JosÃ© Ragot

List of Publications by Year
in descending order

160 papers	2,695 citations	218677 26 h-index	254184 43 g-index
165 all docs	165 docs citations	165 times ranked	1293 citing authors

#	Article	IF	Citations
1	Design of observers for Takagi–Sugeno descriptor systems with unknown inputs and application to fault diagnosis. IET Control Theory and Applications, 2007, 1, 1487-1495.	2.1	172
2	State estimation of Takagi–Sugeno systems with unmeasurable premise variables. IET Control Theory and Applications, 2010, 4, 897-908.	2.1	140
3	An improved PCA scheme for sensor FDI: Application to an air quality monitoring network. Journal of Process Control, 2006, 16, 625-634.	3.3	130
4	State and unknown input estimation for discrete time multiple model. Journal of the Franklin Institute, 2009, 346, 593-610.	3.4	76
5	Three-stage Kalman filter for state and fault estimation of linear stochastic systems with unknown inputs. Journal of the Franklin Institute, 2012, 349, 2369-2388.	3.4	72
6	Non-linear dynamic system identification: A multi-model approach. International Journal of Control, 1999, 72, 591-604.	1.9	69
7	Fault Detection and Isolation with Robust Principal Component Analysis. International Journal of Applied Mathematics and Computer Science, 2008, 18, 429-442.	1.5	69
8	Observers design for uncertain Takagi–Sugeno systems with unmeasurable premise variables and unknown inputs. Application to a wastewater treatment plant. Journal of Process Control, 2011, 21, 1105-1114.	3.3	68
9	Parameter-dependent state observer design for affine LPV systems. International Journal of Control, 2001, 74, 1601-1611.	1.9	65
10	Observers-Based Synchronization and Input Recovery for a Class of Nonlinear Chaotic Models. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2006, 53, 1977-1988.	0.1	62
11	Simultaneous state and unknown inputs estimation with PI and PMI observers for Takagi Sugeno model with unmeasurable premise variables. , 2009, , .		58
12	Fault detection, isolation and estimation for Takagi–Sugeno nonlinear systems. Journal of the Franklin Institute, 2014, 351, 3651-3676.	3.4	56
13	Fault measurement detection in an urban water supply network. Journal of Process Control, 2006, 16, 887-902.	3.3	54
14	Decomposition of an ARX model on Laguerre orthonormal bases. ISA Transactions, 2012, 51, 848-860.	5.7	53
15	Systematic Multimodeling Methodology Applied to an Activated Sludge Reactor Model. Industrial & Engineering Chemistry Research, 2010, 49, 2790-2799.	3.7	50
16	New fault tolerant control strategies for nonlinear Takagi-Sugeno systems. International Journal of Applied Mathematics and Computer Science, 2012, 22, 197-210.	1.5	47
17	Data reconciliation: A robust approach using a contaminated distribution. Control Engineering Practice, 2008, 16, 159-170.	5.5	45
18	On the simultaneous state and unknown input estimation of complex systems via a multiple model strategy. IET Control Theory and Applications, 2009, 3, 877-890.	2.1	43

