

Biao Huang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1955894/publications.pdf>

Version: 2024-02-01

609
papers

18,412
citations

17440

63
h-index

27406

106
g-index

631
all docs

631
docs citations

631
times ranked

7564
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | A new method for stabilization of networked control systems with random delays. IEEE Transactions on Automatic Control, 2005, 50, 1177-1181. | 5.7 | 757 |
| 2 | Data Mining and Analytics in the Process Industry: The Role of Machine Learning. IEEE Access, 2017, 5, 20590-20616. | 4.2 | 647 |
| 3 | Deep Learning-Based Feature Representation and Its Application for Soft Sensor Modeling With Variable-Wise Weighted SAE. IEEE Transactions on Industrial Informatics, 2018, 14, 3235-3243. | 11.3 | 447 |
| 4 | Performance-Driven Distributed PCA Process Monitoring Based on Fault-Relevant Variable Selection and Bayesian Inference. IEEE Transactions on Industrial Electronics, 2016, 63, 377-386. | 7.9 | 292 |
| 5 | Performance Assessment of Control Loops. Advances in Industrial Control, 1999, , . | 0.5 | 280 |
| 6 | Subspace method aided data-driven design of fault detection and isolation systems. Journal of Process Control, 2009, 19, 1496-1510. | 3.3 | 276 |
| 7 | A review On reinforcement learning: Introduction and applications in industrial process control. Computers and Chemical Engineering, 2020, 139, 106886. | 3.8 | 253 |
| 8 | Data-Driven Fault Diagnosis for Traction Systems in High-Speed Trains: A Survey, Challenges, and Perspectives. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 1700-1716. | 8.0 | 244 |
| 9 | Review and Perspectives of Data-Driven Distributed Monitoring for Industrial Plant-Wide Processes. Industrial & Engineering Chemistry Research, 2019, 58, 12899-12912. | 3.7 | 220 |
| 10 | Design of inferential sensors in the process industry: A review of Bayesian methods. Journal of Process Control, 2013, 23, 1575-1596. | 3.3 | 214 |
| 11 | Good, bad or optimal? Performance assessment of multivariable processes. Automatica, 1997, 33, 1175-1183. | 5.0 | 213 |
| 12 | A full-condition monitoring method for nonstationary dynamic chemical processes with cointegration and slow feature analysis. AIChE Journal, 2018, 64, 1662-1681. | 3.6 | 199 |
| 13 | Detection of multiple oscillations in control loops. Journal of Process Control, 2003, 13, 91-100. | 3.3 | 198 |
| 14 | Survey on the theoretical research and engineering applications of multivariate statistics process monitoring algorithms: 2008-2017. Canadian Journal of Chemical Engineering, 2018, 96, 2073-2085. | 1.7 | 178 |
| 15 | Hierarchical Quality-Relevant Feature Representation for Soft Sensor Modeling: A Novel Deep Learning Strategy. IEEE Transactions on Industrial Informatics, 2020, 16, 3721-3730. | 11.3 | 176 |
| 16 | A data driven subspace approach to predictive controller design. Control Engineering Practice, 2003, 11, 261-278. | 5.5 | 162 |
| 17 | H ∞ model reduction of Markovian jump linear systems. Systems and Control Letters, 2003, 50, 103-118. | 2.3 | 158 |
| 18 | Closed-loop subspace identification: an orthogonal projection approach. Journal of Process Control, 2005, 15, 53-66. | 3.3 | 146 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Robust reliable control for a class of uncertain nonlinear state-delayed systems. <i>Automatica</i> , 1999, 35, 955-963. | 5.0 | 143 |
| 20 | Semisupervised JITL Framework for Nonlinear Industrial Soft Sensing Based on Locally Semisupervised Weighted PCR. <i>IEEE Transactions on Industrial Informatics</i> , 2017, 13, 532-541. | 11.3 | 139 |
| 21 | Slow feature analysis for monitoring and diagnosis of control performance. <i>Journal of Process Control</i> , 2016, 39, 21-34. | 3.3 | 128 |
| 22 | Robust H ∞ observer design of linear state delayed systems with parametric uncertainty: the discrete-time case. <i>Automatica</i> , 1999, 35, 1161-1167. | 5.0 | 127 |
| 23 | Spectral principal component analysis of dynamic process data. <i>Control Engineering Practice</i> , 2002, 10, 833-846. | 5.5 | 126 |
| 24 | Robust H ∞ /H $_{\infty}$ filtering for linear systems with error variance constraints. <i>IEEE Transactions on Signal Processing</i> , 2000, 48, 2463-2467. | 5.3 | 114 |
| 25 | A Long-Short Term Memory Recurrent Neural Network Based Reinforcement Learning Controller for Office Heating Ventilation and Air Conditioning Systems. <i>Processes</i> , 2017, 5, 46. | 2.8 | 114 |
| 26 | Dynamic modeling of solid oxide fuel cell: The effect of diffusion and inherent impedance. <i>Journal of Power Sources</i> , 2005, 150, 32-47. | 7.8 | 106 |
| 27 | Control relevant modeling of planer solid oxide fuel cell system. <i>Journal of Power Sources</i> , 2007, 163, 830-845. | 7.8 | 105 |
| 28 | Probabilistic slow feature analysis-based representation learning from massive process data for soft sensor modeling. <i>AIChE Journal</i> , 2015, 61, 4126-4139. | 3.6 | 105 |
| 29 | Constrained Bayesian state estimation – A comparative study and a new particle filter based approach. <i>Journal of Process Control</i> , 2010, 20, 143-157. | 3.3 | 104 |
| 30 | Distributed monitoring for large-scale processes based on multivariate statistical analysis and Bayesian method. <i>Journal of Process Control</i> , 2016, 46, 75-83. | 3.3 | 103 |
| 31 | Data-driven predictive control for solid oxide fuel cells. <i>Journal of Process Control</i> , 2007, 17, 103-114. | 3.3 | 102 |
| 32 | A unified data-driven design framework of optimality-based generalized iterative learning control. <i>Computers and Chemical Engineering</i> , 2015, 77, 10-23. | 3.8 | 101 |
| 33 | A Probabilistic Just-in-Time Learning Framework for Soft Sensor Development With Missing Data. <i>IEEE Transactions on Control Systems Technology</i> , 2017, 25, 1124-1132. | 5.2 | 98 |
| 34 | Recursive Slow Feature Analysis for Adaptive Monitoring of Industrial Processes. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 8895-8905. | 7.9 | 98 |
| 35 | Bayesian methods for control loop monitoring and diagnosis. <i>Journal of Process Control</i> , 2008, 18, 829-838. | 3.3 | 97 |
| 36 | Multiple model LPV approach to nonlinear process identification with EM algorithm. <i>Journal of Process Control</i> , 2011, 21, 182-193. | 3.3 | 95 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Parameter and delay estimation of continuous-time models using a linear filter. <i>Journal of Process Control</i> , 2006, 16, 323-331. | 3.3 | 92 |
| 38 | A review of the Expectation Maximization algorithm in data-driven process identification. <i>Journal of Process Control</i> , 2019, 73, 123-136. | 3.3 | 88 |
| 39 | Determining the Harmonic Impacts of Multiple Harmonic-Producing Loads. <i>IEEE Transactions on Power Delivery</i> , 2011, 26, 1187-1195. | 4.3 | 87 |
| 40 | Novel identification method from step response. <i>Control Engineering Practice</i> , 2007, 15, 545-556. | 5.5 | 86 |
| 41 | Prediction error method for identification of LPV models. <i>Journal of Process Control</i> , 2012, 22, 180-193. | 3.3 | 86 |
| 42 | Computationally Efficient Data-Driven Higher Order Optimal Iterative Learning Control. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2018, 29, 5971-5980. | 11.3 | 86 |
| 43 | Dealing with Irregular Data in Soft Sensors: Bayesian Method and Comparative Study. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 8713-8723. | 3.7 | 85 |
| 44 | Mixture semisupervised principal component regression model and soft sensor application. <i>AIChE Journal</i> , 2014, 60, 533-545. | 3.6 | 84 |
| 45 | LMI synthesis of H_2 and mixed H_2/H_∞ controllers for singular systems. <i>IEEE Transactions on Circuits and Systems Part 2: Express Briefs</i> , 2003, 50, 615-626. | 2.2 | 83 |
| 46 | Multirate sampled-data systems: computing fast-rate models. <i>Journal of Process Control</i> , 2004, 14, 79-88. | 3.3 | 82 |
| 47 | Control Performance Assessment for ILC-Controlled Batch Processes in a 2-D System Framework. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2018, 48, 1493-1504. | 9.3 | 82 |
| 48 | Process monitoring using kernel density estimation and Bayesian networking with an industrial case study. <i>ISA Transactions</i> , 2015, 58, 330-347. | 5.7 | 79 |
| 49 | Supervised Variational Autoencoders for Soft Sensor Modeling With Missing Data. <i>IEEE Transactions on Industrial Informatics</i> , 2020, 16, 2820-2828. | 11.3 | 79 |
| 50 | Robust H_∞ observer design of linear time-delay systems with parametric uncertainty. <i>Systems and Control Letters</i> , 2001, 42, 303-312. | 2.3 | 78 |
| 51 | Solid oxide fuel cell: Perspective of dynamic modeling and control. <i>Journal of Process Control</i> , 2011, 21, 1426-1437. | 3.3 | 78 |
| 52 | FIR model identification of multirate processes with random delays using EM algorithm. <i>AIChE Journal</i> , 2013, 59, 4124-4132. | 3.6 | 77 |
| 53 | GMM and optimal principal components-based Bayesian method for multimode fault diagnosis. <i>Computers and Chemical Engineering</i> , 2016, 84, 338-349. | 3.8 | 77 |
| 54 | Minimum variance unbiased FIR filter for discrete time-variant systems. <i>Automatica</i> , 2015, 53, 355-361. | 5.0 | 75 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Identification of nonlinear parameter varying systems with missing output data. <i>AIChE Journal</i> , 2012, 58, 3454-3467. | 3.6 | 74 |
| 56 | Constrained data-driven optimal iterative learning control. <i>Journal of Process Control</i> , 2017, 55, 10-29. | 3.3 | 74 |
| 57 | Dynamic modeling of a finite volume of solid oxide fuel cell: The effect of transport dynamics. <i>Chemical Engineering Science</i> , 2006, 61, 6057-6076. | 3.8 | 73 |
| 58 | Expectationâ€“Maximization Approach to Fault Diagnosis With Missing Data. <i>IEEE Transactions on Industrial Electronics</i> , 2015, 62, 1231-1240. | 7.9 | 73 |
| 59 | Variational Bayesian approach for ARX systems with missing observations and varying time-delays. <i>Automatica</i> , 2018, 94, 194-204. | 5.0 | 73 |
| 60 | Extended State Observer-Based Data-Driven Iterative Learning Control for Permanent Magnet Linear Motor With Initial Shifts and Disturbances. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2021, 51, 1881-1891. | 9.3 | 70 |
| 61 | Controller performance analysis with LQG benchmark obtained under closed loop conditions. <i>ISA Transactions</i> , 2002, 41, 521-537. | 5.7 | 69 |
| 62 | Kalman filtering approach to multi-rate information fusion in the presence of irregular sampling rate and variable measurement delay. <i>Journal of Process Control</i> , 2017, 53, 15-25. | 3.3 | 69 |
| 63 | Determining the state of a process control system: Current trends and future challenges. <i>Canadian Journal of Chemical Engineering</i> , 2012, 90, 217-245. | 1.7 | 66 |
| 64 | Minimum variance control and performance assessment of time-variant processes. <i>Journal of Process Control</i> , 2002, 12, 707-719. | 3.3 | 64 |
| 65 | Practical solutions to multivariate feedback control performance assessment problem: reduced a priori knowledge of interactor matrices. <i>Journal of Process Control</i> , 2005, 15, 573-583. | 3.3 | 63 |
| 66 | Practical issues in multivariable feedback control performance assessment. <i>Journal of Process Control</i> , 1998, 8, 421-430. | 3.3 | 62 |
| 67 | An Improved Data-Driven Point-to-Point ILC Using Additional On-Line Control Inputs With Experimental Verification. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2019, 49, 687-696. | 9.3 | 62 |
| 68 | A pragmatic approach towards assessment of control loop performance. <i>International Journal of Adaptive Control and Signal Processing</i> , 2003, 17, 589-608. | 4.1 | 61 |
| 69 | Simultaneous Static and Dynamic Analysis for Fine-Scale Identification of Process Operation Statuses. <i>IEEE Transactions on Industrial Informatics</i> , 2019, 15, 5320-5329. | 11.3 | 61 |
| 70 | Constrained robust model predictive control for time-delay systems with polytopic description. <i>International Journal of Control</i> , 2007, 80, 509-522. | 1.9 | 60 |
| 71 | Multiple model approach to nonlinear system identification with an uncertain scheduling variable using EM algorithm. <i>Journal of Process Control</i> , 2013, 23, 1480-1496. | 3.3 | 60 |
| 72 | On gramians and balanced truncation of discrete-time bilinear systems. <i>International Journal of Control</i> , 2003, 76, 414-427. | 1.9 | 59 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Multirate Minimum Variance Control Design and Control Performance Assessment: A Data-Driven Subspace Approach. IEEE Transactions on Control Systems Technology, 2007, 15, 65-74. | 5.2 | 59 |
| 74 | State estimation incorporating infrequent, delayed and integral measurements. Automatica, 2015, 58, 32-38. | 5.0 | 59 |
| 75 | Trial-and-error or avoiding a guess? Initialization of the Kalman filter. Automatica, 2020, 121, 109184. | 5.0 | 59 |
