Aditya Tulsyan

List of Publications by Year
in descending order

33 papers	739 citations	567281 15 h-index	526287 27 g-index
33 all docs	33 docs citations	33 times ranked	545 citing authors

#	Article	IF	Citations
1	State-of-charge estimation in lithium-ion batteries: A particle filter approach. Journal of Power Sources, 2016, 331, 208-223.	7.8	96
2	Toward selfâ€driving processes: A deep reinforcement learning approach to control. AICHE Journal, 2019, 65, e16689.	3.6	90
3	Multiple model approach to nonlinear system identification with an uncertain scheduling variable using EM algorithm. Journal of Process Control, 2013, 23, 1480-1496.	3.3	60
4	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
5	Advances in industrial biopharmaceutical batch process monitoring: Machineâ€learning methods for small data problems. Biotechnology and Bioengineering, 2018, 115, 1915-1924.	3.3	44
6	A machineâ€learning approach to calibrate generic Raman models for realâ€time monitoring of cell culture processes. Biotechnology and Bioengineering, 2019, 116, 2575-2586.	3.3	43
7	A Deep Learning Architecture for Predictive Control. IFAC-PapersOnLine, 2018, 51, 512-517.	0.9	39
8	Particle filtering without tears: A primer for beginners. Computers and Chemical Engineering, 2016, 95, 130-145.	3.8	32
9	Automatic realâ€time calibration, assessment, and maintenance of generic Raman models for online monitoring of cell culture processes. Biotechnology and Bioengineering, 2020, 117, 406-416.	3.3	32
10	Industrial batch process monitoring with limited data. Journal of Process Control, 2019, 77, 114-133.	3.3	31
11	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
12	Performance assessment, diagnosis, and optimal selection of non-linear state filters. Journal of Process Control, 2014, 24, 460-478.	3.3	22
13	Design and assessment of delay timer alarm systems for nonlinear chemical processes. AICHE Journal, 2018, 64, 77-90.	3.6	22
14	Modern Machine Learning Tools for Monitoring and Control of Industrial Processes: A Survey. IFAC-PapersOnLine, 2020, 53, 218-229.	0.9	19
15	Univariate Model-Based Deadband Alarm Design for Nonlinear Processes. Industrial & Engineering Chemistry Research, 2019, 58, 11295-11302.	3.7	16
16	Reachability-based fault detection method for uncertain chemical flow reactors. IFAC-PapersOnLine, 2016, 49, 1-6.	0.9	13
17	Machine-learning for biopharmaceutical batch process monitoring with limited data. IFAC-PapersOnLine, 2018, 51, 126-131.	0.9	12
18	Spectroscopic models for realâ€time monitoring of cell culture processes using spatiotemporal justâ€inâ€time Gaussian processes. AICHE Journal, 2021, 67, e17210.	3.6	12

#	Article	IF	Citations
19	Designing priors for robust Bayesian optimal experimental design. Journal of Process Control, 2012, 22, 450-462.	3.3	11
20	Product Attribute Forecast: Adaptive Model Selection Using Real-Time Machine Learning. IFAC-PapersOnLine, 2018, 51, 121-125.	0.9	11
21	Estimation and identification in batch processes with particle filters. Journal of Process Control, 2019, 81, 1-14.	3.3	10
22	Assessment of type II diabetes mellitus using irregularly sampled measurements with missing data. Bioprocess and Biosystems Engineering, 2015, 38, 615-629.	3.4	6
23	Interval enclosures for reachable sets of chemical kinetic flow systems. Part 2: Direct-bounding method. Chemical Engineering Science, 2017, 166, 345-357.	3.8	6
24	A switching strategy for adaptive state estimation. Signal Processing, 2018, 143, 371-380.	3.7	6
25	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
26	Interval enclosures for reachable sets of chemical kinetic flow systems. Part 1: Sparse transformation. Chemical Engineering Science, 2017, 166, 334-344.	3.8	5
27	Interval enclosures for reachable sets of chemical kinetic flow systems. Part 3: Indirect-bounding method. Chemical Engineering Science, 2017, 166, 358-372.	3.8	5
28	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
29	A Transfer Entropy Method to Quantify Causality in Stochastic Nonlinear Systems**The authors would appreciate the financial support from the National Natural Science Foundation of China (61433001) and Tsinghua University Initiative Scientific Research Program.. IFAC-PapersOnLine, 2016, 49, 454-459.	0.9	4
30	Robust model-based delay timer alarm for non-linear processes. , 2016, , .		4
31	Pattern and Knowledge Extraction using Process Data Analytics: A Tutorial. IFAC-PapersOnLine, 2018, 51, 13-18.	0.9	3
32	A comparative study of chromium(VI) removal using sawdust and eucalyptus bark. Water Science and Technology: Water Supply, 2009, 9, 343-347.	2.1	2
33	PERKS: Software for Parameter Estimation in Reaction Kinetic Systems. Computer Aided Chemical Engineering, 2016, 38, 25-30.	0.5	2