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19	Sensor fault tolerant control of nonlinear Takagi-Sugeno systems. Application to vehicle lateral dynamics. International Journal of Robust and Nonlinear Control, 2016, 26, 1376-1394.	3.7	43
20	Unknown input observer for LPV systems. Automatica, 2019, 100, 67-74.	5.0	42
21	Design of Observers for Takagi-Sugeno Systems with Immeasurable Premise Variables: an â„2 Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 2768-2773.	0.4	40
22	Fault detection and isolation using sliding mode observer for uncertain Takagi-Sugeno fuzzy model. , 2008, , .		39
23	State estimation for non-linear systems using a decoupled multiple model. International Journal of Modelling, Identification and Control, 2008, 4, 59.	0.2	38
24	State estimation of two-time scale multiple models. Application to wastewater treatment plant. Control Engineering Practice, 2011, 19, 1354-1362.	5.5	38
25	Online identification of the ARX model expansion on Laguerre orthonormal bases with filters on model input and output. International Journal of Control, 2013, 86, 369-385.	1.9	37
26	Nonlinear system identification using heterogeneous multiple models. International Journal of Applied Mathematics and Computer Science, 2013, 23, 103-115.	1.5	36
27	Advances in observer design for Takagi-Sugeno systems with unmeasurable premise variables. , 2012, , .		35
28	State and unknown input estimation for nonlinear systems described by Takagi-Sugeno models with unmeasurable premise variables. , 2009, , .		33
29	Nonlinear joint state and parameter estimation: Application to a wastewater treatment plant. Control Engineering Practice, 2013, 21, 1377-1385.	5.5	30
30	Novel optimal recursive filter for state and fault estimation of linear stochastic systems with unknown disturbances. International Journal of Applied Mathematics and Computer Science, 2011, 21, 629-637.	1.5	29
31	Fault detection and isolation with robust principal component analysis. , 2008, , .		28
32	On the design of observer for unknown inputs fuzzy models. International Journal of Automation and Control, 2008, 2, 113.	0.5	25
33	Fault tolerant control for Takagi-Sugeno systems with unmeasurable premise variables by trajectory tracking. , 2010, , .		25
34	Observer based actuator fault tolerant control for nonlinear Takagi-Sugeno systems : an LMI approach. , 2010, , .		24
35	State estimation under nonlinear state inequality constraints. A tracking application. , 2008, , .		23
36	Modelling of ozone concentrations using a Takagi-Sugeno model. Control Engineering Practice, 1999, 7, 707-715.	5.5	21

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37	Determination of principal component analysis models for sensor fault detection and isolation. International Journal of Control, Automation and Systems, 2013, 11, 296-305.	2.7	20
38	State and output feedback control for Takagiâ€"Sugeno systems with saturated actuators. International Journal of Adaptive Control and Signal Processing, 2016, 30, 888-905.	4.1	20
39	New fault tolerant control strategy for nonlinear systems with multiple model approach. , 2010, , .		19
40	Input fault detection and estimation using PI observer based on the ARX-Laguerre model. International Journal of Advanced Manufacturing Technology, 2017, 90, 1317-1336.	3.0	19
41	Data reconciliation with uncertain models. ISA Transactions, 2000, 39, 35-45.	5.7	18
42	An approach for the state estimation of Takagi-Sugeno models and application to sensor fault diagnosis. , 2009, , .		18
43	Fault diagnosis for Takagi-Sugeno nonlinear systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 504-509.	0.4	17
44	On the state observer based stabilization of Takagi-Sugeno systems with immeasurable premise variables. International Journal of Control, Automation and Systems, 2012, 10, 1153-1163.	2.7	17
45	On the stability analysis of multiple model systems. , 2001, , .		16
46	State estimation of nonlinear systems using multiple model approach. , 2009, , .		16
47	Data reconciliation by inequality balance equilibration: a LMI approach. International Journal of Mineral Processing, 1998, 53, 157-169.	2.6	15
48	Nonlinear system modeling based on bilinear Laguerre orthonormal bases. ISA Transactions, 2013, 52, 301-317.	5.7	15
49	Switching Systems: Active Mode Recognition, Identification of the Switching Law. Journal of Control Science and Engineering, 2007, 2007, 1-11.	1.0	14
50	State estimation of the three-tank system using a multiple model. , 2009, , .		14
51	State estimation of two-time scale multiple models with unmeasurable premise variables. Application to biological reactors. , 2010, , .		14
52	Stabilization of nonlinear systems subject to uncertainties and actuator saturation. , 2013, , .		14
53	Laguerre-based modelling and predictive control of multi-input multi-output systems applied to a communicating two-tank system (CTTS). Transactions of the Institute of Measurement and Control, 2017, 39, 611-624.	1.7	14
54	Modelling of a water treatment plant. A multi-model representation. Environmetrics, 2001, 12, 599-611.	1.4	13