| 76 | LMI-based robust H_2 control of uncertain linear jump systems with time-delays. Automatica, 2001, 37, 1141-1146. | 5.0 | 57 |
| 77 | Robust identification of piecewise/switching autoregressive exogenous process. AIChE Journal, 2010, 56, 1829-1844. | 3.6 | 57 |
| 78 | Monitoring of operating point and process dynamics via probabilistic slow feature analysis. Chemometrics and Intelligent Laboratory Systems, 2016, 151, 115-125. | 3.5 | 57 |
| 79 | A novel reduced-order algorithm for rational models based on Arnoldi process and Krylov subspace. Automatica, 2021, 129, 109663. | 5.0 | 57 |
| 80 | Performance Assessment of Model Predictive Control for Variability and Constraint Tuning. Industrial & Engineering Chemistry Research, 2007, 46, 1208-1219. | 3.7 | 56 |
| 81 | Identification from step responses with transient initial conditions. Journal of Process Control, 2008, 18, 121-130. | 3.3 | 54 |
| 82 | Reformulation of LMI-based stabilisation conditions for non-linear systems in Takagi-Sugeno's form. International Journal of Systems Science, 2008, 39, 487-496. | 5.5 | 54 |
| 83 | Multiple model based LPV soft sensor development with irregular/missing process output measurement. Control Engineering Practice, 2012, 20, 165-172. | 5.5 | 54 |
| 84 | The unitary interactor matrix and its estimation using closed-loop data. Journal of Process Control, 1997, 7, 195-207. | 3.3 | 53 |
| 85 | Performance evaluation of two industrial MPC controllers. Control Engineering Practice, 2003, 11, 1371-1387. | 5.5 | 53 |
| 86 | Discrete-Time Extended State Observer-Based Model-Free Adaptive Control Via Local Dynamic Linearization. IEEE Transactions on Industrial Electronics, 2020, 67, 8691-8701. | 7.9 | 53 |
| 87 | Stochastic stability and robust control for sampled-data systems with Markovian jump parameters. Journal of Mathematical Analysis and Applications, 2006, 313, 504-517. | 1.0 | 52 |
| 88 | Performance assessment of PID control loops subject to setpoint changes. Journal of Process Control, 2011, 21, 1164-1171. | 3.3 | 51 |
| 89 | Robust multiple-model LPV approach to nonlinear process identification using mixture t distributions. Journal of Process Control, 2014, 24, 1472-1488. | 3.3 | 51 |
| 90 | Process monitoring using a generalized probabilistic linear latent variable model. Automatica, 2018, 96, 73-83. | 5.0 | 51 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | A level set method for oil slick segmentation in SAR images. International Journal of Remote Sensing, 2005, 26, 1145-1156. | 2.9 | 50 |
| 92 | Dual particle filters for state and parameter estimation with application to a run-of-mine ore mill. Journal of Process Control, 2012, 22, 710-717. | 3.3 | 50 |
| 93 | A Data-Driven Hybrid ARX and Markov Chain Modeling Approach to Process Identification With Time-Varying Time Delays. IEEE Transactions on Industrial Electronics, 2017, 64, 4226-4236. | 7.9 | 50 |
| 94 | A deep learning just-in-time modeling approach for soft sensor based on variational autoencoder. Chemometrics and Intelligent Laboratory Systems, 2020, 197, 103922. | 3.5 | 50 |
| 95 | A Bayesian approach to design of adaptive multi-model inferential sensors with application in oil sand industry. Journal of Process Control, 2012, 22, 1913-1929. | 3.3 | 49 |
| 96 | On simultaneous on-line state and parameter estimation in non-linear state-space models. Journal of Process Control, 2013, 23, 516-526. | 3.3 | 49 |
| 97 | Estimation and control of solid oxide fuel cell system. Computers and Chemical Engineering, 2010, 34, 96-111. | 3.8 | 48 |
| 98 | A Single-Side Neural Network-Aided Canonical Correlation Analysis With Applications to Fault Diagnosis. IEEE Transactions on Cybernetics, 2022, 52, 9454-9466. | 9.5 | 48 |
| 99 | Robust Digital Model Predictive Control for Linear Uncertain Systems With Saturations. IEEE Transactions on Automatic Control, 2004, 49, 792-796. | 5.7 | 47 |
| 100 | Improved identification of continuous-time delay processes from piecewise step tests. Journal of Process Control, 2007, 17, 51-57. | 3.3 | 47 |
| 101 | Compensation of control valve stiction through controller tuning. Journal of Process Control, 2012, 22, 1800-1819. | 3.3 | 47 |
| 102 | Linear Optimal Unbiased Filter for Time-Variant Systems Without Apriori Information on Initial Conditions. IEEE Transactions on Automatic Control, 2017, 62, 882-887. | 5.7 | 47 |
| 103 | Gaussian process modelling with Gaussian mixture likelihood. Journal of Process Control, 2019, 81, 209-220. | 3.3 | 47 |
| 104 | Adjacent-Agent Dynamic Linearization-Based Iterative Learning Formation Control. IEEE Transactions on Cybernetics, 2020, 50, 4358-4369. | 9.5 | 47 |
| 105 | A Deep Probabilistic Transfer Learning Framework for Soft Sensor Modeling With Missing Data. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 7598-7609. | 11.3 | 47 |
| 106 | Enhanced P-Type Control: Indirect Adaptive Learning From Set-Point Updates. IEEE Transactions on Automatic Control, 2023, 68, 1600-1613. | 5.7 | 47 |
| 107 | Economic performance assessment of advanced process control with LQG benchmarking. Journal of Process Control, 2009, 19, 557-569. | 3.3 | 46 |
| 108 | Approaches to robust process identification: A review and tutorial of probabilistic methods. Journal of Process Control, 2018, 66, 68-83. | 3.3 | 46 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 109 | Feedforward plus feedback controller performance assessment of MIMO systems. IEEE Transactions on Control Systems Technology, 2000, 8, 580-587. | 5.2 | 45 |
| 110 | Bayesian Fault Diagnosis With Asynchronous Measurements and Its Application in Networked Distributed Monitoring. IEEE Transactions on Industrial Electronics, 2016, 63, 6316-6324. | 7.9 | 45 |
| 111 | Data-Driven Designs of Fault Detection Systems via Neural Network-Aided Learning. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 5694-5705. | 11.3 | 45 |
| 112 | Dynamic modelling and simulation of a hot strip finishing mill. Applied Mathematical Modelling, 2009, 33, 3208-3225. | 4.2 | 44 |
| 113 | Recursive cointegration analytics for adaptive monitoring of nonstationary industrial processes with both static and dynamic variations. Journal of Process Control, 2020, 92, 319-332. | 3.3 | 44 |
| 114 | Closed-loop identification: a two step approach. Journal of Process Control, 1997, 7, 425-438. | 3.3 | 43 |
| 115 | Cyclo-period estimation for discrete-time cyclo-stationary signals. IEEE Transactions on Signal Processing, 2006, 54, 83-94. | 5.3 | 43 |
| 116 | Double locally weighted principal component regression for soft sensor with sample selection under supervised latent structure. Chemometrics and Intelligent Laboratory Systems, 2016, 153, 116-125. | 3.5 | 43 |
| 117 | Robust optimization under correlated uncertainty: Formulations and computational study. Computers and Chemical Engineering, 2016, 85, 58-71. | 3.8 | 43 |
| 118 | Data-Driven Modeling Based on Two-Stream λ Gated Recurrent Unit Network With Soft Sensor Application. IEEE Transactions on Industrial Electronics, 2020, 67, 7034-7043. | 7.9 | 43 |
| 119 | Alternative solutions to multi-variate control performance assessment problems. Journal of Process Control, 2006, 16, 457-471. | 3.3 | 42 |
| 120 | Mixture semisupervised probabilistic principal component regression model with missing inputs. Computers and Chemical Engineering, 2017, 103, 176-187. | 3.8 | 42 |
| 121 | Data-driven high-order terminal iterative learning control with a faster convergence speed. International Journal of Robust and Nonlinear Control, 2018, 28, 103-119. | 3.7 | 42 |
| 122 | A new soft-sensor algorithm with concurrent consideration of slowness and quality interpretation for dynamic chemical process. Chemical Engineering Science, 2019, 199, 28-39. | 3.8 | 42 |
| 123 | Iterative Identification of Hammerstein Parameter Varying Systems With Parameter Uncertainties Based on the Variational Bayesian Approach. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 1035-1045. | 9.3 | 42 |
| 124 | Stationary Subspace Analysis-Based Hierarchical Model for Batch Processes Monitoring. IEEE Transactions on Control Systems Technology, 2021, 29, 444-453. | 5.2 | 42 |
| 125 | Model predictive control relevant identification and validation. Chemical Engineering Science, 2003, 58, 2389-2401. | 3.8 | 41 |
| 126 | Identification of Hammerstein systems without explicit parameterisation of non-linearity. International Journal of Control, 2009, 82, 937-952. | 1.9 | 41 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | The DCT-based oscillation detection method for a single time series. <i>Journal of Process Control</i> , 2010, 20, 609-617. | 3.3 | 41 |
| 128 | Nonlinear semisupervised principal component regression for soft sensor modeling and its mixture form. <i>Journal of Chemometrics</i> , 2014, 28, 793-804. | 1.3 | 41 |
| 129 | Reinforcement learning approach to autonomous PID tuning. <i>Computers and Chemical Engineering</i> , 2022, 161, 107760. | 3.8 | 41 |
| 130 | Stochastic reliable control of a class of uncertain time-delay systems with unknown nonlinearities. <i>IEEE Transactions on Circuits and Systems Part 1: Regular Papers</i> , 2001, 48, 646-650. | 0.1 | 40 |
| 131 | Multiple-Model State Estimation Based on Variational Bayesian Inference. <i>IEEE Transactions on Automatic Control</i> , 2019, 64, 1679-1685. | 5.7 | 40 |
| 132 | Multisource-Refined Transfer Network for Industrial Fault Diagnosis Under Domain and Category Inconsistencies. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 9784-9796. | 9.5 | 40 |
| 133 | Identifiability and estimability study for a dynamic solid oxide fuel cell model. <i>Computers and Chemical Engineering</i> , 2009, 33, 484-492. | 3.8 | 39 |
| 134 | Cytotoxicity assessment based on the AUC50 using multi-concentration time-dependent cellular response curves. <i>Analytica Chimica Acta</i> , 2013, 764, 44-52. | 5.4 | 39 |
| 135 | Fault Detection and Diagnosis of Multiple-Model Systems With Mismodeled Transition Probabilities. <i>IEEE Transactions on Industrial Electronics</i> , 2015, 62, 5063-5071. | 7.9 | 39 |
| 136 | A Variational Bayesian Approach to Robust Identification of Switched ARX Models. <i>IEEE Transactions on Cybernetics</i> , 2016, 46, 3195-3208. | 9.5 | 39 |
| 137 | Event-Triggered Model-Free Adaptive Control. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2021, 51, 3358-3369. | 9.3 | 39 |
| 138 | Multi-step prediction error approach for controller performance monitoring. <i>Control Engineering Practice</i> , 2010, 18, 1-12. | 5.5 | 38 |
| 139 | Robust Gaussian process modeling using EM algorithm. <i>Journal of Process Control</i> , 2016, 42, 125-136. | 3.3 | 38 |
| 140 | Bayesian Learning for Dynamic Feature Extraction With Application in Soft Sensing. <i>IEEE Transactions on Industrial Electronics</i> , 2017, 64, 7171-7180. | 7.9 | 38 |
| 141 | Robust Estimation of ARX Models With Time Varying Time Delays Using Variational Bayesian Approach. <i>IEEE Transactions on Cybernetics</i> , 2018, 48, 532-542. | 9.5 | 38 |
| 142 | Sampled-data filtering with error covariance assignment. <i>IEEE Transactions on Signal Processing</i> , 2001, 49, 666-670. | 5.3 | 37 |
| 143 | Bayesian methods for control loop diagnosis in the presence of temporal dependent evidences. <i>Automatica</i> , 2011, 47, 1349-1356. | 5.0 | 36 |
| 144 | Moving horizon estimation for switching nonlinear systems. <i>Automatica</i> , 2013, 49, 3270-3281. | 5.0 | 36 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | MoniNet With Concurrent Analytics of Temporal and Spatial Information for Fault Detection in Industrial Processes. IEEE Transactions on Cybernetics, 2022, 52, 8340-8351. | 9.5 | 36 |
| 146 | JITL based MWGPR soft sensor for multi-mode process with dual-updating strategy. Computers and Chemical Engineering, 2016, 90, 260-267. | 3.8 | 35 |
| 147 | A Bayesian framework for real-time identification of locally weighted partial least squares. AIChE Journal, 2015, 61, 518-529. | 3.6 | 34 |
| 148 | Data-driven optimal terminal iterative learning control with initial value dynamic compensation. IET Control Theory and Applications, 2016, 10, 1357-1364. | 2.1 | 34 |
| 149 | Mixtures of Probabilistic PCA With Common Structure Latent Bases for Process Monitoring. IEEE Transactions on Control Systems Technology, 2019, 27, 838-846. | 5.2 | 34 |
| 150 | Online Probabilistic Estimation of Sensor Faulty Signal in Industrial Processes and Its Applications. IEEE Transactions on Industrial Electronics, 2021, 68, 8853-8862. | 7.9 | 34 |
| 151 | Data-Driven Fault Detection for Dynamic Systems With Performance Degradation: A Unified Transfer Learning Framework. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12. | 4.7 | 34 |
| 152 | Output feedback model predictive control for nonlinear systems represented by Hammerstein-Wiener model. IET Control Theory and Applications, 2007, 1, 1302-1310. | 2.1 | 33 |
