

Joaquim Blesa

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5089285/publications.pdf>

Version: 2024-02-01

85
papers

1,433
citations

361045

20
h-index

360668

35
g-index

88
all docs

88
docs citations

88
times ranked

971
citing authors

#	ARTICLE	IF	CITATIONS
1	FDI and FTC of wind turbines using the interval observer approach and virtual actuators/sensors. Control Engineering Practice, 2014, 24, 138-155.	3.2	111
2	Leak localization in water distribution networks using Bayesian classifiers. Journal of Process Control, 2017, 55, 1-9.	1.7	96
3	Leak localization in water distribution networks using a mixed model-based/data-driven approach. Control Engineering Practice, 2016, 55, 162-173.	3.2	81
4	Robust fault diagnosis of proton exchange membrane fuel cells using a Takagi-Sugeno interval observer approach. International Journal of Hydrogen Energy, 2016, 41, 2875-2886.	3.8	62
5	Identification for passive robust fault detection using zonotope-based set-membership approaches. International Journal of Adaptive Control and Signal Processing, 2011, 25, 788-812.	2.3	57
6	Robust fault detection based on adaptive threshold generation using interval LPV observers. International Journal of Adaptive Control and Signal Processing, 2012, 26, 258-283.	2.3	54
7	Sensor placement for leak detection and location in water distribution networks. Water Science and Technology: Water Supply, 2014, 14, 795-803.	1.0	54
8	Fault detection using interval LPV models in an open-flow canal. Control Engineering Practice, 2010, 18, 460-470.	3.2	43
9	Model reference FTC for LPV systems using virtual actuators and set-membership fault estimation. International Journal of Robust and Nonlinear Control, 2015, 25, 735-760.	2.1	43
10	Robust sensor placement for leak location: analysis and design. Journal of Hydroinformatics, 2016, 18, 136-148.	1.1	43
11	Leak Localization in Water Distribution Networks using Pressure Residuals and Classifiers. IFAC-PapersOnLine, 2015, 48, 220-225.	0.5	42
12	Robust fault detection using polytope-based set-membership consistency test. IET Control Theory and Applications, 2012, 6, 1767-1777.	1.2	38
13	Gain-Scheduled Smith Predictor PID-Based LPV Controller for Open-Flow Canal Control. IEEE Transactions on Control Systems Technology, 2014, 22, 468-477.	3.2	36
14	Fault Diagnosis of Wind Turbines using a Set-membership Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8316-8321.	0.4	32
15	Sensor placement for classifier-based leak localization in water distribution networks using hybrid feature selection. Computers and Chemical Engineering, 2018, 108, 152-162.	2.0	32
16	Leak Localization in Water Distribution Networks using Deep Learning. , 2019, , .		29
17	Robust identification and fault diagnosis based on uncertain multiple input-multiple output linear parameter varying parity equations and zonotopes. Journal of Process Control, 2012, 22, 1890-1912.	1.7	28
18	An Interval NLPV Parity Equations Approach for Fault Detection and Isolation of a Wind Farm. IEEE Transactions on Industrial Electronics, 2014, , 1-1.	5.2	26