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55	Mass balance equilibration: A robust approach using contaminated distribution. AICHE Journal, 2005, 51, 1569-1575.	3.6	13
56	Soft Computing Algorithm to Data Validation in Aerospace Systems Using Parity Space Approach. Journal of Aerospace Engineering, 2007, 20, 165-171.	1.4	13
57	Robust identification of switched regression models. IET Control Theory and Applications, 2009, 3, 1578-1590.	2.1	13
58	Subspace Method for Sensor Fault Detection and Isolation-Application to Grinding Circuit Monitoring. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 47-52.	0.4	12
59	Fuzzy observer for fault detection and reconstruction of unknown input fuzzy models. International Journal of Modelling, Identification and Control, 2008, 3, 193.	0.2	12
60	Model structure simplification of a biological reactor. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 257-262.	0.4	12
61	Online identification of the bilinear model expansion on Laguerre orthonormal bases. International Journal of Control, 2014, 87, 441-463.	1.9	12
62	Synthesis of a robust controller with reduced dimension by the Loop Shaping Design Procedure and decomposition based on Laguerre functions. Transactions of the Institute of Measurement and Control, 2016, 38, 1236-1260.	1.7	12
63	Reformulation of Data Reconciliation Problem with Unknown-but-Bounded Errors. Industrial & Engineering Chemistry Research, 2004, 43, 1530-1536.	3.7	11
64	Proportional-Integral observer design for nonlinear uncertain systems modelled by a multiple model approach. , 2008, , .		11
65	On the unknown input observer design: A decoupling class approach. , 2011, , .		11
66	Fault‐tolerant control design for uncertain Takagi‐Sugeno systems by trajectory tracking: a descriptor approach. IET Control Theory and Applications, 2013, 7, 1793-1805.	2.1	11
67	Fault detection and estimation using kernel principal component analysis. IFAC-PapersOnLine, 2017, 50, 1025-1030.	0.9	11
68	Robust Filtering for State and Fault Estimation of Linear Stochastic Systems with Unknown Disturbance. Mathematical Problems in Engineering, 2010, 2010, 1-24.	1.1	10
69	State and parameter estimation for nonlinear systems: A Takagi-Sugeno approach. , 2013, , .		10
70	State estimation of system with bounded uncertain parameters: Interval multimodel approach. International Journal of Adaptive Control and Signal Processing, 2018, 32, 480-493.	4.1	10
71	Active Mode Estimation for Switching Systems. Proceedings of the American Control Conference, 2007, , .	0.0	9
72	Unbiased Minimum-Variance Filter for State and Fault Estimation of Linear Time-Varying Systems with Unknown Disturbances. Mathematical Problems in Engineering, 2010, 2010, 1-17.	1.1	9