| 153 | Dynamic output feedback robust model predictive control. International Journal of Systems Science, 2011, 42, 1669-1682. | 5.5 | 33 |
| 154 | Data quality assessment of routine operating data for process identification. Computers and Chemical Engineering, 2013, 55, 19-27. | 3.8 | 33 |
| 155 | Adaptive soft sensor based on time difference Gaussian process regression with local time-delay reconstruction. Chemical Engineering Research and Design, 2017, 117, 670-680. | 5.6 | 33 |
| 156 | Event-Triggered Nonlinear Iterative Learning Control. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 5118-5128. | 11.3 | 33 |
| 157 | Output-relevant Variational autoencoder for Just-in-time soft sensor modeling with missing data. Journal of Process Control, 2020, 92, 90-97. | 3.3 | 33 |
| 158 | Tuning-Free Bayesian Estimation Algorithms for Faulty Sensor Signals in State-Space. IEEE Transactions on Industrial Electronics, 2023, 70, 921-929. | 7.9 | 33 |
| 159 | Performance assessment of advanced supervisory regulatory control systems with subspace LQG benchmark. Automatica, 2010, 46, 1363-1368. | 5.0 | 32 |
| 160 | Operating condition diagnosis based on HMM with adaptive transition probabilities in presence of missing observations. AIChE Journal, 2015, 61, 477-493. | 3.6 | 32 |
| 161 | Localization of Indoor Mobile Robot Using Minimum Variance Unbiased FIR Filter. IEEE Transactions on Automation Science and Engineering, 2018, 15, 410-419. | 5.2 | 32 |
| 162 | 3-D Learning-Enhanced Adaptive ILC for Iteration-Varying Formation Tasks. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 89-99. | 11.3 | 32 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 163 | Performance assessment of multivariate control loops on a paper machine headbox. Canadian Journal of Chemical Engineering, 1997, 75, 134-142. | 1.7 | 31 |
| 164 | Parameter estimation in batch process using EM algorithm with particle filter. Computers and Chemical Engineering, 2013, 57, 159-172. | 3.8 | 31 |
| 165 | Two layered mixture Bayesian probabilistic PCA for dynamic process monitoring. Journal of Process Control, 2017, 57, 148-163. | 3.3 | 31 |
| 166 | A Novel Approach to Feedback Control with Deep Reinforcement Learning. IFAC-PapersOnLine, 2018, 51, 31-36. | 0.9 | 31 |
| 167 | Robust Model Predictive Control of Singular Systems. IEEE Transactions on Automatic Control, 2004, 49, 1000-1006. | 5.7 | 30 |
| 168 | Information transfer methods in causality analysis of process variables with an industrial application. Journal of Process Control, 2013, 23, 1296-1305. | 3.3 | 30 |
| 169 | Development of soft sensor by incorporating the delayed infrequent and irregular measurements. Journal of Process Control, 2014, 24, 1733-1739. | 3.3 | 30 |
| 170 | Robust Identification of Nonlinear Errors-in-Variables Systems With Parameter Uncertainties Using Variational Bayesian Approach. IEEE Transactions on Industrial Informatics, 2017, 13, 3047-3057. | 11.3 | 30 |
| 171 | Closed-loop identification via output fast sampling. Journal of Process Control, 2004, 14, 555-570. | 3.3 | 29 |
| 172 | Closed-loop identification with routine operating data: Effect of time delay and sampling time. Journal of Process Control, 2011, 21, 997-1010. | 3.3 | 29 |
| 173 | Recursive Wavelength-Selection Strategy to Update Near-Infrared Spectroscopy Model with an Industrial Application. Industrial & Engineering Chemistry Research, 2013, 52, 7886-7895. | 3.7 | 29 |
| 174 | Development and industrial application of soft sensors with on-line Bayesian model updating strategy. Journal of Process Control, 2013, 23, 317-325. | 3.3 | 29 |
| 175 | Constrained particle filtering methods for state estimation of nonlinear process. AIChE Journal, 2014, 60, 2072-2082. | 3.6 | 29 |
| 176 | Automatic Detection and Frequency Estimation of Oscillatory Variables in the Presence of Multiple Oscillations. Industrial & Engineering Chemistry Research, 2014, 53, 9427-9438. | 3.7 | 29 |
| 177 | Estimating harmonic impact of individual loads using multiple linear regression analysis. International Transactions on Electrical Energy Systems, 2016, 26, 809-824. | 1.9 | 29 |
| 178 | Incipient Fault Detection for Complex Industrial Processes with Stationary and Nonstationary Hybrid Characteristics. Industrial & Engineering Chemistry Research, 2018, 57, 5045-5057. | 3.7 | 29 |
| 179 | Fault Detection for Nonlinear Dynamic Systems With Consideration of Modeling Errors: A Data-Driven Approach. IEEE Transactions on Cybernetics, 2023, 53, 4259-4269. | 9.5 | 29 |
| 180 | Model validation for industrial model predictive control systems. Chemical Engineering Science, 2000, 55, 2315-2327. | 3.8 | 28 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Detection of Distributed Oscillations and Root-Cause Diagnosis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 149-154. | 0.4 | 28 |
| 182 | Sensitivity analysis for selective constraint and variability tuning in performance assessment of industrial MPC. Control Engineering Practice, 2008, 16, 1195-1215. | 5.5 | 28 |
| 183 | Multiple-Model Based Linear Parameter Varying Time-Delay System Identification with Missing Output Data Using an Expectation-Maximization Algorithm. Industrial & Engineering Chemistry Research, 2014, 53, 11074-11083. | 3.7 | 28 |
| 184 | Controller performance assessment in set point tracking and regulatory control. International Journal of Adaptive Control and Signal Processing, 2003, 17, 709-727. | 4.1 | 27 |
| 185 | Multi-loop decentralized PID control based on covariance control criteria: An LMI approach. ISA Transactions, 2004, 43, 49-59. | 5.7 | 27 |
| 186 | Closed-loop identification condition for ARMAX models using routine operating data. Automatica, 2011, 47, 1534-1537. | 5.0 | 27 |
| 187 | Dynamic bayesian approach to gross error detection and compensation with application toward an oil sands process. Chemical Engineering Science, 2012, 67, 44-56. | 3.8 | 27 |
| 188 | Soft sensors for online steam quality measurements of OTSGs. Journal of Process Control, 2013, 23, 990-1000. | 3.3 | 27 |
| 189 | Computationally Light Non-Lifted Data-Driven Norm-Optimal Iterative Learning Control. Asian Journal of Control, 2018, 20, 115-124. | 3.0 | 27 |
| 190 | Semi-supervised dynamic latent variable modeling: I/O probabilistic slow feature analysis approach. AIChE Journal, 2019, 65, 964-979. | 3.6 | 27 |
| 191 | Active Disturbance Rejection Control for Nonaffined Globally Lipschitz Nonlinear Discrete-Time Systems. IEEE Transactions on Automatic Control, 2021, 66, 5955-5967. | 5.7 | 27 |
| 192 | Online reinforcement learning for a continuous space system with experimental validation. Journal of Process Control, 2021, 104, 86-100. | 3.3 | 27 |
| 193 | Assessing Model Prediction Control (MPC) Performance. 1. Probabilistic Approach for Constraint Analysis. Industrial & Engineering Chemistry Research, 2007, 46, 8101-8111. | 3.7 | 26 |
| 194 | Identification of switched Markov autoregressive exogenous systems with hidden switching state. Automatica, 2012, 48, 436-441. | 5.0 | 26 |
| 195 | Improved DCT-based method for online detection of oscillations in univariate time series. Control Engineering Practice, 2013, 21, 622-630. | 5.5 | 26 |
| 196 | Quantitative Data-Driven Adaptive Iterative Learning Control: From Trajectory Tracking to Point-to-Point Tracking. IEEE Transactions on Cybernetics, 2022, 52, 4859-4873. | 9.5 | 26 |
| 197 | Variational Progressive-Transfer Network for Soft Sensing of Multirate Industrial Processes. IEEE Transactions on Cybernetics, 2022, 52, 12882-12892. | 9.5 | 26 |
| 198 | Detection of abrupt changes of total least squares models and application in fault detection. IEEE Transactions on Control Systems Technology, 2001, 9, 357-367. | 5.2 | 25 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Determination of ochratoxin A by polyclonal antibodies based sensitive time-resolved fluoroimmunoassay. Archives of Toxicology, 2006, 80, 481-485. | 4.2 | 25 |
| 200 | Probabilistic Monitoring of Sensors in State-Space With Variational Bayesian Inference. IEEE Transactions on Industrial Electronics, 2019, 66, 2154-2163. | 7.9 | 25 |
| 201 | A slow independent component analysis algorithm for time series feature extraction with the concurrent consideration of high-order statistic and slowness. Journal of Process Control, 2019, 84, 1-12. | 3.3 | 25 |
| 202 | Dynamics and variance control of hot mill loopers. Control Engineering Practice, 2008, 16, 89-100. | 5.5 | 24 |
| 203 | Industrial implementation of controller performance analysis technology. Control Engineering Practice, 2010, 18, 147-158. | 5.5 | 24 |
| 204 | Bayesian method for multirate data synthesis and model calibration. AIChE Journal, 2011, 57, 1514-1525. | 3.6 | 24 |
| 205 | A Bayesian approach to robust process identification with ARX models. AIChE Journal, 2013, 59, 845-859. | 3.6 | 24 |
| 206 | Parameter estimation for a dual-rate system with time delay. ISA Transactions, 2014, 53, 1368-1376. | 5.7 | 24 |
| 207 | A unified recursive just-in-time approach with industrial near infrared spectroscopy application. Chemometrics and Intelligent Laboratory Systems, 2014, 135, 133-140. | 3.5 | 24 |
| 208 | Robust optimization approximation for joint chance constrained optimization problem. Journal of Global Optimization, 2017, 67, 805-827. | 1.8 | 24 |
| 209 | Performance assessment of processes with abrupt changes of disturbances. Canadian Journal of Chemical Engineering, 1999, 77, 1044-1054. | 1.7 | 23 |
| 210 | Process identification based on last principal component analysis. Journal of Process Control, 2001, 11, 19-33. | 3.3 | 23 |
| 211 | Performance assessment of control loops with time-variant disturbance dynamics. Journal of Process Control, 2004, 14, 867-877. | 3.3 | 23 |
| 212 | In vitro cytotoxicity assessment based on KC50 with real-time cell analyzer (RTCA) assay. Computational Biology and Chemistry, 2013, 47, 113-120. | 2.3 | 23 |
| 213 | A Particle Filter Approach to Approximate Posterior Cramer-Rao Lower Bound: The Case of Hidden States. IEEE Transactions on Aerospace and Electronic Systems, 2013, 49, 2478-2495. | 4.7 | 23 |
| 214 | Real-Time Assessment and Diagnosis of Process Operating Performance. Engineering, 2017, 3, 214-219. | 6.7 | 23 |
| 215 | A just-in-time modeling approach for multimode soft sensor based on Gaussian mixture variational autoencoder. Computers and Chemical Engineering, 2021, 146, 107230. | 3.8 | 23 |
| 216 | Multi-rate Gaussian Bayesian network soft sensor development with noisy input and missing data. Journal of Process Control, 2021, 105, 48-61. | 3.3 | 23 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | A Gaussian mixture model based virtual sample generation approach for small datasets in industrial processes. Information Sciences, 2021, 581, 262-277. | 6.9 | 23 |
| 218 | Feedforward and Feedback Controller Performance Assessment of Linear Time-Variant Processes. Industrial & Engineering Chemistry Research, 2004, 43, 589-596. | 3.7 | 22 |
| 219 | A decoupled multiple model approach for soft sensors design. Control Engineering Practice, 2011, 19, 126-134. | 5.5 | 22 |
| 220 | Frequency analysis and compensation of valve stiction in cascade control loops. Journal of Process Control, 2014, 24, 1747-1760. | 3.3 | 22 |
| 221 | Performance assessment, diagnosis, and optimal selection of non-linear state filters. Journal of Process Control, 2014, 24, 460-478. | 3.3 | 22 |
| 222 | Iterative Residual Generator for Fault Detection With Linear Time-Invariant State-Space Models. IEEE Transactions on Automatic Control, 2017, 62, 5422-5428. | 5.7 | 22 |
| 223 | Bayesian state estimation on finite horizons: The case of linear state-space model. Automatica, 2017, 85, 91-99. | 5.0 | 22 |
| 224 | Identification of robust probabilistic slow feature regression model for process data contaminated with outliers. Chemometrics and Intelligent Laboratory Systems, 2018, 173, 1-13. | 3.5 | 22 |
| 225 | A novel approach to process operating mode diagnosis using conditional random fields in the presence of missing data. Computers and Chemical Engineering, 2018, 111, 149-163. | 3.8 | 22 |
| 226 | Assessing Model Prediction Control (MPC) Performance. 2. Bayesian Approach for Constraint Tuning. Industrial & Engineering Chemistry Research, 2007, 46, 8112-8119. | 3.7 | 21 |
| 227 | A Bayesian approach for control loop diagnosis with missing data. AIChE Journal, 2010, 56, 179-195. | 3.6 | 21 |
| 228 | Online composition estimation and experiment validation of distillation processes with switching dynamics. Chemical Engineering Science, 2010, 65, 1597-1608. | 3.8 | 21 |
| 229 | Estimation of distribution function for control valve stiction estimation. Journal of Process Control, 2011, 21, 1208-1216. | 3.3 | 21 |
