

Teresa F Mendonca

List of Publications by Year in descending order

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103
papers

1,838
citations

623188

14
h-index

377514

34
g-index

105
all docs

105
docs citations

105
times ranked

1361
citing authors

#	ARTICLE	IF	CITATIONS
1	PH<sup>2</sup> - A dermoscopic image database for research and benchmarking. , 2013, 2013, 5437-40.		426
2	Comparison of Segmentation Methods for Melanoma Diagnosis in Dermoscopy Images. IEEE Journal on Selected Topics in Signal Processing, 2009, 3, 35-45.	7.3	327
3	Two Systems for the Detection of Melanomas in Dermoscopy Images Using Texture and Color Features. IEEE Systems Journal, 2014, 8, 965-979.	2.9	289
4	Drug Delivery for Neuromuscular Blockade With Supervised Multimodel Adaptive Control. IEEE Transactions on Control Systems Technology, 2009, 17, 1237-1244.	3.2	59
5	PID control strategies for the automatic control of neuromuscular blockade. Control Engineering Practice, 1998, 6, 1225-1231.	3.2	55
6	The use of texture for image classification of black & white air photographs. International Journal of Remote Sensing, 2008, 29, 593-607.	1.3	43
7	Nonlinear Identification of a Minimal Neuromuscular Blockade Model in Anesthesia. IEEE Transactions on Control Systems Technology, 2011, , .	3.2	39
8	Hopfield neural networks for on-line parameter estimation. Neural Networks, 2009, 22, 450-462.	3.3	35
9	Online nonlinear identification of the effect of drugs in anaesthesia using a minimal parameterization and BIS measurements. , 2010, , .		31
10	Control of Neuromuscular Blockade in the Presence of Sensor Faults. IEEE Transactions on Biomedical Engineering, 2005, 52, 1902-1911.	2.5	29
11	Hipocrates: a Robust System for the Control of Neuromuscular Blockade. Journal of Clinical Monitoring and Computing, 2004, 18, 265-273.	0.7	25
12	Bag-of-Features Classification Model for the Diagnose of Melanoma in Dermoscopy Images Using Color and Texture Descriptors. Lecture Notes in Computer Science, 2013, , 547-555.	1.0	25
13	On the role of texture and color in the classification of dermoscopy images. , 2012, 2012, 4402-5.		24
14	A Bag-of-Features Approach for the Classification of Melanomas in Dermoscopy Images: The Role of Color and Texture Descriptors. Series in Bioengineering, 2014, , 49-69.	0.3	23
15	A hybrid method for parameter estimation and its application to biomedical systems. Computer Methods and Programs in Biomedicine, 2008, 89, 112-122.	2.6	21
16	A GPU-based calculation using the three-dimensional FDTD method for electromagnetic field analysis. , 2010, 2010, 327-30.		20
17	Feedforward adaptive control of the Bispectral Index of the EEG using the intravenous anaesthetic drug propofol. International Journal of Adaptive Control and Signal Processing, 2009, 23, 485-503.	2.3	19
18	Comparison of Segmentation Methods for Automatic Diagnosis of Dermoscopy Images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6573-6.	0.5	18

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19	Total Mass TCI driven by parametric estimation. , 2009, , .		17
20	Long-range adaptive control with input constraints. International Journal of Control, 1991, 54, 289-306.	1.2	13
21	Modelling neuromuscular blockade: a stochastic approach based on clinical data. Mathematical and Computer Modelling of Dynamical Systems, 2013, 19, 540-556.	1.4	13
22	Comparing different identification approaches for the depth of anesthesia using BIS measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 781-785.	0.4	12
23	Perceptual image segmentation using fuzzy-based hierarchical algorithm and its application to dermoscopy images. , 2008, , .		11
24	Real-time algorithm for changes detection in depth of anesthesia signals. Evolving Systems, 2013, 4, 3-12.	2.4	11
25	Adaptive predictive control with mean-square input constraint. Automatica, 1992, 28, 593-597.	3.0	10
26	An annotation tool for dermoscopic image segmentation. , 2012, , .		9
27	Individualizing propofol dosage: a multivariate linear model approach. Journal of Clinical Monitoring and Computing, 2014, 28, 525-536.	0.7	9
28	A reduced MIMO Wiener model for recursive identification of the depth of anesthesia. International Journal of Adaptive Control and Signal Processing, 2014, 28, 1357-1371.	2.3	9
29	Fading histograms in detecting distribution and concept changes. International Journal of Data Science and Analytics, 2017, 3, 183-212.	2.4	9
30	Optimized PID tuning for the automatic control of neuromuscular blockade. IFAC-PapersOnLine, 2018, 51, 66-71.	0.5	9
31	MODELLING DRUGS' PHARMACODYNAMIC INTERACTION DURING GENERAL ANAESTHESIA: THE CHOICE OF PHARMACOKINETIC MODEL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 447-452.	0.4	8
32	A simple model for the identification of drug effects. , 2009, , .		8
33	Nonlinear adaptive control of the NeuroMuscular Blockade in anesthesia. , 2011, , .		8
34	On the role of shape in the detection of melanomas. , 2013, , .		7
35	Comparison of Neural Networks, Fuzzy and Stochastic Prediction Models for return of consciousness after general anesthesia. , 0, , .		6
36	Modeling Anesthetic Drugs' Pharmacodynamic Interaction on the Bispectral Index of the EEG: the Influence of Heart Rate. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6480-3.	0.5	6