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73	State estimation and fault detection of uncertain systems based on an interval approach. , 2010, , .		9
74	Observer for Lipschitz nonlinear systems: Mean Value Theorem and sector nonlinearity transformation. , 2012, , .		9
75	State and multiplicative sensor fault estimation for nonlinear systems. , 2013, , .		9
76	Nonlinear predictive controller based on S-PARAFAC Volterra models applied to a communicating two-tank system. International Journal of Control, 2015, 88, 1456-1471.	1.9	9
77	Dataâ€driven approach for fault detection and isolation in nonlinear system. International Journal of Adaptive Control and Signal Processing, 2018, 32, 1569-1590.	4.1	9
78	Fuzzy logic control. International Journal of Systems Science, 1993, 24, 1825-1848.	5.5	8
79	State and Parameter Estimation for Time-varying Systems: a Takagi-Sugeno Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 761-766.	0.4	8
80	Identification of a linear parameter varying system based on Meixner-like model. Transactions of the Institute of Measurement and Control, 2018, 40, 657-665.	1.7	8
81	Design of observers for descriptor systems affected by unknown inputs. International Journal of Systems Science, 1996, 27, 465-471.	5.5	7
82	A DECOUPLED MULTIPLE MODEL APPROACH FOR STATE ESTIMATION OF NONLINEAR SYSTEMS SUBJECT TO DELAYED MEASUREMENTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 97-102.	0.4	7
83	Robust observer design for uncertain Takagi-Sugeno model with unmeasurable decision variables: an L_2 approach. , 2008, , .		7
84	Estimating the state and the unknown inputs of nonlinear systems using a multiple model approach. , 2008, , .		7
85	Contribution to the constrained output feedback control. , 2013, , .		7
86	Observability of systems involving flow circulation. International Journal of Mineral Processing, 1996, 47, 125-140.	2.6	6
87	Soft Computing Approach for Data Validation. Journal of Aerospace Computing, Information, and Communication, 2007, 4, 628-635.	0.8	6
88	Sensor Fault Detection and Isolation by Robust Principal Component Analysis. , 0, , .		6
89	Nonlinear observer based sensor fault tolerant control for nonlinear systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1053-1058.	0.4	6
90	Fault estimation of nonlinear processes using kernel principal component analysis. , 2015, , .		6

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91	Fault tolerant control for uncertain descriptor multi-models with application to wastewater treatment plant. , 2015, , .		6
92	Recursive identification of multi-variable interconnected systems. International Journal of Systems Science, 1992, 23, 987-1000.	5.5	5
93	STRUCTURE IDENTIFICATION OF MULTIPLE MODELS WITH OUTPUT ERROR LOCAL MODELS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 151-156.	0.4	5
94	Observer-based approach for Synchronization of a Time-Delayed Chua's Circuit. , 0, , .		5
95	A discrete-time Sliding Window Observer for Markovian Switching System. , 2006, , .		5
96	Multiple sensor fault detection and isolation of an air quality monitoring network using RBF-NLPCA model. International Journal of Adaptive and Innovative Systems, 2010, 1, 267.	0.1	5
97	Fault diagnosis for nonlinear systems represented by heterogeneous multiple models. , 2010, , .		5
98	Trajectory tracking fault tolerant controller design for Takagi-Sugeno systems subject to actuator faults. , 2011, , .		5
99	Stabilization of nonlinear systems subject to actuator saturation. , 2013, , .		5
100	State estimation for a class of nonlinear systems. International Journal of Applied Mathematics and Computer Science, 2013, 23, 383-394.	1.5	5
101	Nonlinear joint state-parameter observer for VAV damper position estimation. , 2016, , .		5
102	Constrained predictive control of a SISO nonlinear system based on third-order S-PARAFAC Volterra models. Transactions of the Institute of Measurement and Control, 2017, 39, 907-920.	1.7	5
103	An adaptive observer design approach for a class of discrete-time nonlinear systems. International Journal of Applied Mathematics and Computer Science, 2018, 28, 55-67.	1.5	5
104	Reduced model of linear systems via Laguerre filters. Transactions of the Institute of Measurement and Control, 2018, 40, 1510-1520.	1.7	5
105	Diagnostic de fonctionnement de capteurs d'un réseau de surveillance de la qualité de l'air par analyse en composantes principales. Journal Europeen Des Systemes Automatises, 2005, 39, 417-436.	0.4	4
106	PARAMETER UNCERTAINTIES CHARACTERISATION FOR LINEAR MODELS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 581-586.	0.4	4
107	Fault tolerant tracking control for continuous Takagi-Sugeno systems with time varying faults. , 2011, , .		4
108	Asymptotic Observer for a Non-Linear Descriptor System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 639-643.	0.4	3

