

Paula Rocha

List of Publications by Year in descending order

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115
papers

943
citations

516710

16
h-index

526287

27
g-index

124
all docs

124
docs citations

124
times ranked

612
citing authors

#	ARTICLE	IF	CITATIONS
1	An Individualized Automatically Tuned TCI Strategy for Neuromuscular Blockade Control. <i>Cybernetics and Systems</i> , 2022, 53, 44-57.	2.5	1
2	A Behavioral Approach to Estimation in the Presence of Disturbances. <i>IEEE Transactions on Automatic Control</i> , 2021, 66, 2795-2801.	5.7	1
3	State-Space Realization of Periodic i/o Behaviors. <i>IEEE Transactions on Automatic Control</i> , 2021, 66, 2825-2831.	5.7	2
4	An intelligent drug delivery system for neuromuscular blockade in healthcare. , 2021, , .		0
5	State-Space Estimation Using the Behavioral Approach: A Simple Particular Case. <i>Lecture Notes in Electrical Engineering</i> , 2021, , 210-220.	0.4	0
6	Individualized control of the depth of anesthesia based on online identification and retuning. <i>IFAC-PapersOnLine</i> , 2021, 54, 43-48.	0.9	0
7	Improving TCI control for the automatic delivery of rocuronium. , 2020, , .		0
8	Modeling and control of neuromuscular blockade level in general anesthesia. , 2020, , 167-195.		5
9	Modelling and indentification for the action of propofol and remifentanil on the BIS level. <i>IFAC-PapersOnLine</i> , 2020, 53, 16197-16202.	0.9	5
10	Periodic state-space representations of periodic convolutional codes. <i>Cryptography and Communications</i> , 2019, 11, 585-595.	1.4	7
11	Pole placement based on model identification for automatic delivery of Rocuronium. , 2019, , .		5
12	Towards a Geometric Theory for nD Behaviors:Conditioned Invariance and Detectability Subspaces. <i>IFAC-PapersOnLine</i> , 2019, 52, 77-81.	0.9	1
13	Positive state observer for the automatic control of the depth of anesthesiaâ€”Clinical results. <i>Computer Methods and Programs in Biomedicine</i> , 2019, 171, 99-108.	4.7	17
14	Realization of 2D (2,2)â€”Periodic Encoders by Means of 2D Periodic Separable Roesser Models. <i>International Journal of Applied Mathematics and Computer Science</i> , 2019, 29, 527-539.	1.5	1
15	Strong controlled-invariance of behavioural nD systems. <i>International Journal of Control</i> , 2018, 91, 2772-2779.	1.9	1
16	A simple positive control law for the rocuronium- induced neuromuscular blockade level. <i>IFAC-PapersOnLine</i> , 2018, 51, 90-94.	0.9	5
17	Optimized PID tuning for the automatic control of neuromuscular blockade. <i>IFAC-PapersOnLine</i> , 2018, 51, 66-71.	0.9	9
18	On the State-Space Realization of 2-Periodic Image Behaviors. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
19	The Generic Degree of Autonomy. SIAM Journal on Applied Algebra and Geometry, 2018, 2, 410-427.	1.4	4
20	On the state space realization of separable periodic 2D systems. , 2018, , .		1
21	Stability of simultaneously block triangularisable switched systems with partial state reset. International Journal of Control, 2017, 90, 428-437.	1.9	6
22	Controller design for neuromuscular blockade level tracking based on optimal control. Control Engineering Practice, 2017, 59, 151-158.	5.5	3
23	Nonlinear controller for bispectral index tracking: Robustness and on-line retuning. Control Engineering Practice, 2017, 58, 343-353.	5.5	2
24	Roesser model representation of 2D periodic behaviors: the (2,2)-periodic SISO case. , 2017, , . Conditioned invariance and detectability subspaces in the behavioral approach * *This work was supported in part by the Portuguese Foundation for Science and Technology (FCT-Funda		4
25	Applications, within project UID/MAT/04106/2013 and also by Project POCI-01-0145-FEDER-006933 - SYSTEC - Research Center for Systems and Technologies - funded by FEDER funds through COMPETE2020 - Programa Operacional Competiti. IFAC-PapersOnLine, 2017, 50, 687-692.	0.9	1
26	On the Identification of the Propofol PK/PD Model Using BIS Measurements. IFAC-PapersOnLine, 2017, 50, 868-873.	0.9	5
27	A Simplified Control Approach for the Neuromuscular Blockade Level. Lecture Notes in Electrical Engineering, 2017, , 37-44.	0.4	1
28	A State Space Approach to Periodic Convolutional Codes. Lecture Notes in Computer Science, 2017, , 238-247.	1.3	1
29	On the Connection Between the Stability of Multidimensional Positive Systems and the Stability of Switched Positive Systems. Lecture Notes in Control and Information Sciences, 2017, , 171-178. A simplified control scheme for the Depth of Anesthesia**This work was financially supported by:	1.0	0
30	Project POCI-01-0145-FEDER-006933 - SYSTEC - Research Center for Systems and Technologies - funded by FEDER funds through COMPETE2020 -Programa Operacional Competitividade e Internacionalizao (POCI) and by national funds through FCT – Funda	0.9	4
31	Composition codes. Advances in Mathematics of Communications, 2016, 10, 163-177.	0.7	0
32	NMB target level tracking via an optimization based control law. IFAC-PapersOnLine, 2015, 48, 413-417.	0.9	0
33	Automatic control of the depth of anesthesia - clinical results. IFAC-PapersOnLine, 2015, 48, 540-544.	0.9	4
34	Special issue on multidimensional systems applications. Multidimensional Systems and Signal Processing, 2015, 26, 891-893.	2.6	0
35	An optimal control approach to reference level tracking in general anesthesia. , 2015, , .		1
36	A 2D Hopfield Neural Network approach to mechanical beam damage detection. Multidimensional Systems and Signal Processing, 2015, 26, 1081-1095.	2.6	2