| 230 | Recursive constrained state estimation using modified extended Kalman filter. Computers and Chemical Engineering, 2014, 65, 9-17. | 3.8 | 21 |
| 231 | Bayesian method for simultaneous gross error detection and data reconciliation. AIChE Journal, 2015, 61, 3232-3248. | 3.6 | 21 |
| 232 | A direct maximum likelihood optimization approach to identification of LPV time-delay systems. Journal of the Franklin Institute, 2016, 353, 1862-1881. | 3.4 | 21 |
| 233 | Detection and Diagnosis of Multiple Faults With Uncertain Modeling Parameters. IEEE Transactions on Control Systems Technology, 2017, 25, 1873-1881. | 5.2 | 21 |
| 234 | Expectation maximization estimation for a class of input nonlinear state space systems by using the Kalman smoother. Signal Processing, 2018, 145, 295-303. | 3.7 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 235 | Real-Time Mode Diagnosis for Processes With Multiple Operating Conditions Using Switching Conditional Random Fields. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 5060-5070. | 7.9 | 21 |
| 236 | Estimation of States of Nonlinear Systems using a Particle Filter. , 2006, , . | | 20 |
| 237 | A blind approach to closed-loop identification of Hammerstein systems. <i>International Journal of Control</i> , 2007, 80, 302-313. | 1.9 | 20 |
| 238 | Control-loop diagnosis using continuous evidence through kernel density estimation. <i>Journal of Process Control</i> , 2014, 24, 640-651. | 3.3 | 20 |
| 239 | Minimal required excitation for closed-loop identification: Some implications for data-driven, system identification. <i>Journal of Process Control</i> , 2015, 27, 22-35. | 3.3 | 20 |
| 240 | Robust Diagnosis of Operating Mode Based on Time-Varying Hidden Markov Models. <i>IEEE Transactions on Industrial Electronics</i> , 2016, 63, 1142-1152. | 7.9 | 20 |
| 241 | Dynamic higher-order cumulants analysis for state monitoring based on a novel lag selection. <i>Information Sciences</i> , 2016, 331, 45-66. | 6.9 | 20 |
| 242 | Observer-Based Sampled-Data Model-Free Adaptive Control for Continuous-Time Nonlinear Nonaffine Systems With Input Rate Constraints. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2021, 51, 7813-7822. | 9.3 | 20 |
| 243 | SFNet: A slow feature extraction network for parallel linear and nonlinear dynamic process monitoring. <i>Neurocomputing</i> , 2022, 488, 359-380. | 5.9 | 20 |
| 244 | A generalized probabilistic monitoring model with both random and sequential data. <i>Automatica</i> , 2022, 144, 110468. | 5.0 | 20 |
| 245 | Multivariable model validation in the presence of time-variant disturbance dynamics. <i>Chemical Engineering Science</i> , 2000, 55, 4583-4595. | 3.8 | 19 |
| 246 | Estimation of the Dynamic Matrix and Noise Model for Model Predictive Control Using Closed-Loop Data. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 842-852. | 3.7 | 19 |
| 247 | Consistency of noise covariance estimation in joint input-output closed-loop subspace identification with application in LQG benchmarking. <i>Journal of Process Control</i> , 2009, 19, 1649-1657. | 3.3 | 19 |
| 248 | Model predictive control of axial dispersion chemical reactor. <i>Journal of Process Control</i> , 2014, 24, 1671-1690. | 3.3 | 19 |
| 249 | Predicting wellbore dynamics in a steam-assisted gravity drainage system: Numeric and semi-analytic model, and validation. <i>Applied Thermal Engineering</i> , 2015, 91, 679-686. | 6.0 | 19 |
| 250 | 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 |
| 251 | Robust probabilistic principal component analysis for process modeling subject to scaled mixture Gaussian noise. <i>Computers and Chemical Engineering</i> , 2016, 90, 62-78. | 3.8 | 19 |
| 252 | Robust identification for nonlinear errors-in-variables systems using the EM algorithm. <i>Journal of Process Control</i> , 2017, 54, 129-137. | 3.3 | 19 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 253 | Experimental study of geysers through a vent pipe connected to flowing sewers. <i>Water Science and Technology</i> , 2018, 2017, 66-76. | 2.5 | 19 |
| 254 | Output relevant slow feature extraction using partial least squares. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2019, 191, 148-157. | 3.5 | 19 |
| 255 | Hierarchically Distributed Monitoring for the Early Prediction of Gas Flare Events. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 11352-11363. | 3.7 | 19 |
| 256 | Neighborhood Variational Bayesian Multivariate Analysis for Distributed Process Monitoring With Missing Data. <i>IEEE Transactions on Control Systems Technology</i> , 2019, 27, 2330-2339. | 5.2 | 19 |
| 257 | Siamese Neural Network-Based Supervised Slow Feature Extraction for Soft Sensor Application. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 8953-8962. | 7.9 | 19 |
| 258 | Valve Stiction Detection and Quantification Using a K-Means Clustering Based Moving Window Approach. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 2563-2577. | 3.7 | 19 |
| 259 | Modern Machine Learning Tools for Monitoring and Control of Industrial Processes: A Survey. <i>IFAC-PapersOnLine</i> , 2020, 53, 218-229. | 0.9 | 19 |
| 260 | The Role of data prefiltering for integrated identification and model predictive control. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1999, 32, 6751-6756. | 0.4 | 18 |
| 261 | Multirate robust digital control for fuzzy systems with periodic Lyapunov function. <i>IEEE Transactions on Fuzzy Systems</i> , 2005, 13, 436-443. | 9.8 | 18 |
| 262 | On spectral theory of cyclostationary signals in multirate systems. <i>IEEE Transactions on Signal Processing</i> , 2005, 53, 2421-2431. | 5.3 | 18 |
| 263 | Closed-loop Fault Detection Using the Local Approach. <i>Canadian Journal of Chemical Engineering</i> , 2003, 81, 1101-1108. | 1.7 | 18 |
| 264 | A Data-Based Augmented Model Identification Method for Linear Errors-in-Variables Systems Based on EM Algorithm. <i>IEEE Transactions on Industrial Electronics</i> , 2017, 64, 8657-8665. | 7.9 | 18 |
| 265 | An Augmented Model Approach for Identification of Nonlinear Errors-in-Variables Systems Using the EM Algorithm. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2018, 48, 1968-1978. | 9.3 | 18 |
| 266 | Robust FIR State Estimation of Dynamic Processes Corrupted by Outliers. <i>IEEE Transactions on Industrial Informatics</i> , 2019, 15, 139-147. | 11.3 | 18 |
| 267 | The role of the unitary interactor matrix in the explicit solution of the singular LQ output feedback control problem. <i>Automatica</i> , 1997, 33, 2071-2075. | 5.0 | 17 |
| 268 | On-line closed-loop model validation and detection of abrupt parameter changes. <i>Journal of Process Control</i> , 2001, 11, 699-715. | 3.3 | 17 |
| 269 | Subspace Approach to Identification of Step-Response Model from Closed-Loop Data. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 8558-8567. | 3.7 | 17 |
| 270 | Bayesian and Expectation Maximization methods for multivariate change point detection. <i>Computers and Chemical Engineering</i> , 2014, 60, 339-353. | 3.8 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 271 | New results on the robust stability of PID controllers with gain and phase margins for UFOPTD processes. ISA Transactions, 2016, 61, 240-250. | 5.7 | 17 |
| 272 | Distributed Dynamic Modeling and Monitoring for Large-Scale Industrial Processes under Closed-Loop Control. Industrial & Engineering Chemistry Research, 2018, 57, 15759-15772. | 3.7 | 17 |
| 273 | Distributed iterative learning temperature control for multi-zone HVAC system. Journal of the Franklin Institute, 2020, 357, 810-831. | 3.4 | 17 |
| 274 | How Good is Your Controller? Application of Control Loop Performance Assessment Techniques to MIMO Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1996, 29, 6025-6030. | 0.4 | 16 |
| 275 | Robust performance assessment of feedback control systems. Automatica, 2002, 38, 33-46. | 5.0 | 16 |
| 276 | New formulation of robust MPC by incorporating off-line approach with on-line optimization. International Journal of Systems Science, 2007, 38, 519-529. | 5.5 | 16 |
| 277 | Closed-loop model validation based on the two-model divergence method. Journal of Process Control, 2009, 19, 644-655. | 3.3 | 16 |
| 278 | Dynamic Bayesian Approach for Control Loop Diagnosis with Underlying Mode Dependency. Industrial & Engineering Chemistry Research, 2010, 49, 8613-8623. | 3.7 | 16 |
| 279 | Control Performance Assessment Subject to Multi-Objective User-Specified Performance Characteristics. IEEE Transactions on Control Systems Technology, 2011, 19, 682-691. | 5.2 | 16 |
| 280 | Constrained receding-horizon experiment design and parameter estimation in the presence of poor initial conditions. AIChE Journal, 2011, 57, 2808-2820. | 3.6 | 16 |
| 281 | Deterministic vs. stochastic performance assessment of iterative learning control for batch processes. AIChE Journal, 2013, 59, 457-464. | 3.6 | 16 |
| 282 | Multi-input-Multi-output (MIMO) Control System Performance Monitoring Based on Dissimilarity Analysis. Industrial & Engineering Chemistry Research, 2014, 53, 18226-18235. | 3.7 | 16 |
| 283 | Process monitoring based on factor analysis: Probabilistic analysis of monitoring statistics in presence of both complete and incomplete measurements. Chemometrics and Intelligent Laboratory Systems, 2015, 142, 18-27. | 3.5 | 16 |
| 284 | Reliable control for nonlinear discrete-time systems with multiple intermittent faults in sensors or actuators. International Journal of Systems Science, 2017, 48, 302-315. | 5.5 | 16 |
| 285 | Molecular-Based Bayesian Regression Model of Petroleum Fractions. Industrial & Engineering Chemistry Research, 2017, 56, 14865-14872. | 3.7 | 16 |
| 286 | Nonlinear robust optimization for process design. AIChE Journal, 2018, 64, 481-494. | 3.6 | 16 |
| 287 | Identification of robust Gaussian Process Regression with noisy input using EM algorithm. Chemometrics and Intelligent Laboratory Systems, 2019, 191, 1-11. | 3.5 | 16 |
| 288 | A Holistic Probabilistic Framework for Monitoring Nonstationary Dynamic Industrial Processes. IEEE Transactions on Control Systems Technology, 2021, 29, 2239-2246. | 5.2 | 16 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 289 | Multimodal process monitoring based on variational Bayesian PCA and Kullback-Leibler divergence between mixture models. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2021, 210, 104230. | 3.5 | 16 |
| 290 | Soft sensor based on eXtreme gradient boosting and bidirectional converted gates long short-term memory self-attention network. <i>Neurocomputing</i> , 2021, 434, 126-136. | 5.9 | 16 |
| 291 | Estimation of Markov parameters and time-delay/interactor matrix. <i>Chemical Engineering Science</i> , 2000, 55, 3353-3363. | 3.8 | 15 |
| 292 | H2 approximation of multiple input/output delay systems. <i>Journal of Process Control</i> , 2004, 14, 627-634. | 3.3 | 15 |
| 293 | Monitoring control performance via structured closed-loop response subject to output variance/covariance upper bound. <i>Journal of Process Control</i> , 2006, 16, 971-984. | 3.3 | 15 |
| 294 | Model Predictive Control. <i>Journal of Control Science and Engineering</i> , 2012, 2012, 1-2. | 1.0 | 15 |
| 295 | Model analysis and performance analysis of two industrial MPCs. <i>Control Engineering Practice</i> , 2012, 20, 219-235. | 5.5 | 15 |
| 296 | Bayesian method for state estimation of batch process with missing data. <i>Computers and Chemical Engineering</i> , 2013, 53, 14-24. | 3.8 | 15 |
| 297 | Generalized expectation-maximization approach to LPV process identification with randomly missing output data. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2015, 148, 1-8. | 3.5 | 15 |
| 298 | Iteration Tuning of Disturbance Observer-Based Control System Satisfying Robustness Index for FOPTD Processes. <i>IEEE Transactions on Control Systems Technology</i> , 2017, 25, 1978-1988. | 5.2 | 15 |
| 299 | Wavelet Transform Based Methodology for Detection and Characterization of Multiple Oscillations in Nonstationary Variables. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 2083-2093. | 3.7 | 15 |
| 300 | State Estimation and Fusion in the Presence of Integrated Measurement. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2017, 66, 2490-2499. | 4.7 | 15 |
| 301 | Expectation Maximization Approach for Simultaneous Gross Error Detection and Data Reconciliation Using Gaussian Mixture Distribution. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 14530-14544. | 3.7 | 15 |
| 302 | Extracting dynamic features with switching models for process data analytics and application in soft sensing. <i>AIChE Journal</i> , 2018, 64, 2037-2051. | 3.6 | 15 |
| 303 | Variational Bayesian Approach for Causality and Contemporaneous Correlation Features Inference in Industrial Process Data. <i>IEEE Transactions on Cybernetics</i> , 2019, 49, 2580-2590. | 9.5 | 15 |