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109	Data validation with unknown variance matrix. Computers and Chemical Engineering, 1999, 23, S609-S612.	3.8	3
110	Observers based synchronization and input recovery for a class of nonlinear chaotic models.. , 0, , .		3
111	Design of robust Hâˇž observers for nonlinear systems using a multiple model. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 2756-2761.	0.4	3
112	Observer design for nonlinear systems described by multiple models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 18-23.	0.4	3
113	Simultaneous data reconciliation and parameter estimation. Application to a basic oxygen furnace.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 86-91.	0.4	3
114	A new method for determining PCA models for system diagnosis. , 2010, , .		3
115	Interval state estimation for uncertain polytopic systems. International Journal of Control, 2020, 93, 2564-2576.	1.9	3
116	Evaluation des bornes de l'Ã©tat d'un systÃ¨me incertain Approche par intervalles. Journal Europeen Des Systemes Automatises, 2003, 37, 1181-1192.	0.4	3
117	Diagnostic des SDH. Quelques contributions issues des approches continues. Journal Europeen Des Systemes Automatises, 2007, 41, 885-912.	0.4	3
118	ENVIRONMENTAL SYSTEMS MODELLING AND DIAGNOSIS USING A MULTIPLE MODEL APPROACH. , 2002, , .		2
119	Robust fault and state estimation for linear discrete-time systems with unknown disturbances using PI Three-Stage Kalman Filter. , 2011, , .		2
120	Modeling and simulation of a carrousel for long-term operation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3806-3811.	0.4	2
121	Observer synthesis for uncertain nonlinear systems. Application to waste-water treatment plants. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 485-490.	0.4	2
122	Detection, isolation and fault estimation of nonlinear systems using a directional study. Journal of Physics: Conference Series, 2015, 659, 012032.	0.4	2
123	Active mode recognition of dynamic systems. International Journal of Systems Science, 2020, 51, 2500-2519.	5.5	2
124	Aberrant measurements: Detection, localization, suppression, acceptance and robustness. Measurement: Journal of the International Measurement Confederation, 2021, 172, 108872.	5.0	2
125	ModÃ©lisation d'un rÃ©acteur biologique Ã l'aide d'une structure multimodÃ¨le. MÃ©thode analytique d'obtention d'un multimodÃ¨le. Journal Europeen Des Systemes Automatises, 2010, 44, 423-443.	0.4	2
126	Detection of operating mode changes, without a priori model and in uncertain environments. Transactions of the Institute of Measurement and Control, 2022, 44, 2653-2671.	1.7	2

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127	An algorithm for obtaining the redundancy equations of LTI systems. Automatica, 1994, 30, 537-542.	5.0	1
128	Robust Data Reconciliation to Determine Basic Oxygen Furnace Set-points. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 286-291.	0.4	1
129	State estimation for wastewater treatment plant with slow and fast dynamics using multiple models. , 2010, , .		1
130	Design of a soft sensor for the oscillatory failure detection in the flight control system of a civil aircraft. , 2010, , .		1
131	New hierarchical approach for multiple sensor fault detection and isolation. Application to an air quality monitoring network. , 2010, , .		1
132	Systematic simplification methodology applied to an activated sludge reactor model. , 2011, , .		1
133	State, unknown input and uncertainty estimation for nonlinear systems using a Takagi-Sugeno model. , 2014, , .		1
134	State estimation for MISO nonâ€"linear systems in controller canonical form. International Journal of Applied Mathematics and Computer Science, 2016, 26, 569-583.	1.5	1
135	Operating mode recognition. Application to a grinding mill process.. IFAC-PapersOnLine, 2016, 49, 7-12.	0.9	1
136	Joint State and Parameter Estimation for Discrete-Time Takagi-Sugeno Model. Journal of Physics: Conference Series, 2017, 783, 012016.	0.4	1
137	Robust predictive controller for nonlinear uncertain process based on S-PARAFAC Volterra models. International Journal of Advanced Manufacturing Technology, 2017, 90, 2309-2323.	3.0	1
138	An Adaptive Observer Design for Takagi-Sugeno type Nonlinear System * *The work was supported by FP7 project Energy in Time (EiT) under the grant no. 608981. IFAC-PapersOnLine, 2017, 50, 826-831.	0.9	1
139	Polytopic Models for Observer and Fault-Tolerant Control Designs. , 2019, , 295-335.		1
140	A DISCRETE-TIME SLIDING WINDOW OBSERVER FOR MARKOVIAN SWITCHING SYSTEM: AN LMI APPROACH. Control and Intelligent Systems, 2008, 36, .	0.3	1
141	Validation de donnÃ©es issues de systÃ¨mes de mesure incertains. Journal Europeen Des Systemes Automatises, 2003, 37, 1163-1179.	0.4	1
142	Recursive and Sequential Identification of Jumping Interconnected Systems Through Multiple Models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1994, 27, 947-952.	0.4	0
143	State equations and decomposition into Laguerre functions. Journal of the Franklin Institute, 1996, 333, 283-288.	3.4	0
144	A unifying approach of LTI discrete-time state observers by means of complementary matrices. IEEE Transactions on Automatic Control, 1999, 44, 422-426.	5.7	0