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37	Improving energy efficiency via smart building energy management systems: A comparison with policy measures. Energy and Buildings, 2015, 88, 203-213.	6.7	124
38	Implementation of Behavioral Systems. Lecture Notes in Control and Information Sciences, 2015, , 151-168.	1.0	0
39	Minimal Realizations of Syndrome Formers of a Special Class of 2D Codes. CIM Series in Mathematical Sciences, 2015, , 185-193.	0.4	1
40	Minimal State-Space Realizations of Convolutional Codes. Lecture Notes in Electrical Engineering, 2015, , 13-22.	0.4	1
41	Robustness of a new nonlinear positive controller for BIS tracking. , 2014, , .		0
42	Sensor placement for real-time dynamic state estimation in power systems: Structural systems approach. , 2014, , .		0
43	Optimal time for constant drug infusion initialization in neuromuscular blockade control. , 2014, , .		1
44	Controlling the depth of anesthesia by a novel positive control strategy. Computer Methods and Programs in Biomedicine, 2014, 114, e87-e97.	4.7	27
45	Realization of 2D convolutional codes of rate $\frac{1}{n}$ by separable Roesser models. Designs, Codes, and Cryptography, 2014, 70, 241-250.	1.6	5
46	Automatic control of the NMB level in general anaesthesia with a switching total system mass control strategy. Journal of Clinical Monitoring and Computing, 2014, 28, 501-512.	1.6	4
47	Stability of Switched Linear Differential Systems. IEEE Transactions on Automatic Control, 2014, 59, 2038-2051.	5.7	23
48	A new retuning approach for DoA reference tracking improvement. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9890-9894.	0.4	1
49	A Polynomial-Time Solution Scheme for Quadratic Stochastic Programs. Journal of Optimization Theory and Applications, 2013, 158, 576-589.	1.5	1
50	A simple PK/PD model identification procedure for controller design in anesthesia. , 2013, , .		0
51	A neural network approach to damage detection in Euler-Bernoulli beams subjected to external forces. , 2013, , .		1
52	Improvement of the BIS reference tracking performance in the presence of parameters uncertainties. , 2013, , .		1
53	Characterizations of global reachability of 2D structured systems. Multidimensional Systems and Signal Processing, 2013, 24, 51-64.	2.6	5
54	Stability of Switched Systems With Partial State Reset. IEEE Transactions on Automatic Control, 2013, 58, 1008-1012.	5.7	10