| 304 | Spatial Linear Dynamic Relationship of Strongly Connected Multiagent Systems and Adaptive Learning Control for Different Formations. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 531-543. | 9.5 | 15 |
| 305 | A hierarchical constrained reinforcement learning for optimization of bitumen recovery rate in a primary separation vessel. <i>Computers and Chemical Engineering</i> , 2020, 140, 106939. | 3.8 | 15 |
| 306 | Gaussian process regression with heteroscedastic noises - A machine-learning predictive variance approach. <i>Chemical Engineering Research and Design</i> , 2020, 157, 162-173. | 5.6 | 15 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 307 | Identification of Two-Dimensional Causal Systems With Missing Output Data via Expectation-Maximization Algorithm. IEEE Transactions on Industrial Informatics, 2021, 17, 5185-5196. | 11.3 | 15 |
| 308 | Auxiliary Predictive Compensation-Based ILC for Variable Pass Lengths. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4048-4056. | 9.3 | 15 |
| 309 | Adversarial smoothing tri-regression for robust semi-supervised industrial soft sensor. Journal of Process Control, 2021, 108, 86-97. | 3.3 | 15 |
| 310 | Industrial Applications of a Feedback Controller Performance Assessment of Time-Variant Processes. Industrial & Engineering Chemistry Research, 2004, 43, 597-607. | 3.7 | 14 |
| 311 | Performance monitoring of SISO control loops subject to LTV disturbance dynamics: An improved LTI benchmark. Journal of Process Control, 2006, 16, 567-579. | 3.3 | 14 |
| 312 | Dynamic Modelling and Prediction of Cytotoxicity on Microelectronic cell Sensor Array. Canadian Journal of Chemical Engineering, 2006, 84, 393-405. | 1.7 | 14 |
| 313 | Frequency analysis and experimental validation for stiction phenomenon in multi-loop processes. Journal of Process Control, 2011, 21, 437-447. | 3.3 | 14 |
| 314 | Adaptive monitoring of the process operation based on symbolic episode representation and hidden Markov models with application toward an oil sand primary separation. Computers and Chemical Engineering, 2014, 71, 281-297. | 3.8 | 14 |
| 315 | Performance Assessment of Industrial Linear Controllers in Univariate Control Loops for Both Set Point Tracking and Load Disturbance Rejection. Industrial & Engineering Chemistry Research, 2014, 53, 11050-11060. | 3.7 | 14 |
| 316 | Nonlinear process identification in the presence of multiple correlated hidden scheduling variables with missing data. AIChE Journal, 2015, 61, 3270-3287. | 3.6 | 14 |
| 317 | Robust probabilistic principal component analysis based process modeling: Dealing with simultaneous contamination of both input and output data. Journal of Process Control, 2018, 67, 94-111. | 3.3 | 14 |
| 318 | Triggered Communication in Distributed Adaptive High-Gain EKF. IEEE Transactions on Industrial Informatics, 2018, 14, 58-68. | 11.3 | 14 |
| 319 | Constrained multimodal ensemble Kalman filter based on Kullback-Leibler (KL) divergence. Journal of Process Control, 2019, 79, 16-28. | 3.3 | 14 |
| 320 | Mixture robust semi-supervised probabilistic principal component regression with missing input data. Chemometrics and Intelligent Laboratory Systems, 2021, 214, 104315. | 3.5 | 14 |
| 321 | Comments on "A Feedback Min-Max MPC Algorithm for LPV Systems Subject to Bounded Rates of Change of Parameters. IEEE Transactions on Automatic Control, 2007, 52, 970-970. | 5.7 | 13 |
| 322 | 1-D dynamic modeling of SOFC with analytical solution for reacting gas-flow problem. AIChE Journal, 2008, 54, 1537-1553. | 3.6 | 13 |
| 323 | Robust identification of switched regression models. IET Control Theory and Applications, 2009, 3, 1578-1590. | 2.1 | 13 |
| 324 | Early determination of toxicant concentration in water supply using MHE. Water Research, 2010, 44, 3252-3260. | 11.3 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 325 | Monitoring of solid oxide fuel cell systems. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2011, 6, 204-219. | 1.5 | 13 |
| 326 | Development of a simultaneous continuum and noncontinuum state estimator with application on a distillation process. <i>AIChE Journal</i> , 2012, 58, 480-492. | 3.6 | 13 |
| 327 | Mode of action classification of chemicals using multi-concentration time-dependent cellular response profiles. <i>Computational Biology and Chemistry</i> , 2014, 49, 23-35. | 2.3 | 13 |
| 328 | Multi-model multivariate Gaussian process modelling with correlated noises. <i>Journal of Process Control</i> , 2017, 58, 11-22. | 3.3 | 13 |
| 329 | Stochastic high-order internal model-based adaptive TILC with random uncertainties in initial states and desired reference points. <i>International Journal of Adaptive Control and Signal Processing</i> , 2017, 31, 726-741. | 4.1 | 13 |
| 330 | Multi-lagged-input iterative dynamic linearization based data-driven adaptive iterative learning control. <i>Journal of the Franklin Institute</i> , 2019, 356, 457-473. | 3.4 | 13 |
| 331 | Event-Triggered ILC for Optimal Consensus at Specified Data Points of Heterogeneous Networked Agents With Switching Topologies. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 8951-8961. | 9.5 | 13 |
| 332 | Data-driven design of fault detection and isolation method for distributed homogeneous systems. <i>Journal of the Franklin Institute</i> , 2021, 358, 4929-4949. | 3.4 | 13 |
| 333 | Sensor Fault Estimation in a Probabilistic Framework for Industrial Processes and its Applications. <i>IEEE Transactions on Industrial Informatics</i> , 2022, 18, 387-396. | 11.3 | 13 |
| 334 | Event-Triggered Distributed Moving Horizon State Estimation of Linear Systems. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2022, 52, 6439-6451. | 9.3 | 13 |
| 335 | An investigation into the poor performance of a model predictive control system on an industrial CGO coker. <i>Control Engineering Practice</i> , 2000, 8, 619-631. | 5.5 | 12 |
| 336 | A new method for stabilization of networked control systems with random delays [4]. , 0, , . | | 12 |
| 337 | Performance assessment of MIMO control systems with time-variant disturbance dynamics. <i>Computers and Chemical Engineering</i> , 2008, 32, 2144-2154. | 3.8 | 12 |
| 338 | Preferential crystallization: Multi-objective optimization framework. <i>AIChE Journal</i> , 2009, 55, 383-395. | 3.6 | 12 |
| 339 | Tuning a Soft Sensor's Bias Update Term. 1. The Open-Loop Case. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 4958-4967. | 3.7 | 12 |
| 340 | Gaussian Mixture Model-Based Ensemble Kalman Filtering for State and Parameter Estimation for a PMMA Process. <i>Processes</i> , 2016, 4, 9. | 2.8 | 12 |
| 341 | Distributed Student's t filtering algorithm for heavy-tailed noises. <i>International Journal of Adaptive Control and Signal Processing</i> , 2018, 32, 875-890. | 4.1 | 12 |
| 342 | Constrained ensemble Kalman filter based on Kullback-Leibler divergence. <i>Journal of Process Control</i> , 2019, 81, 150-161. | 3.3 | 12 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 343 | Computer vision system for froth-middlings interface level detection in the primary separation vessels. <i>Computers and Chemical Engineering</i> , 2019, 123, 357-370. | 3.8 | 12 |
| 344 | Deep Discriminative Representation Learning for Nonlinear Process Fault Detection. <i>IEEE Transactions on Automation Science and Engineering</i> , 2019, , 1-10. | 5.2 | 12 |
| 345 | Data-driven recursive least squares methods for non-affined nonlinear discrete-time systems. <i>Applied Mathematical Modelling</i> , 2020, 81, 787-798. | 4.2 | 12 |
| 346 | Actor-Critic Reinforcement Learning and Application in Developing Computer-Vision-Based Interface Tracking. <i>Engineering</i> , 2021, 7, 1248-1261. | 6.7 | 12 |
| 347 | Feedback and Feedforward Performance Analysis of the Shell Industrial Closed Loop Data Set. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1997, 30, 313-318. | 0.4 | 11 |
| 348 | SUBSPACE METHOD AIDED DATA-DRIVEN DESIGN OF OBSERVER BASED FAULT DETECTION SYSTEMS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005, 38, 167-172. | 0.4 | 11 |
| 349 | Validation of continuous-time models with delay. <i>Chemical Engineering Science</i> , 2009, 64, 443-454. | 3.8 | 11 |
| 350 | Recognition of chemical compounds in contaminated water using time-dependent multiple dose cellular responses. <i>Analytica Chimica Acta</i> , 2012, 724, 30-39. | 5.4 | 11 |
| 351 | Designing priors for robust Bayesian optimal experimental design. <i>Journal of Process Control</i> , 2012, 22, 450-462. | 3.3 | 11 |
| 352 | Bayesian Control Loop Diagnosis by Combining Historical Data and Process Knowledge of Fault Signatures. <i>IEEE Transactions on Industrial Electronics</i> , 2014, , 1-1. | 7.9 | 11 |
| 353 | Multiple oscillations detection in control loops by using the DFT and Raleigh distribution a ... a ... This work was supported by the Natural Sciences and Engineering Research Council (NSERC) of Canada; the National Natural Science Foundation of China [61174161, 61304141, 61375077]; the specialized Research Fund for the Doctoral Program of Higher Education of China [20130121130004]; and the Fundamental Research Funds for the Central Universities in China [201212G005].. <i>IFAC-PapersOnLine</i> , 2015, 48, 529-534. | 0.9 | 11 |
| 354 | A Revised Technique of Stiction Compensation for Control Valves. <i>IFAC-PapersOnLine</i> , 2016, 49, 1038-1043. | 0.9 | 11 |
| 355 | Control Design for Disturbance Rejection in the Presence of Uncertain Delays. <i>IEEE Transactions on Automation Science and Engineering</i> , 2017, 14, 1570-1581. | 5.2 | 11 |
| 356 | Distributed adaptive high-gain extended Kalman filtering for nonlinear systems. <i>International Journal of Robust and Nonlinear Control</i> , 2017, 27, 4873-4902. | 3.7 | 11 |
| 357 | A weighted heteroscedastic Gaussian Process Modelling via particle swarm optimization. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2018, 172, 129-138. | 3.5 | 11 |
| 358 | Complex probabilistic slow feature extraction with applications in process data analytics. <i>Computers and Chemical Engineering</i> , 2021, 154, 107456. | 3.8 | 11 |
| 359 | Transfer Learning for Dynamic Feature Extraction Using Variational Bayesian Inference. <i>IEEE Transactions on Knowledge and Data Engineering</i> , 2022, 34, 5524-5535. | 5.7 | 11 |
| 360 | Comparative Study of State Estimation of Fuel Cell Hybrid System Using UKF and EKF. , 2007, , . | | 10 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 361 | Robust $\int_0^T \int_{\Omega} H(x,t) ^2 dx dt$ optimal filtering for continuous-time stochastic systems with polytopic parameter uncertainty. Automatica, 2008, 44, 2686-2690. | 5.0 | 10 |
| 362 | Receding horizon experiment design with application in SOFC parameter estimation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 541-546. | 0.4 | 10 |
| 363 | Control loop diagnosis with ambiguous historical operating modes: Part 2, information synthesis based on proportional parametrization. Journal of Process Control, 2013, 23, 1441-1454. | 3.3 | 10 |
| 364 | Statistical properties of signal entropy for use in detecting changes in time series data. Journal of Chemometrics, 2013, 27, 394-405. | 1.3 | 10 |
| 365 | Hellinger distance based probability distribution approach to performance monitoring of nonlinear control systems. Chinese Journal of Chemical Engineering, 2015, 23, 1945-1950. | 3.5 | 10 |
| 366 | Communication delays and data losses in distributed adaptive high-gain EKF. AIChE Journal, 2016, 62, 4321-4333. | 3.6 | 10 |
| 367 | PET Viscosity Prediction Using JIT-based Extreme Learning Machine. IFAC-PapersOnLine, 2018, 51, 608-613. | 0.9 | 10 |
| 368 | Estimation and identification in batch processes with particle filters. Journal of Process Control, 2019, 81, 1-14. | 3.3 | 10 |
| 369 | Global convergence of the EM algorithm for ARX models with uncertain communication channels. Systems and Control Letters, 2020, 136, 104614. | 2.3 | 10 |
| 370 | Hidden Markov Model-Based Attack Detection for Networked Control Systems Subject to Random Packet Dropouts. IEEE Transactions on Industrial Electronics, 2021, 68, 642-653. | 7.9 | 10 |
| 371 | Convergence Analysis of Sampled-Data ILC for Locally Lipschitz Continuous Nonlinear Nonaffine Systems With Nonrepetitive Uncertainties. IEEE Transactions on Automatic Control, 2021, 66, 3347-3354. | 5.7 | 10 |
| 372 | Parallel Interaction Spatiotemporal Constrained Variational Autoencoder for Soft Sensor Modeling. IEEE Transactions on Industrial Informatics, 2022, 18, 5190-5198. | 11.3 | 10 |
| 373 | Data-Driven Adaptive Consensus Learning From Network Topologies. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 3487-3497. | 11.3 | 10 |
