Lidia Auret

List of Publications by Year in descending order

24 papers	478 citations	840776 11 h-index	839539 18 g-index
24 all docs	24 docs citations	24 times ranked	583 citing authors

#	Article	IF	Citations
1	Interpretation of nonlinear relationships between process variables by use of random forests. Minerals Engineering, 2012, 35, 27-42.	4.3	129
2	Unsupervised Process Monitoring and Fault Diagnosis with Machine Learning Methods. Advances in Computer Vision and Pattern Recognition, 2013, , .	1.3	75
3	Empirical comparison of tree ensemble variable importance measures. Chemometrics and Intelligent Laboratory Systems, 2011, 105, 157-170.	3.5	67
4	Comparative analysis of Granger causality and transfer entropy to present a decision flow for the application of oscillation diagnosis. Journal of Process Control, 2019, 79, 72-84.	3.3	53
5	Change point detection in time series data with random forests. Control Engineering Practice, 2010, 18, 990-1002.	5.5	30
6	A Systematic Workflow for Oscillation Diagnosis Using Transfer Entropy. IEEE Transactions on Control Systems Technology, 2020, 28, 908-919.	5.2	25
7	Unsupervised Process Fault Detection with Random Forests. Industrial & Engineering Chemistry Research, 2010, 49, 9184-9194.	3.7	24
8	Investigating the Impact of Perturbations in Chemical Processes on Data-Based Causality Analysis. Part 1: Defining Desired Performance of Causality Analysis Techniques * *The authors gratefully acknowledge Anglo American Platinum for the financial support that made this research possible.. IFAC-PapersOnLine, 2017, 50, 3269-3274.	0.9	14
9	Data-driven fault detection with process topology for fault identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 8903-8908.	0.4	13
10	Diagnosis of Oscillations in an Industrial Mineral Process Using Transfer Entropy and Nonlinearity Index. IFAC-PapersOnLine, 2018, 51, 1409-1416.	0.9	12
11	Fault diagnosis and economic performance evaluation for a simulated base metal leaching operation. Minerals Engineering, 2018, 123, 128-143.	4.3	11
12	Application of Data-based Process Topology and Feature Extraction for Fault Diagnosis of an Industrial Platinum Group Metals Concentrator Plant. IFAC-PapersOnLine, 2015, 48, 102-107.	0.9	8
13	Experimental modelling and plant simulation of spiral concentrators: Comparing response surface methodology and extended Holland-Batt models. Minerals Engineering, 2019, 141, 105833.	4.3	4
14	Industrial PID Control Loop Data Repository and Comparison of Fault Detection Methods. Industrial & Engineering Chemistry Research, 2019, 58, 11430-11439.	3.7	3
15	A control system framework for reflective practice: Design-based research applied to process control teaching. , 2018, , .		2
16	A Hierarchical Approach to Improve the Interpretability of Causality Maps for Plant-Wide Fault Identification. Minerals (Basel, Switzerland), 2021, 11, 823.	2.0	2
17	Set-point optimization for plant-wide control of a sugarcane mill under process and market prices disturbances: Energy and economic perspectives. Journal of Process Control, 2021, 106, 173-183.	3.3	2
18	Economic Assessment of Condition-based Maintenance with Statistical Process Monitoring. IFAC-PapersOnLine, 2018, 51, 867-873.	0.9	1

#	Article	IF	Citations
19	A residential rainwater harvesting system as a control engineering challenge problem. , 2019, , .		1
20	One-Dimensional Convolutional Auto-Encoder for Predicting Furnace Blowback Events from Multivariate Time Series Process Dataâ€"A Case Study. Minerals (Basel, Switzerland), 2021, 11, 1106.	2.0	1
21	Fault Diagnosis in Steady-State Process Systems. , 2013, , 221-279.		1
22	Dynamic Process Monitoring. , 2013, , 281-339.		0
23	Tree-Based Methods. , 2013, , 183-220.		0
24	Overview of Process Fault Diagnosis. , 2013, , 17-70.		0