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55	Reconstructibility of time-invariant and periodic behavioural systems. International Journal of Control, 2013, 86, 84-94.	1.9	0
56	A remark on conditioned invariance in the behavioral approach. , 2013, , .		3
57	A Wide Spread of Algorithms for Automatic Segmentation of Dermoscopic Images. Lecture Notes in Computer Science, 2013, , 592-599.	1.3	5
58	Output Reference Tracking for MISO Positive Systems in General Anesthesia. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 119-124.	0.4	4
59	Tracking the NMB level via a switching system mass control strategy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 473-477.	0.4	0
60	An annotation tool for dermoscopic image segmentation. , 2012, , .		9
61	Lyapunov functions for time-relevant systems, with application to first-orthant stable systems. Automatica, 2012, 48, 1998-2006.	5.0	10
62	Multistage stochastic portfolio optimisation in deregulated electricity markets using linear decision rules. European Journal of Operational Research, 2012, 216, 397-408.	5.7	46
63	A compartmental model-based control strategy for NeuroMuscular Blockade level. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 599-604.	0.4	6
64	Time-relevant stability of 2D systems. Automatica, 2011, 47, 2373-2382.	5.0	35
65	Markovian properties for 2D behavioral systems described by PDEs: the scalar case. Multidimensional Systems and Signal Processing, 2011, 22, 45-53.	2.6	2
66	Stabilization of discrete 2D behaviors by regular partial interconnection. Mathematics of Control, Signals, and Systems, 2011, 22, 295-316.	2.3	2
67	Lyapunov stability of 2D finite-dimensional behaviours. International Journal of Control, 2011, 84, 737-745.	1.9	20
68	State space representation of SISO periodic behaviors. , 2011, , .		9
69	Time-relevant 2D behaviors. , 2011, , .		2
70	On the stability of switched behavioral systems. , 2011, , .		17
71	An improved strategy for NeuroMuscular Blockade control with parameter uncertainty. , 2011, , .		6
72	Controllability and reconstructibility of periodic state space systems " a behavioral approach *. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 152-159.	0.4	0

#	ARTICLE	IF	CITATIONS
73	Strongly autonomous interconnections and stabilization of 2D behaviors. Asian Journal of Control, 2010, 12, 127-135.	3.0	6
74	Autonomous multidimensional systems and their implementation by behavioral control. Systems and Control Letters, 2010, 59, 203-208.	2.3	17
75	A General Stability Test for Switched Positive Systems Based on a Multidimensional System Analysis. IEEE Transactions on Automatic Control, 2010, 55, 2660-2664.	5.7	19
76	Target mass control for uncertain compartmental systems. International Journal of Control, 2010, 83, 1387-1396.	1.9	1
77	Implementation of autonomous multidimensional behaviors. , 2009, , .		2
78	An automatic system for on-line change detection with application to structural health monitoring. , 2009, , .		2
79	Hopfield neural networks for on-line parameter estimation. Neural Networks, 2009, 22, 450-462.	5.9	35
80	A switching control strategy for improving drug infusion. International Journal of Control, 2009, 82, 2221-2234.	1.9	0
81	Stabilization of nD behaviors. , 2009, , .		0
82	Drug Delivery for Neuromuscular Blockade With Supervised Multimodel Adaptive Control. IEEE Transactions on Control Systems Technology, 2009, 17, 1237-1244.	5.2	59
83	Implementation of 2D Strongly Autonomous Behaviors by Full and Partial Interconnections. Lecture Notes in Control and Information Sciences, 2009, , 369-378.	1.0	4
84	Finite dimensional interconnections and stabilization of 2D behaviors. , 2009, , .		0
85	Stabilization of multidimensional behaviors. Multidimensional Systems and Signal Processing, 2008, 19, 273-286.	2.6	9
86	On the determinant of quaternionic polynomial matrices and its application to system stability. Mathematical Methods in the Applied Sciences, 2008, 31, 99-122.	2.3	12
87	A hybrid method for parameter estimation and its application to biomedical systems. Computer Methods and Programs in Biomedicine, 2008, 89, 112-122.	4.7	21
88	Control of uncertain compartmental systems. , 2007, , .		2
89	An algorithm for SDV representation of 2D behaviors. , 2007, , .		0
90	Representations and structural properties of periodic systems. Automatica, 2007, 43, 1921-1931.	5.0	12