#	ARTICLE	IF	CITATIONS
19	Set-membership parity space approach for fault detection in linear uncertain dynamic systems. <i>International Journal of Adaptive Control and Signal Processing</i> , 2016, 30, 186-205.	2.3	25
20	Linear parameter varying modeling and identification for real-time control of open-flow irrigation canals. <i>Environmental Modelling and Software</i> , 2014, 53, 87-97.	1.9	23
21	Fault detection and isolation for a wind turbine benchmark using a mixed Bayesian/Set-membership approach. <i>Annual Reviews in Control</i> , 2015, 40, 59-69.	4.4	23
22	Fault Tolerant Control of the Wind Turbine Benchmark using Virtual Sensors/Actuators. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 114-119.	0.4	20
23	Assessment of a Leak Localization Algorithm in Water Networks under Demand Uncertainty a ... a ... This work is partially supported by CICYT HARCRICS DPI2014-58104-R, CICYT ECOCIS DPI2013-48243-C2-1-R of the Spanish Ministry of Education and by the EFFINET grant FP7-ICT-2012-318556 of the European Commission, the Universitat Politècnica de Catalunya (UPC) and 2014SGR374 of the Generalitat de Catalunya. <i>IFAC-PapersOnLine</i> , 2015, 48, 226-231.	0.5	20
24	Leak Localization Method for Water-Distribution Networks Using a Data-Driven Model and Dempster-Shafer Reasoning. <i>IEEE Transactions on Control Systems Technology</i> , 2021, 29, 937-948.	3.2	20
25	Gain-scheduled Smith proportional-integral derivative controllers for linear parameter varying first-order plus time-varying delay systems. <i>IET Control Theory and Applications</i> , 2011, 5, 2142-2155.	1.2	19
26	Data-Driven Approach for Leak Localization in Water Distribution Networks Using Pressure Sensors and Spatial Interpolation. <i>Water (Switzerland)</i> , 2019, 11, 1500.	1.2	19
27	Optimal Pressure Sensor Placement in Water Distribution Networks Minimizing Leak Location Uncertainty. <i>Procedia Engineering</i> , 2015, 119, 953-962.	1.2	18
28	Modelling uncertainty for leak localization in Water Networks. <i>IFAC-PapersOnLine</i> , 2018, 51, 730-735.	0.5	18
29	Robust Economic Model Predictive Control Based on a Zonotope and Local Feedback Controller for Energy Dispatch in Smart-Grids Considering Demand Uncertainty. <i>Energies</i> , 2020, 13, 696.	1.6	16
30	Leak Detection, Isolation and Estimation in Pressurized Water Pipe Networks using LPV Models and Zonotopes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010, 43, 36-41.	0.4	15
31	Limnimeter and rain gauge FDI in sewer networks using an interval parity equations based detection approach and an enhanced isolation scheme. <i>Control Engineering Practice</i> , 2013, 21, 146-170.	3.2	13
32	Leak Localization in Water Distribution Networks Using Data-Driven and Model-Based Approaches. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2022, 148, .	1.3	13
33	Gray-Box Model of Inland Navigation Channel: Application to the Cuiry-Fontinettes Reach. <i>Journal of Intelligent Systems</i> , 2014, 23, 183-199.	1.2	12
34	Adaptive threshold generation in robust fault detection using interval models: time-domain and frequency-domain approaches. <i>International Journal of Adaptive Control and Signal Processing</i> , 2013, 27, 873-901.	2.3	11
35	Robustness Analysis of Sensor Placement for Leak Detection and Location under Uncertain Operating Conditions. <i>Procedia Engineering</i> , 2014, 89, 1553-1560.	1.2	11
36	Clustering techniques applied to sensor placement for leak detection and location in water distribution networks. , 2014, , .		11

#	ARTICLE	IF	CITATIONS
37	Set-membership identification and fault detection using a Bayesian framework. International Journal of Systems Science, 2016, 47, 1710-1724.	3.7	11
38	Economic model predictive control for energy dispatch of a smart micro-grid system. , 2017, , .		11
39	BiDrac Industry 4.0 framework: Application to an Automotive Paint Shop Process. Control Engineering Practice, 2021, 109, 104757.	3.2	11
40	Robust Data-Driven Leak Localization in Water Distribution Networks Using Pressure Measurements and Topological Information. Sensors, 2021, 21, 7551.	2.1	11
41	Inland navigation channel model: Application to the Cuinchy-Fontinettes reach. , 2013, , .		9
42	Parameter Uncertainty Modelling in Water Distribution Network Models. Procedia Engineering, 2015, 119, 583-592.	1.2	9
43	Robust fault detection using polytope-based set-membership consistency test. , 2010, , .		8
44	Robust Gain-Scheduled Smith PID Controllers for Second Order LPV Systems with Time Varying Delay. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 199-204.	0.4	8
45	First Results in Leak Localization in Water Distribution Networks using Graph-Based Clustering and Deep Learning. IFAC-PapersOnLine, 2020, 53, 16691-16696.	0.5	8
46	Clustering-Learning Approach to the Localization of Leaks in Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	8
47	Nonlinear set-membership identification and fault detection using a Bayesian framework: Application to the wind turbine benchmark. , 2013, , .		7
48	Fault Detection and Isolation of inland navigation channel: Application to the Cuinchy-Fontinettes reach. , 2013, , .		7
49	Optimal Pressure Sensor Placement for Leak Localisation Using a Relaxed Isolation Index: Application to the Barcelona Water Network â...â. This work has been partially funded by the Spanish Ministry of Science and Technology through the Project ECOCIS (Ref. DPI2013-48243-C2-1-R) and Project HARCRCIS (Ref. DPI2014-58104-R), and by EFFINET grant FP7-ICT-2012-318556 of the European Commission.. IFAC PapersOnLine, 2015, 48, 1108-1113.	0.5	6
50	Non-linear set-membership identification approach based on the Bayesian framework. IET Control Theory and Applications, 2015, 9, 1392-1398.	1.2	6
51	Robust Optimization based Energy Dispatch in Smart Grids Considering Simultaneously Multiple Uncertainties: Load Demands and Energy Prices. IFAC-PapersOnLine, 2017, 50, 6755-6760.	0.5	6
52	Robust Periodic Economic Predictive Control based on Interval Arithmetic for Water Distribution Networks. IFAC-PapersOnLine, 2017, 50, 5202-5207.	0.5	6
53	Robust fault detection and isolation of wind turbines using interval observers. , 2013, , .		5
54	Adaptive and predictive control architecture of inland navigation networks in a global change context: application to the Cuinchy-Fontinettes reach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 2201-2206.	0.4	5