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145	State estimates for non-linear SISO systems. , 2008, , .		0
146	Robust PI observer design for hybrid heterogeneous multiple models with delayed measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 398-403.	0.4	0
147	Estimation of a generic model for a fleet of machines. , 2011, , .		0
148	Takagi-Sugeno model based Nonlinear Parameter Estimation in Air Handling Units**The work was supported by FP7 project Energy in Time (EiT) under the grant no. 608981. IFAC-PapersOnLine, 2016, 49, 188-193.	0.9	0
149	Resistance to Noise of Non-linear Observers in Canonical Form Application to a Sludge Activation Model. Journal of Mathematics Research, 2017, 9, 38.	0.1	0
150	Dependability analysis of instrumented linear static systems based on their observability. International Journal of Systems Science: Operations and Logistics, 2019, 6, 272-284.	3.0	0
151	PrÃ©vision des maxima journaliers d'ozone. Approche multimodÃ¨le. Journal Europeen Des Systemes Automatises, 2005, 39, 513-532.	0.4	0
152	Real-Time Parameter Identification Through Output Signal Processing Based on the Preliminary Data Structurized. , 2006, , .		0
153	Parameter Uncertainties Characterisation for Linear Models.. , 2007, , 581-586.		0
154	SystÃ¨mes ÃÂ commutation. Recherche du mode actif, identification de la loi de commutation. Journal Europeen Des Systemes Automatises, 2007, 41, 7-30.	0.4	0
155	4th Colloquium Interdisciplinary in Instrumentation. EPJ Applied Physics, 2009, 47, 12701.	0.7	0
156	SENSOR NETWORK DESIGN FOR IMPROVING ESTIMATION QUALITY. International Journal of Modelling and Simulation, 2010, 30, .	3.3	0
157	ModÃ©lisation des entrÃ©es inconnues pour une estimation dâ€™Ã©tat robuste. Application Ã un systÃ¨me de navigation hybridÃ©e inertie-GPS. Journal Europeen Des Systemes Automatises, 2010, 44, 1047-1078.	0.4	0
158	DÃ©tection de pannes oscillatoires dans un systÃ¨me de commande de vol dâ€™avion. Instrumentation Mesure Metrologie, 2011, 11, 131-148.	0.3	0
159	DÃ©termination de modÃ¨les ACP pour la dÃ©tection et la localisation de dÃ©fauts de capteurs. Journal Europeen Des Systemes Automatises, 2012, 46, 103-126.	0.4	0
160	Reducing Complexity of Nonlinear Dynamic Systems. Advances in Dynamics, Patterns, Cognition, 2017, , 159-187.	0.3	0