic optimisation of batch processes. *Journal of Process Control*, **2013**, 23, 1350-1359	3.9	1
101	Integrated soft sensor using just-in-time support vector regression and probabilistic analysis for quality prediction of multi-grade processes. *Journal of Process Control*, **2013**, 23, 793-804	3.9	108

100	Optimization design for removal of radioactive Kr from Xe using pressure swing adsorption. *Chemical Engineering Research and Design*, **2013**, 91, 649-659	5.5	3
99	Development of soft-sensors for online quality prediction of sequential-reactor-multi-grade industrial processes. *Chemical Engineering Science*, **2013**, 102, 602-612	4.4	23
98	On-line monitoring and diagnosis of membrane fouling using ultrasonic techniques. *Chemometrics and Intelligent Laboratory Systems*, **2013**, 127, 147-157	3.8	2
97	Gaussian process regression based optimal design of combustion systems using flame images. *Applied Energy*, **2013**, 111, 153-160	10.7	29
96	Correntropy estimator for data reconciliation. *Chemical Engineering Science*, **2013**, 104, 1019-1027	4.4	19
95	Performance Design of Image-Oxygen Based Cascade Control Loops for Boiler Combustion Processes. *Industrial & Engineering Chemistry Research*, **2013**, 52, 2368-2378	3.9	6
94	Liquid□quid equilibrium (LLE) study for six-component transesterification system. *Clean Technologies and Environmental Policy*, **2013**, 15, 817-822	4.3	8
93	Nonlinear System Identification with Selective Recursive Gaussian Process Models. *Industrial & Engineering Chemistry Research*, **2013**, 52, 18276-18286	3.9	26
92	Neural PID Control Strategy for Networked Process Control. *Mathematical Problems in Engineering*, **2013**, 2013, 1-11	1.1	3
91	Correntropy-based kernel learning for nonlinear system identification with unknown noise: an industrial case study. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2013**, 46, 361-366		6
90	Deterministic and stochastic model based run-to-run control for batch processes with measurement delays of uncertain duration. *Journal of Process Control*, **2012**, 22, 508-517	3.9	10
89	A synthetic approach for robust constrained iterative learning control of piecewise affine batch processes. *Automatica*, **2012**, 48, 2762-2775	5.7	55
88	Multibatch Model Predictive Control for Repetitive Batch Operation with Input□Output Linearization. *Industrial & Engineering Chemistry Research*, **2012**, 51, 9598-9608	3.9	7
87	A review on conventional technologies and emerging process intensification (PI) methods for biodiesel production. *Renewable and Sustainable Energy Reviews*, **2012**, 16, 5131-5145	16.2	82
86	Application of wavelet analysis and decision tree in UTDR data for diagnosis of membrane filtration. *Chemometrics and Intelligent Laboratory Systems*, **2012**, 116, 102-111	3.8	8
85	Integration Design of Heat Exchanger Networks into Membrane Distillation Systems to Save Energy. *Industrial & Engineering Chemistry Research*, **2012**, 51, 6798-6810	3.9	10
84	Modeling and simulation of biodiesel production using a membrane reactor integrated with a prereactor. *Chemical Engineering Science*, **2012**, 69, 81-92	4.4	15
83	Advanced PI control with simple learning set-point design: Application on batch processes and robust stability analysis. *Chemical Engineering Science*, **2012**, 71, 153-165	4.4	38

82	Removal of the effects of outliers in batch process data through maximum correntropy estimator. *Chemometrics and Intelligent Laboratory Systems*, **2012**, 111, 53-58	3.8	13
81	Design of image-based control loops for industrial combustion processes. *Applied Energy*, **2012**, 94, 13-21	10.7	12
80	Flexible Closed-Loop Iterative Learning Control for Industrial Batch Processes With State Delay and Time-Varying Uncertainties. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 225-230		1
79	A Performance Assessment Method for Feedback Control Loops in Chemical Processes with Distribution Outputs. *Computer Aided Chemical Engineering*, **2012**, 275-279	0.6	
78	Online Predictive Monitoring Using Dynamic Imaging of Furnaces with the Combinational Method of Multiway Principal Component Analysis and Hidden Markov Model. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2946-2958	3.9	9
77	Two-dimensional Iterative Learning Control for Batch Processes With State Delay and Time-varying Uncertainties. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 12255-12260		
76	Using cooling load forecast as the optimal operation scheme for a large multi-chiller system. *International Journal of Refrigeration*, **2011**, 34, 2050-2062	3.8	16
75	A new view of membrane fouling with 3D ultrasonic imaging techniques: Taking the canola oil with phospholipids for example. *Journal of Membrane Science*, **2011**, 372, 134-144	9.6	8
74	Development of hidden semi-Markov models for diagnosis of multiphase batch operation. *Chemical Engineering Science*, **2011**, 66, 1087-1099	4.4	18
73	Optimal Design of Multistage Membrane Distillation Systems for Water Purification. *Industrial & Engineering Chemistry Research*, **2011**, 50, 7345-7354	3.9	29
72	Hidden Semi-Markov Probability Models for Monitoring Two-Dimensional Batch Operation. *Industrial & Engineering Chemistry Research*, **2011**, 50, 3345-3355	3.9	4
71	Enhanced air gap membrane desalination by novel finned tubular membrane modules. *Journal of Membrane Science*, **2011**, 378, 398-406	9.6	32
70	Development of MBPLS based control for serial operation processes **2011**, 26, 935		
69	Iterative learning controller synthesis using FIR models for batch processes **2011**, 26, 1512		
68	PCA/ARMA-Based Control Charts for Performance Monitoring of Multivariable Feedback Control. *Industrial & Engineering Chemistry Research*, **2010**, 49, 2228-2241	3.9	7
67	Online Monitoring of Batch Processes Using IOHMM Based MPLS. *Industrial & Engineering Chemistry Research*, **2010**, 49, 2800-2811	3.9	13
66	Iterative learning parameter estimation and design of SMB processes. *Chemical Engineering Journal* , **2010**, 161, 223-233	14.7	1
65	Context-kernel support vector machines (KSVM) based run-to-run control for nonlinear processes. *Korean Journal of Chemical Engineering*, **2010**, 27, 1366-1371	2.8	

64	IMC-based iterative learning control for batch processes with uncertain time delay. *Journal of Process Control*, **2010**, 20, 173-180	3.9	84
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