| 374 | Discrete-Time-Distributed Adaptive ILC With Nonrepetitive Uncertainties and Applications to Building HVAC Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 5068-5080. | 9.3 | 10 |
| 375 | On-line control performance monitoring of MIMO processes. , 0, , . | | 9 |
| 376 | H ∞ control for sampled-data linear systems with two Markov processes. Optimal Control Applications and Methods, 2005, 26, 291-306. | 2.1 | 9 |
| 377 | Delay-dependent robust guaranteed cost control of an uncertain linear system with state and input delay. International Journal of Systems Science, 2005, 36, 19-26. | 5.5 | 9 |
| 378 | Undergraduate design of experiment laboratory on analysis and optimization of distillation column. Education for Chemical Engineers, 2012, 7, e187-e195. | 4.8 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 379 | Estimation of bitumen froth quality using Bayesian information synthesis: An application to froth transportation process. <i>Canadian Journal of Chemical Engineering</i> , 2012, 90, 1393-1399. | 1.7 | 9 |
| 380 | Control loop diagnosis with ambiguous historical operating modes: Part 1. A proportional parametrization approach. <i>Journal of Process Control</i> , 2013, 23, 585-597. | 3.3 | 9 |
| 381 | High-throughput screening assay for the environmental water samples using cellular response profiles. <i>Ecotoxicology and Environmental Safety</i> , 2015, 114, 134-142. | 6.0 | 9 |
| 382 | Optimal continuous-time state estimation for linear finite and infinite-dimensional chemical process systems with state constraints. <i>Journal of Process Control</i> , 2015, 35, 127-142. | 3.3 | 9 |
| 383 | Diagnosis of Oscillations Between Controller Tuning and Harmonic External Disturbances. <i>IEEE Transactions on Control Systems Technology</i> , 2015, 23, 1283-1293. | 5.2 | 9 |
| 384 | Novel model of non-uniformly sampled-data systems based on a time-varying backward shift operator. <i>Journal of Process Control</i> , 2016, 43, 38-52. | 3.3 | 9 |
| 385 | Robust filter design for asymmetric measurement noise using variational Bayesian inference. <i>IET Control Theory and Applications</i> , 2019, 13, 1656-1664. | 2.1 | 9 |
| 386 | Linear Time-Varying Data Model-Based Iterative Learning Recursive Least Squares Identifications for Repetitive Systems. <i>IEEE Access</i> , 2019, 7, 133304-133313. | 4.2 | 9 |
| 387 | A mutual information-based Variational Autoencoder for robust JIT soft sensing with abnormal observations. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2020, 204, 104118. | 3.5 | 9 |
| 388 | Data-Driven Communication Efficient Distributed Monitoring for Multiunit Industrial Plant-Wide Processes. <i>IEEE Transactions on Automation Science and Engineering</i> , 2022, 19, 1913-1923. | 5.2 | 9 |
| 389 | Blind Hammerstein Identification for MR Damper Modeling. <i>Proceedings of the American Control Conference</i> , 2007, , . | 0.0 | 8 |
| 390 | Tuning a Soft Sensor's Bias Update Term. 2. The Closed-Loop Case. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 4968-4981. | 3.7 | 8 |
| 391 | A probabilistic framework for real-time performance assessment of inferential sensors. <i>Control Engineering Practice</i> , 2014, 26, 136-150. | 5.5 | 8 |
| 392 | Constraint data-driven optimal terminal ILC of end product quality for a class of I/O constrained batch processes. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 215-222. | 1.7 | 8 |
| 393 | Limits of control performance for distributed networked control systems in presence of communication delays. <i>International Journal of Adaptive Control and Signal Processing</i> , 2018, 32, 1282-1293. | 4.1 | 8 |
| 394 | Extracting nonstationary features for process data analytics and application in fouling detection. <i>Computers and Chemical Engineering</i> , 2020, 135, 106762. | 3.8 | 8 |
| 395 | A Variational Bayesian Causal Analysis Approach for Time-Varying Systems. <i>IEEE Transactions on Control Systems Technology</i> , 2021, 29, 1191-1202. | 5.2 | 8 |
| 396 | Kalman Filter-Based Convolutional Neural Network for Robust Tracking of Froth-Middling Interface in a Primary Separation Vessel in Presence of Occlusions. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-8. | 4.7 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 397 | Multirate Sensor Fusion in the Presence of Irregular Measurements and Time-Varying Time Delays Using Synchronized, Neural, Extended Kalman Filters. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9. | 4.7 | 8 |
| 398 | Model Reduction of Uncertain Systems with Multiplicative Noise Based on Balancing. SIAM Journal on Control and Optimization, 2006, 45, 1541-1560. | 2.1 | 7 |
| 399 | Performance Assessment and Model Validation of Two Industrial MPC Controllers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8387-8394. | 0.4 | 7 |
| 400 | Process Identification from Sinusoidal Test Data by Estimating Step Response. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 396-401. | 0.4 | 7 |
| 401 | Real-time cell-impedance sensing assay as an alternative to clonogenic assay in evaluating cancer radiotherapy. Analytical and Bioanalytical Chemistry, 2011, 400, 2003-2011. | 3.7 | 7 |
| 402 | Data-based modeling and prediction of cytotoxicity induced by contaminants in water resources. Computational Biology and Chemistry, 2011, 35, 69-80. | 2.3 | 7 |
| 403 | An improved algebraic geometric solution to the identification of switched ARX models with noise. , 2011, , . | | 7 |
| 404 | Expectation Maximization method for multivariate change point detection in presence of unknown and changing covariance. Computers and Chemical Engineering, 2014, 69, 128-146. | 3.8 | 7 |
| 405 | An Iterative Algebraic Geometric Approach for Identification of Switched ARX Models with Noise. Asian Journal of Control, 2016, 18, 1655-1667. | 3.0 | 7 |
| 406 | On initialization of the Kalman filter. , 2017, , . | | 7 |
| 407 | Robust Identification of Switching Markov ARX Models Using EM Algorithm * *This work is supported in part by NSERC and AITF.. IFAC-PapersOnLine, 2017, 50, 9772-9777. | 0.9 | 7 |
| 408 | An Eâ€œHOIM Based Dataâ€œDriven Adaptive TILC of Nonlinear Discreteâ€œTime Systems for Nonâ€œRepetitive Terminal Point Tracking. Asian Journal of Control, 2018, 20, 1135-1144. | 3.0 | 7 |
| 409 | Feature Extraction of Constrained Dynamic Latent Variables. IEEE Transactions on Industrial Informatics, 2019, 15, 5637-5645. | 11.3 | 7 |
| 410 | Data-driven nonlinear ILC with varying trial lengths. Journal of the Franklin Institute, 2020, 357, 10262-10287. | 3.4 | 7 |
| 411 | Dual Neural Extended Kalman Filtering Approach for Multirate Sensor Data Fusion. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9. | 4.7 | 7 |
| 412 | Event-triggered learning consensus of networked heterogeneous nonlinear agents with switching topologies. Journal of the Franklin Institute, 2021, 358, 3803-3821. | 3.4 | 7 |
| 413 | Data-Driven Adaptive Iterative Learning Bipartite Consensus for Heterogeneous Nonlinear Cooperationâ€œAntagonism Networks. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 8262-8270. | 11.3 | 7 |
| 414 | Identification of the Time Delay/Interactor Matrix for MIMO Systems Using Closed-Loop Data. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1996, 29, 6149-6154. | 0.4 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 415 | Nonlinear state space modeling and simulation of a SOFC fuel cell. , 2006, , . | | 6 |
| 416 | Estimation of Instrument Variance and Bias Using Bayesian Methods. Industrial & Engineering Chemistry Research, 2011, 50, 6229-6239. | 3.7 | 6 |
| 417 | Multi-model approach to nonlinear system identification with unknown time delay. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9388-9393. | 0.4 | 6 |
| 418 | Identification of Linear Parameter Varying Systems with Missing Output Data Using Generalized Expectation-Maximization Algorithm. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9364-9369. | 0.4 | 6 |
| 419 | A Bayesian sparse reconstruction method for fault detection and isolation. Journal of Chemometrics, 2015, 29, 349-360. | 1.3 | 6 |
| 420 | Robust Fault Detection and Diagnosis for Multiple-Model Systems with Uncertainties ~... ~...This work is supported in part by NSERC, AITF and China Scholarship Council Scholarship.. IFAC-PapersOnLine, 2015, 48, 137-142. | 0.9 | 6 |
| 421 | Interaction Analysis of Multivariate Control Systems Under Bayesian Framework. IEEE Transactions on Control Systems Technology, 2017, 25, 1644-1655. | 5.2 | 6 |
| 422 | Robust soft sensor development using multi-rate measurements * *This work was supported by Natural Sciences and Engineering Research Council (NSERC) of Canada.. IFAC-PapersOnLine, 2017, 50, 10190-10195. | 0.9 | 6 |
| 423 | MV bound and MV controller for convex~non~linear systems with input constraints. IET Control Theory and Applications, 2018, 12, 761-769. | 2.1 | 6 |
| 424 | A switching strategy for adaptive state estimation. Signal Processing, 2018, 143, 371-380. | 3.7 | 6 |
| 425 | Reservoir history matching using constrained ensemble Kalman filtering. Canadian Journal of Chemical Engineering, 2018, 96, 145-159. | 1.7 | 6 |
| 426 | Dynamic prediction of interface level using spatial temporal markov random field. Computers and Chemical Engineering, 2019, 128, 301-311. | 3.8 | 6 |
| 427 | Multivariate Gaussian process regression for nonlinear modelling with colored noise. Transactions of the Institute of Measurement and Control, 2019, 41, 2268-2279. | 1.7 | 6 |
| 428 | Probabilistic just-in-time approach for nonlinear modeling with Bayesian nonlinear feature extraction. Chemometrics and Intelligent Laboratory Systems, 2020, 196, 103895. | 3.5 | 6 |
| 429 | Data analytics approach for online produced fluid flow rate estimation in SAGD process. Computers and Chemical Engineering, 2020, 136, 106766. | 3.8 | 6 |
| 430 | Offline and Online Parameter Learning for Switching Multirate Processes With Varying Delays and Integrated Measurements. IEEE Transactions on Industrial Electronics, 2022, 69, 7213-7222. | 7.9 | 6 |
| 431 | Parameter estimation of Markov~switching Hammerstein systems using the variational Bayesian approach. IET Control Theory and Applications, 2019, 13, 1646-1655. | 2.1 | 6 |
| 432 | Robust probabilistic principal component regression with switching mixture Gaussian noise for soft sensing. Chemometrics and Intelligent Laboratory Systems, 2022, 222, 104491. | 3.5 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 433 | Data-driven iterative learning control using a uniform quantizer with an encoding-decoding mechanism. International Journal of Robust and Nonlinear Control, 2022, 32, 4336-4354. | 3.7 | 6 |
| 434 | Model predictive control using an extended ARMarkov model. Journal of Process Control, 2002, 12, 123-129. | 3.3 | 5 |
| 435 | Closed-loop identification with a quantizer. Journal of Process Control, 2005, 15, 729-740. | 3.3 | 5 |
| 436 | Determining the harmonic impacts of multiple harmonic-producing loads. , 2011, , . | | 5 |
| 437 | Bayesian identification of non-linear state-space models: Part II- Error analysis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 631-636. | 0.4 | 5 |
| 438 | Development of Toxicity Index to Evaluate the Level of Water Contamination by Using Cellular Responses. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 309-314. | 0.4 | 5 |
| 439 | A variational Bayesian approach to identification of switched ARX models. , 2014, , . | | 5 |
| 440 | State Estimation in Batch Process Based on Two-Dimensional State-Space Model. Industrial & Engineering Chemistry Research, 2014, 53, 19573-19582. | 3.7 | 5 |
| 441 | Ethylene/1-hexene copolymerization with supported Ziegler-Natta catalysts prepared by immobilizing TiCl ₃ (OAr) onto MgCl ₂ . Journal of Applied Polymer Science, 2015, 132, . | 2.6 | 5 |
| 442 | Analysis of inter-/intra-E-plate repeatability in the real-time cell analyzer. Analytical Biochemistry, 2015, 477, 98-104. | 2.4 | 5 |
| 443 | Dynamic Modeling of Gross Errors via Probabilistic Slow Feature Analysis Applied to a Mining Slurry Preparation Process**This work was supported by National Natural Science Foundation of China (21276137), National Science Engineering Research Council of Canada (NSERC) and AITF. The first author is also supported by China Scholarship Council (CSC).. IFAC-PapersOnLine, 2016, 49, 25-30. | 0.9 | 5 |
| 444 | Control Performance Monitoring with Temporal Features and Dissimilarity Analysis for Nonstationary Dynamic Processes. IFAC-PapersOnLine, 2018, 51, 357-362. | 0.9 | 5 |
| 445 | Mitigating peak pressure of storm geysering by orifice plates installed at the top of vent pipes. Water Science and Technology, 2018, 78, 1587-1596. | 2.5 | 5 |
| 446 | Data rectification for multiple operating modes: A MAP framework. Computers and Chemical Engineering, 2019, 123, 272-285. | 3.8 | 5 |