#	ARTICLE	IF	CITATIONS
55	Enhancing Inland Navigation by Model Predictive Control of Water Levels: The Cuiuchy-Fontinettes Case. Operations Research/ Computer Science Interfaces Series, 2015, , 211-234.	0.3	5
56	Leak localization in water distribution networks using model-based Bayesian reasoning. , 2016, , .		5
57	Sliding window assessment for sensor fault model-based diagnosis in inland waterways. IFAC-PapersOnLine, 2018, 51, 31-36.	0.5	5
58	Modeling and fault diagnosis of flat inland navigation canals. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2018, 232, 761-771.	0.7	5
59	Robust fault detection using interval LPV models. , 2007, , .		4
60	Leak Localization in Water Distribution Networks Using a Kriging Data-Based Approach. , 2018, , .		4
61	Incremental upgrading sensor placement methodology: Application to the leak localization in water networks. Computers and Chemical Engineering, 2022, 158, 107642.	2.0	4
62	Set-membership parity space hybrid system diagnosis. International Journal of Systems Science, 2015, 46, 790-807.	3.7	3
63	Uncertainty effect on leak localisation in a DMA. , 2016, , .		3
64	Advanced monitoring of an industrial process integrating several sources of information through a data warehouse. , 2017, , .		3
65	Decentralized Fault-Tolerant Control of Inland Navigation Networks: a Challenge. Journal of Physics: Conference Series, 2017, 783, 012018.	0.3	3
66	Robust optimization based energy dispatch in smart grids considering demand uncertainty. Journal of Physics: Conference Series, 2017, 783, 012033.	0.3	3
67	Sensor fault diagnosis in inland navigation networks based on a grey-box model. IFAC-PapersOnLine, 2018, 51, 742-747.	0.5	3
68	Estimation of Node Pressures in Water Distribution Networks by Gaussian Process Regression. , 2019, , .		3
69	Optimal energy dispatch in a smart micro-grid system using economic model predictive control. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2020, 234, 96-106.	0.7	3
70	LPV modelling and identification of an open-flow canal for control. , 2012, , .		2
71	Set-membership identification and fault detection using a bayesian framework. , 2013, , .		2
72	Teaching Model-based Fault Detection and Isolation using Project-based Learning on a Three-tank System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9026-9031.	0.4	2

#	ARTICLE	IF	CITATIONS
73	Optimal sensor placement for classifier-based leak localization in drinking water networks. , 2016, , .		2
74	On Teaching Model-Based Fault Diagnosis in Engineering Curricula [Lecture Notes]. IEEE Control Systems, 2016, 36, 53-62.	1.0	2
75	A methodology for distributed fault diagnosis. Journal of Physics: Conference Series, 2017, 783, 012005.	0.3	2
76	A Fully Data-Driven Approach for Leak Localization in Water Distribution Networks. , 2021, , .		2
77	Identification and fault diagnosis for LPV uncertain systems. , 2011, , .		1
78	Set-membership Parity Space Approach for Fault Detection in Linear Uncertain Dynamic Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1287-1292.	0.4	1
79	Fault detection and isolation in flat navigation canals. , 2017, , .		1
80	Set-membership identification: Bayesian approach vs subpavings approach. , 2013, , .		0
81	Nonlinear set-membership identification using a Bayesian approach. , 2014, , .		0
82	Sensor placement for leak monitoring in drinking water networks combining clustering techniques and a semi-exhaustive search. , 2016, , .		0
83	Pumps condition assessment in water distribution networks. IFAC-PapersOnLine, 2018, 51, 662-667.	0.5	0
84	Sensor Placement for Monitoring. Advances in Industrial Control, 2017, , 153-173.	0.4	0
85	Leak Monitoring. Advances in Industrial Control, 2017, , 115-130.	0.4	0