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91	Multiple Model Adaptive Control of neuromuscular blockade: Design guidelines and clinical cases. , 2007, , .		4
92	A note on behavioral reachability. , 2007, , .		0
93	Markov properties for systems described by PDEs and first-order representations. Systems and Control Letters, 2006, 55, 538-542.	2.3	14
94	Controllability and Extendibility of Continuous Multi-dimensional Behaviors. Multidimensional Systems and Signal Processing, 2006, 17, 97-106.	2.6	3
95	Observer design in switching control of neuromuscular blockade: clinical cases. , 2006, 2006, 5436-9.		2
96	CANONICAL CONTROLLERS AND REGULAR IMPLEMENTATION OF ND BEHAVIORS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 13-18.	0.4	12
97	Algebraic tools for the study of quaternionic behavioral systems. Linear Algebra and Its Applications, 2005, 400, 121-140.	0.9	33
98	Strong controllability and extendibility of discrete multidimensional behaviors. Systems and Control Letters, 2005, 54, 375-380.	2.3	8
99	Feedback control of multidimensional behaviors. Systems and Control Letters, 2002, 45, 207-215.	2.3	16
100	State/Driving-Variable Representation of 2D Systems. Multidimensional Systems and Signal Processing, 2002, 13, 129-156.	2.6	3
101	An alternative characterization for state/driving-variable representability of 2D behaviors. , 2001, , .		0
102	Structure indices for multidimensional systems. IMA Journal of Mathematical Control and Information, 2000, 17, 227-256.	1.7	4
103	Behavioral Controllability of Delay-Differential Systems. SIAM Journal on Control and Optimization, 1997, 35, 254-264.	2.1	32
104	State/driving-variable representations and model reduction for \mathbb{R}^2 2D systems. , 1997, , .		1
105	Stability of discrete non-unit memory linear repetitive processesâ€”a two-dimensional systems interpretation. International Journal of Control, 1996, 63, 457-482.	1.9	6
106	Behavioral Interpretation of Weak and Strong Controllability for Delay-Differential Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1995, 28, 453-457.	0.4	1
107	Adirectional Markov models for 2D systems. IMA Journal of Mathematical Control and Information, 1995, 12, 37-56.	1.7	2
108	MA REPRESENTATION OF I2 2D SYSTEMS. , 1992, , 416-418.		0

#	ARTICLE	IF	CITATIONS
109	Controllability of 2-D systems. IEEE Transactions on Automatic Control, 1991, 36, 413-423.	5.7	51
110	Closed subspaces, polynomial operators in the shift, and ARMA representations. Applied Mathematics Letters, 1991, 4, 15-19.	2.7	11
111	Representation of noncausal 2D systems. , 1991, , 630-635.		5
112	Controllability of delay-differential systems. , 1990, , 332-340.		2
113	Canonical computational forms for AR 2-D systems. Multidimensional Systems and Signal Processing, 1990, 1, 251-278.	2.6	14
114	State for 2-D systems. Linear Algebra and Its Applications, 1989, 122-124, 1003-1038.	0.9	28
115	Further results on periodically time-varying behavioral systems. , 0, , .		1