| 447 | State Estimation for Multirate Measurements in the Presence of Integral Term and Variable Delay. IEEE Transactions on Control Systems Technology, 2021, 29, 2416-2426. | 5.2 | 5 |
| 448 | Reinforcement Learning With Constrained Uncertain Reward Function Through Particle Filtering. IEEE Transactions on Industrial Electronics, 2022, 69, 7491-7499. | 7.9 | 5 |
| 449 | Sparse Inverse Covariance Estimation for Causal Inference in Process Data Analytics. IEEE Transactions on Control Systems Technology, 2022, 30, 1268-1280. | 5.2 | 5 |
| 450 | Stiction Estimation Using Constrained Optimisation and Contour Map. Advances in Industrial Control, 2010, , 229-266. | 0.5 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 451 | A Blind Approach to Identification of Hammerstein Systems. Lecture Notes in Control and Information Sciences, 2010, , 293-312. | 1.0 | 5 |
| 452 | Deep Bayesian Slow Feature Extraction With Application to Industrial Inferential Modeling. IEEE Transactions on Industrial Informatics, 2023, 19, 40-51. | 11.3 | 5 |
| 453 | Incremental Variational Bayesian Gaussian Mixture Model With Decremental Optimization for Distribution Accommodation and Fine-Scale Adaptive Process Monitoring. IEEE Transactions on Cybernetics, 2023, 53, 5094-5107. | 9.5 | 5 |
| 454 | Performance assessment: a requisite for maintaining your APC assets. , 0, , . | | 4 |
| 455 | Controller Performance Assessment in Set Point Tracking and Regulatory Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 183-188. | 0.4 | 4 |
| 456 | Gap metric on the subgraphs of systems and the robustness problem. IEEE Transactions on Automatic Control, 2000, 45, 1522-1526. | 5.7 | 4 |
| 457 | Constrained approximation of multiple inputâ€“output delay systems using genetic algorithm. ISA Transactions, 2007, 46, 211-221. | 5.7 | 4 |
| 458 | Implementation of FIR control for H_∞ output feedback stabilisation of linear systems. International Journal of Control, 2009, 82, 2335-2346. | 1.9 | 4 |
| 459 | MPC Constraint Analysisâ€™ Bayesian Approach via a Continuous-Valued Profit Function. Industrial & Engineering Chemistry Research, 2009, 48, 3944-3954. | 3.7 | 4 |
| 460 | High-throughput quantitative analysis with cell growth kinetic curves for low copy number mutant cells. Analytical and Bioanalytical Chemistry, 2012, 404, 2033-2041. | 3.7 | 4 |
| 461 | Bayesian identification of non-linear state-space models: Part I- Input design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 774-779. | 0.4 | 4 |
| 462 | Inequality constrained parameter estimation using filtering approaches. Chemical Engineering Science, 2014, 106, 211-221. | 3.8 | 4 |
| 463 | Distributed Adaptive High-Gain Extended Kalman Filtering for Nonlinear systems. IFAC-PapersOnLine, 2015, 48, 158-163. | 0.9 | 4 |
| 464 | Froth Pipeline Water Content Estimation and Control. IFAC-PapersOnLine, 2015, 48, 63-68. | 0.9 | 4 |
| 465 | Identification of linear dynamic errors-in-variables systems with a dynamic uncertain input using the EM algorithm. , 2016, , . | | 4 |
| 466 | Mixture Probabilistic PCA for Process Monitoring - Collapsed Variational Bayesian Approach. IFAC-PapersOnLine, 2016, 49, 1032-1037. | 0.9 | 4 |
| 467 | Robust online algorithm for adaptive linear regression parameter estimation and prediction. Journal of Chemometrics, 2016, 30, 308-323. | 1.3 | 4 |
| 468 | Parameter-based conditions for closed-loop system identifiability of ARX models with routine operating data. Journal of the Franklin Institute, 2017, 354, 722-751. | 3.4 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 469 | Constrained Extended Kalman Filter based on Kullback-Leibler (KL) Divergence*. , 2018, , . | | 4 |
| 470 | Probabilistic PCR based near-infrared modeling with temperature compensation. ISA Transactions, 2018, 81, 46-51. | 5.7 | 4 |
| 471 | Generalization and comparative studies of similarity measures for Just-in-Time modeling. IFAC-PapersOnLine, 2019, 52, 760-765. | 0.9 | 4 |
| 472 | Steam allocation and production optimization in SAGD reservoir under steam-to-oil ratio uncertainty. Journal of Petroleum Science and Engineering, 2019, 183, 106456. | 4.2 | 4 |
| 473 | Chance-Constrained Model Predictive Control for SAGD Process Using Robust Optimization Approximation. Industrial & Engineering Chemistry Research, 2019, 58, 11407-11418. | 3.7 | 4 |
| 474 | Conjugate exponential family graphical models in process monitoring: A tutorial review. Chemometrics and Intelligent Laboratory Systems, 2020, 204, 104095. | 3.5 | 4 |
| 475 | Distributed data-driven observer for linear time invariant systems. International Journal of Adaptive Control and Signal Processing, 2020, 34, 503-519. | 4.1 | 4 |
| 476 | Consensus-based approach for parameter and state estimation of agro-hydrological systems. AIChE Journal, 2021, 67, e17096. | 3.6 | 4 |
| 477 | Quantisation compensated data-driven iterative learning control for nonlinear systems. International Journal of Systems Science, 2022, 53, 275-290. | 5.5 | 4 |
| 478 | Double Dynamic Linearization-Based Higher Order Indirect Adaptive Iterative Learning Control. IEEE Transactions on Cybernetics, 2023, 53, 3506-3517. | 9.5 | 4 |
| 479 | Variational Bayesian Inference for Robust Identification of PWARX Systems With Time-Varying Time-Delays. IEEE Transactions on Cybernetics, 2023, 53, 3613-3623. | 9.5 | 4 |
| 480 | No-Delay Multimodal Process Monitoring Using Kullback-Leibler Divergence-Based Statistics in Probabilistic Mixture Models. IEEE Transactions on Automation Science and Engineering, 2023, 20, 167-178. | 5.2 | 4 |
| 481 | Community detection based process decomposition and distributed monitoring for large-scale processes. AIChE Journal, 2022, 68, . | 3.6 | 4 |
| 482 | Detection of abrupt change and applications in sensor decalibration monitoring. ISA Transactions, 2002, 41, 155-166. | 5.7 | 3 |
| 483 | Performance assessment and robustness analysis using an ARMarkov approach. Journal of Process Control, 2004, 14, 915-925. | 3.3 | 3 |
| 484 | Multivariate Controller Performance Assessment without Interactor Matrix - A Subspace Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 535-540. | 0.4 | 3 |
| 485 | Fixed-order controller design for linear time-invariant descriptor systems: A BMI approach. International Journal of Systems Science, 2005, 36, 13-18. | 5.5 | 3 |
| 486 | PARAMETER AND DELAY ESTIMATION OF CONTINUOUS-TIME MODELS FROM IRREGULARLY SAMPLED OUTPUT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 85-90. | 0.4 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 487 | Extended Prediction Error Approach for MPC Performance Monitoring and Industrial Applications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 14894-14899. | 0.4 | 3 |
| 488 | structured model reduction algorithms for linear discrete systems via LMI-based optimisation. International Journal of Systems Science, 2009, 40, 685-693. | 5.5 | 3 |
| 489 | Matrix-wise approach for identification of multi-mode Switched ARX models with noise. , 2012, , . | | 3 |
| 490 | Soft sensor solutions for control of oil sands processes. Canadian Journal of Chemical Engineering, 2013, 91, 1416-1426. | 1.7 | 3 |
| 491 | Parameter estimation for a dual rate system with time delay. , 2013, , . | | 3 |
| 492 | Nonlinear system identification with multiple and correlated scheduling variables. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 319-324. | 0.4 | 3 |
| 493 | Estimation of Flat-topped Gaussian distribution with application in system identification. Journal of Chemometrics, 2016, 30, 726-738. | 1.3 | 3 |
| 494 | MV benchmark estimation based on high-frequency test signal. Journal of Process Control, 2016, 47, 35-45. | 3.3 | 3 |
| 495 | A weighted Gaussian process regression for multivariate modelling. , 2017, , . | | 3 |
| 496 | An integrated first principle modeling to steam assisted gravity drainage (SAGD). Journal of Petroleum Science and Engineering, 2018, 163, 501-510. | 4.2 | 3 |
| 497 | Data analytics for oil sands subcool prediction – a comparative study of machine learning algorithms. IFAC-PapersOnLine, 2018, 51, 886-891. | 0.9 | 3 |
| 498 | Iterative dynamic linearization and identification of a nonlinear learning controller: A data-driven approach. Journal of the Franklin Institute, 2019, 356, 7009-7027. | 3.4 | 3 |
| 499 | Distributed multiple step ahead prediction considering communication delays. IET Control Theory and Applications, 2019, 13, 806-814. | 2.1 | 3 |
| 500 | Detecting the Direction of Information Flow in Instantaneous Relations Between Variables. IEEE Transactions on Control Systems Technology, 2020, 28, 542-549. | 5.2 | 3 |
| 501 | Multiple step ahead prediction based high order discrete-time sliding mode control design with actuator and communication delays. Journal of the Franklin Institute, 2020, 357, 7845-7863. | 3.4 | 3 |
| 502 | Parameter estimation for nonlinear systems with multirate measurements and random delays. AIChE Journal, 2021, 67, e17327. | 3.6 | 3 |
| 503 | Dynamic Modeling, Prediction and Analysis of Cytotoxicity on Microelectronic Sensors. Lecture Notes in Computer Science, 2005, , 265-274. | 1.3 | 3 |
| 504 | Effects of Estrogen Contamination on Human Cells: Modeling and Prediction Based on Michaelis-Menten Kinetics. Journal of Water Resource and Protection, 2009, 01, 336-344. | 0.8 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 505 | Process Parameter and Delay Estimation from Non-uniformly Sampled Data. <i>Advances in Industrial Control</i> , 2008, , 313-337. | 0.5 | 3 |
| 506 | Real-time Performance Monitoring of Electrical Submersible Pumps in SAGD Process. <i>IFAC-PapersOnLine</i> , 2021, 54, 139-144. | 0.9 | 3 |
| 507 | Practical Linear Regression-Based Method for Detection and Quantification of Stiction in Control Valves. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 502-514. | 3.7 | 3 |
| 508 | Identification of errors-in-variables ARX model with time varying time delay. <i>Journal of Process Control</i> , 2022, 115, 134-144. | 3.3 | 3 |
| 509 | A case study on performance analysis and trouble shooting of an industrial model predictive control system. , 1999, , . | | 2 |
| 510 | Covariance constrained LQ control and applications. , 0, , . | | 2 |
| 511 | Robust digital model predictive control for linear uncertain systems with saturations. , 0, , . | | 2 |
| 512 | Minimum variance in fast, slow and dual-rate control loops. <i>International Journal of Adaptive Control and Signal Processing</i> , 2005, 19, 575-600. | 4.1 | 2 |
| 513 | FIR modelling for errors-in-variables/closed-loop systems by exploiting cyclo-stationarity. <i>International Journal of Adaptive Control and Signal Processing</i> , 2007, 21, 603-622. | 4.1 | 2 |
| 514 | Controller Performance Analysis Technology for Industry: Implementation and Case Studies. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008, 41, 14912-14919. | 0.4 | 2 |
| 515 | Identification from Step Response in the Presence of Deterministic Disturbance. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009, 42, 886-891. | 0.4 | 2 |
| 516 | Conditions for Identifiability Using Routine Operating Data for a First-Order ARX Process Regulated by a Lead-Lag Controller. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010, 43, 373-378. | 0.4 | 2 |
| 517 | Reconciling continuum and non-continuum data with industrial application. <i>Computers and Chemical Engineering</i> , 2011, 35, 519-529. | 3.8 | 2 |
| 518 | Bayesian method for identification of constrained nonlinear processes with missing output data. , 2011, , . | | 2 |
| 519 | On-line estimation of glucose and biomass concentration in batch fermentation process using particle filter with constraint. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2012, 7, 678-686. | 1.5 | 2 |
| 520 | Microelectronic-sensing assay to detect presence of Verotoxins in human faecal samples. <i>Journal of Applied Microbiology</i> , 2012, 113, 429-437. | 3.1 | 2 |
| 521 | Model Predictive Control: Algorithmic Development and Applications. <i>International Journal of Control</i> , 2013, 86, 1323-1323. | 1.9 | 2 |
| 522 | A moving horizon approach to a noncontinuum state estimation. <i>International Journal of Control</i> , 2013, 86, 1098-1106. | 1.9 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 523 | Expectation maximization approach to gross error and change point detection. , 2013, , . | | 2 |
| 524 | Ellipsoidal set based robust particle filtering for recursive Bayesian state estimation. , 2013, , . | | 2 |
| 525 | Parameter Estimation for Batch Processes with Measurements of Large Sampling Intervals**This work is supported by Chang Jiang Scholar Program and National Natural Science Foundation of China (NSFC) Tj ETQq1 109784314rgBT /O | | |
| 526 | Predicting Electricity Pool Prices Using Hidden Markov Models—This work is supported in part by NSERC and AITF.. IFAC-PapersOnLine, 2015, 48, 343-348. | 0.9 | 2 |
| 527 | A weighted heteroscedastic Gaussian process modeling via particle swarm optimization. , 2016, , . | | 2 |
| 528 | User characteristics based information diffusion model for analysis of hot social events. , 2016, , . | | 2 |
| 529 | A Variational Bayesian Approach to Modelling with Random Time-varying Time Delays. , 2018, , . | | 2 |
| 530 | Dissipativity Analysis for Linear Systems in the Behavioural Framework. , 2019, , . | | 2 |
| 531 | Hybrid kernel approach to Gaussian process modeling with colored noises. Computers and Chemical Engineering, 2020, 143, 107067. | 3.8 | 2 |
| 532 | Performance assessment of distributed LQG control subject to communication delays. International Journal of Control, 2020, , 1-12. | 1.9 | 2 |
| 533 | Integrated well pad development scheduling with steam injection control in steam-assisted gravity drainage. Journal of Process Control, 2020, 89, 45-57. | 3.3 | 2 |
| 534 | Distributed control performance assessment and corresponding optimal controller design considering communication delays. IET Control Theory and Applications, 2020, 14, 568-576. | 2.1 | 2 |
| 535 | Forward“Backward Smoothers With Finite Impulse Response Structure. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 765-774. | 9.3 | 2 |
| 536 | Filtering and Smoothing of Hidden Monotonic Trends and Application to Fouling Detection. IFAC-PapersOnLine, 2021, 54, 427-432. | 0.9 | 2 |
| 537 | Identification of Gaussian process with switching noise mode and missing data. Journal of the Franklin Institute, 2021, 358, 4546-4570. | 3.4 | 2 |
| 538 | Bayesian network approach to process data reconciliation with state uncertainties and recycle streams. Chemical Engineering Science, 2021, 246, 116996. | 3.8 | 2 |
| 539 | Latent variable modeling and state estimation of non-stationary processes driven by monotonic trends. Journal of Process Control, 2021, 108, 40-54. | 3.3 | 2 |
| 540 | Sparsity constrained wavelet neural networks for robust soft sensor design with application to the industrial KIVCET unit. Computers and Chemical Engineering, 2022, 159, 107695. | 3.8 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 541 | A comparative study of model approximation methods applied to economic MPC. Canadian Journal of Chemical Engineering, 0, , . | 1.7 | 2 |
| 542 | Overexpression of heat shock protein 70 induces apoptosis of intestinal epithelial cells in heat-stressed pigs: A proteomics approach. Journal of Thermal Biology, 2022, 108, 103289. | 2.5 | 2 |
| 543 | Delay-dependent robust H_{∞} control of uncertain linear systems with input delay. , 1999, , . | | 1 |
| 544 | Trouble shooting and performance audit for a multivariable control system: an industrial case study. , 0, , . | | 1 |
| 545 | Industrial Applications of Process Fault Detection Approaches. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 647-652. | 0.4 | 1 |
| 546 | Minimum Variance Control and Performance Assessment of Time-Variant Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 177-182. | 0.4 | 1 |
| 547 | A data driven subspace approach to predictive controller design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 365-370. | 0.4 | 1 |
| 548 | CLOSED LOOP IDENTIFICATION BASED ON QUANTIZATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 319-324. | 0.4 | 1 |
| 549 | Improved Threshold for the Local Approach in Detecting Faults. Industrial & Engineering Chemistry Research, 2003, 42, 1870-1878. | 3.7 | 1 |
| 550 | ROBUST H_2 FILTERING FOR CONTINUOUS-TIME STOCHASTIC SYSTEMS WITH UNCERTAINTIES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 35-40. | 0.4 | 1 |
| 551 | BAYESIAN METHODS FOR CONTROL LOOP MONITORING AND DIAGNOSIS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 29-38. | 0.4 | 1 |
| 552 | Stabilization of Takagi-Sugeno model via non-parallel distributed compensation law. , 2008, , . | | 1 |
| 553 | Implementation of FIR control for H_{∞} output feedback stabilization of linear systems. , 2009, , . | | 1 |
| 554 | Assessment of control system performance with LTV disturbance dynamics: SISO case. , 2009, , . | | 1 |
| 555 | Bayesian methods for process identification with outliers. , 2012, , . | | 1 |
| 556 | EM Algorithm for Parameter Estimation in Batch Process. Computer Aided Chemical Engineering, 2012, , 935-939. | 0.5 | 1 |
| 557 | Guest Editorial: 4TH symposium on advanced control of industrial processes (ADCONIP). Canadian Journal of Chemical Engineering, 2012, 90, 1381-1382. | 1.7 | 1 |
| 558 | Real-time Performance Assessment of Inferential Sensors*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 277-282. | 0.4 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 559 | Diagnosis between sinusoidal oscillations and oscillatory colored noise. , 2014, , . | | 1 |
| 560 | Design and performance assessment of setpoint feedforward controllers to break tradeoffs in univariate control loops. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5740-5745. | 0.4 | 1 |
| 561 | Adaptive Soft Sensing and On-line Estimation of the Critical Minimum Velocity with Application to an Oil Sand Primary Separation Vessel—The authors would like to acknowledge financial support from NSERC and Syncrude Canada Ltd. IFAC-PapersOnLine, 2015, 48, 211-216. | 0.9 | 1 |
| 562 | State feedback output regulation for a class of hyperbolic PDE systems. , 2015, , . | | 1 |
| 563 | Alleviating Geysers through Standpipes in Sewer Systems. , 2017, , . | | 1 |
| 564 | Switching Conditional Random Field Approach to Process Operating Mode Diagnosis for Multi-Modal Processes. , 2018, , . | | 1 |
| 565 | Stacking Approach for Soft Sensor Design in Steam Assisted Gravity Drainage Applications. IFAC-PapersOnLine, 2018, 51, 30-35. | 0.9 | 1 |
| 566 | Identification of ARX Model with Multi-Gaussian Noises. , 2019, , . | | 1 |
| 567 | Two-stage time-varying hidden conditional random fields with variable selection for process operating mode diagnosis. Chemometrics and Intelligent Laboratory Systems, 2021, 214, 104330. | 3.5 | 1 |
| 568 | Fault diagnosis of an industrial CGO coker model predictive control system. , 0, , . | | 0 |
| 569 | Process and control loop performance monitoring through detection of abrupt parameter changes. , 0, , . | | 0 |
| 570 | The Effect of Uncertainty on Controller Performance. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 6962-6967. | 0.4 | 0 |
| 571 | Robust H ∞ observers for uncertain time-delay systems: (II) the discrete-time case. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 3432-3437. | 0.4 | 0 |
| 572 | Process identification based on last principal component analysis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 3980-3985. | 0.4 | 0 |
| 573 | Predictive Control Using an Extended Armakov Model. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 317-322. | 0.4 | 0 |
| 574 | PERFORMANCE EVALUATION OF AN INDUSTRIAL MPC CONTROLLER. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 411-416. | 0.4 | 0 |
| 575 | Practical Solutions to Multivariate Feedback Control Performance Assessment. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 335-340. | 0.4 | 0 |
| 576 | VARIABILITY METHOD FOR CYCLO-PERIOD ESTIMATION OF CYCLOSTATIONARY SIGNALS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 172-177. | 0.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 577 | Closed-loop model validation based on the two-model divergence method. , 2007, , . | | 0 |
| 578 | Control relevant onâ€line model validation criterion based on robust stability conditions. Canadian Journal of Chemical Engineering, 2008, 86, 893-904. | 1.7 | 0 |
| 579 | Data-driven Bayesian approach for control loop diagnosis. , 2008, , . | | 0 |
| 580 | LQG benchmarking for economic control performance. , 2008, , . | | 0 |
| 581 | A control performance benchmark subject to output variance/covariance upper bound and pole placement constraint. , 2009, , . | | 0 |
| 582 | Effects of Estrogen Contamination on Human Cells: Modeling and Prediction Based on Michaelis-Menten Kinetics. , 2009, , . | | 0 |
| 583 | Guest editorial-fuel cells. Asia-Pacific Journal of Chemical Engineering, 2009, 4, 1-2. | 1.5 | 0 |
| 584 | Data-driven Control Loop Diagnosis: Dealing with Temporal Dependency in Bayesian Methods* *This work is supported by the Natural Sciences and Engineering Research Council of Canada (NSERC) and the Alberta Ingenuity Fund.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 315-320. | 0.4 | 0 |
| 585 | Multi-step Prediction Error Approach for MPC Performance Monitoring* *This work is supported in part by the the National Creative Research Groups Science Foundation of China (NCRGSFC: 60421002) and National Basic Research Program of China (973 Program 2007CB714000) and by the 111 Program (B07031) for visiting professorship.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 162-167. | 0.4 | 0 |
| 586 | Solid Oxide Fuel Cell: Perspective of Dynamic Modeling and Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 133-146. | 0.4 | 0 |
| 587 | Electronic dynamic cellular sensor used to measure gold nanoparticles enhanced radiotherapy. , 2011, , . | | 0 |
| 588 | 4th Symposium on advanced control of industrial processes (Adconip). Asia-Pacific Journal of Chemical Engineering, 2012, 7, 633-634. | 1.5 | 0 |
| 589 | 4th Symposium on Advanced Control of Industrial Processes (ADCONIP). Control Engineering Practice, 2012, 20, 931-932. | 5.5 | 0 |
| 590 | Optimal State Estimation for Linear Systems with State Constraints. IFAC-PapersOnLine, 2015, 48, 153-157. | 0.9 | 0 |
| 591 | Multiple Model LPV Approach to Identification of Nonlinear Dual-rate System with Random Time Delay**This work was supported by the Natural Sciences and Engineering Research Council (NSERC) of Canada, the Fundamental Research Funds for the Central Universities, Shanghai Pujiang Program (15PJ1400100), the Key Project of the National Nature Science Foundation of China (No. 61134009), the National Nature Science Foundation of China (No. 61473078), Specialized Research Fund for Shanghai Leading Talents, Project. IFAC-PapersOnLine, 2015, 48, 1220-1225. | 0.9 | 0 |
| 592 | Constrained optimal boundary state estimation for dissipative systems. , 2015, , . | | 0 |
| 593 | Explicit/multi-parametric model predictive control of dissipative distributed parameter systems. , 2015, , . | | 0 |
| 594 | Detecting and isolating abrupt changes in linear switching systems. International Journal of Control, 2015, 88, 801-814. | 1.9 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 595 | Predicting GHS toxicity using RTCA and discrete-time Fourier transform. Journal of Bioinformatics and Computational Biology, 2016, 14, 1650004. | 0.8 | 0 |
| 596 | Identification of nonlinear errors-in-variables systems in state-space form: A linear parameter varying approach. , 2017, , . | | 0 |
| 597 | Simultaneous estimation of sub-model number and parameters for mixture probability principal component regression. , 2017, , . | | 0 |
| 598 | MV Benchmark for Networked Control Systems with Random Communication Delays. IFAC-PapersOnLine, 2019, 52, 970-975. | 0.9 | 0 |
| 599 | Dissipativity Analysis for Linear Systems in the Behavioural Framework. , 2019, , . | | 0 |
| 600 | Oil sands extraction plant debottlenecking: an optimization approach. Optimization Letters, 2020, 14, 945-957. | 1.6 | 0 |
| 601 | Robust algorithm for attack detection based on time-varying hidden Markov model subject to outliers. International Journal of Adaptive Control and Signal Processing, 2020, 34, 1537-1558. | 4.1 | 0 |
| 602 | Guest Editorial: Special Section on Smart Process Manufacturing Driven by Artificial Intelligence. IEEE Transactions on Industrial Informatics, 2020, 16, 2765-2766. | 11.3 | 0 |
| 603 | Just-in-time learning for the prediction of oil sands ore characteristics using GPS data in mining applications. Canadian Journal of Chemical Engineering, 2020, 98, 2125-2136. | 1.7 | 0 |
| 604 | Sensor Fusion and Computer Vision Integrated System for Primary Separation Vessel Interface Level Estimation. IFAC-PapersOnLine, 2021, 54, 170-175. | 0.9 | 0 |
| 605 | Data-driven multi-model minimum variance controller design based on support vectors. Journal of Process Control, 2021, 104, 28-39. | 3.3 | 0 |
| 606 | Conclusions and Future Research Challenges. Advances in Industrial Control, 2010, , 359-366. | 0.5 | 0 |
| 607 | Dynamic Bayesian Methods for On-Line Instrument Bias Detection and Compensation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13151-13156. | 0.4 | 0 |
| 608 | Gap Metric Based Performance Assessment of Subcool Control in Steam Assisted Gravity Drainage Wells. IFAC-PapersOnLine, 2020, 53, 12002-12007. | 0.9 | 0 |
| 609 | Adaptive inference for Bayesian network soft-sensor in the presence of process and sensor drift. Canadian Journal of Chemical Engineering, 2022, 100, 2119-2134. | 1.7 | 0 |