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37	An automatic Method to identify and extract information of DNA bands in Gel Electrophoresis images. , 2009, 2009, 1024-7.		6
38	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
39	An improved strategy for NeuroMuscular Blockade control with parameter uncertainty. , 2011, , .		6
40	What Is the Role of Color in Dermoscopy Analysis?. Lecture Notes in Computer Science, 2013, , 819-826.	1.0	6
41	Statistical analysis of neuromuscular blockade response: contributions to an automatic controller calibration. Computational Statistics and Data Analysis, 2005, 49, 955-968.	0.7	5
42	Personalized neuromuscular blockade through control: Clinical and technical evaluation. , 2008, 2008, 5826-9.		5
43	Exactly linearizing adaptive control of propofol and remifentanyl using a reduced Wiener model for the depth of anesthesia. , 2012, , .		5
44	Control of rocuronium-induced neuromuscular blockade via online identification of a two-parameters Wiener model. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 571-576.	0.4	5
45	Modeling the Effect of Intravenous Anesthetics: A Path Toward Individualization. IEEE Design and Test, 2015, 32, 17-26.	1.1	5
46	On the Identification of the Propofol PK/PD Model Using BIS Measurements. IFAC-PapersOnLine, 2017, 50, 868-873.	0.5	5
47	A simple positive control law for the rocuronium- induced neuromuscular blockade level. IFAC-PapersOnLine, 2018, 51, 90-94.	0.5	5
48	Pole placement based on model identification for automatic delivery of Rocuronium. , 2019, , .		5
49	Modeling and control of neuromuscular blockade level in general anesthesia. , 2020, , 167-195.		5
50	Separability Analysis of Color Classes on Dermoscopic Images. Lecture Notes in Computer Science, 2012, , 268-277.	1.0	5
51	A Wide Spread of Algorithms for Automatic Segmentation of Dermoscopic Images. Lecture Notes in Computer Science, 2013, , 592-599.	1.0	5
52	Comparison of On-line Autocalibration Techniques of a Controller of Neuromuscular Blockade. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 227-232.	0.4	4
53	Supervised multi-model adaptive control of neuromuscular blockade with off-set compensation. , 2009, , .		4
54	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

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55	Automatic control of the NMB level in general anaesthesia with a switching total system mass control strategy. <i>Journal of Clinical Monitoring and Computing</i> , 2014, 28, 501-512. A simplified control scheme for the Depth of Anesthesia**This work was financially supported by:	0.7	4
56	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��o para a Ci��ncia e Tecnologia; The author Juliana Almeida acknowledge the support from FCT – Funda��o para a Ci��ncia e Tecnologia–under the doc. IFAC-PapersOnLine, 2016, 49, 230-235.	0.5	4
57	Contributions to a decision support system based on depth of anesthesia signals. , 2012, , .		3
58	Self-calibrating total-mass controller for the neuromuscular blockade matching the anesthesiologists' mindset. , 2013, , .		3
59	Critically Safe General Anaesthesia in Closed Loop: Availability and Challenges. <i>IFAC-PapersOnLine</i> , 2015, 48, 551-556.	0.5	3
60	Controller design for neuromuscular blockade level tracking based on optimal control. <i>Control Engineering Practice</i> , 2017, 59, 151-158.	3.2	3
61	Automatic control of drug dosage for continuous infusion in anaesthesia using state space methods. , 2019, , .		3
62	Predictive Adaptive Control of the Bispectral Index of the EEG (BIS) �� Using the Intravenous Anaesthetic Drug Propofol. <i>Lecture Notes in Computer Science</i> , 2006, , 1248-1255.	1.0	3
63	Observer design in switching control of neuromuscular blockade: clinical cases. , 2006, 2006, 5436-9.		2
64	Control of uncertain compartmental systems. , 2007, , .		2
65	Batch identification of neuromuscular blockade models. , 2011, , .		2
66	Automatic counting the number of Collembola in digital images. , 2011, , .		2
67	A bi-phase algorithm to identify hypnotic models of patients subject to deep sedation for ultrasonographic endoscopy*. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 775-780.	0.4	2
68	Design of depth of anesthesia controllers in the presence of model uncertainty. , 2013, , .		2
69	A polynomial design approach to robust control of neuromuscular blockade of patients subject to general anesthesia. , 2013, , .		2
70	Constructing fading histograms from data streams. <i>Progress in Artificial Intelligence</i> , 2014, 3, 15-28.	1.5	2
71	Nonlinear controller for bispectral index tracking: Robustness and on-line retuning. <i>Control Engineering Practice</i> , 2017, 58, 343-353.	3.2	2
72	Towards the control of depth of anaesthesia: Identification of patient variability. , 2007, , .		2

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73	Automatic Information Extraction from Gel Electrophoresis Images Using GEIAS. Lecture Notes in Computer Science, 2010, , 185-194.	1.0	2
74	Predictive adaptive control of unconsciousness - exploiting remifentanil as an accessible disturbance. , 2006, , .		1
75	Control of Depth of Anesthesia using MUSMAR - Exploring Electromyography and the Analgesic dose as Accessible Disturbances. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1574-7.	0.5	1
76	Merging PK/PD information in a minimally parameterized model of the NeuroMuscular Blockade. , 2010, 2010, 4602-5.		1
77	Contributions to the initialization of online identification algorithms for anaesthesia: The NeuroMuscular Blockade case study. , 2010, , .		1
78	Target mass control for uncertain compartmental systems. International Journal of Control, 2010, 83, 1387-1396.	1.2	1
79	Quantification of the multiplicative uncertainty in the linearized minimally parameterized parsimonious Wiener model for the neuromuscular blockade in closed-loop anesthesia. , 2013, , .		1
80	Improvement of the BIS reference tracking performance in the presence of parameters uncertainties. , 2013, , .		1
81	A nonlinear continuous-discrete filter with model parameter uncertainty and application to anesthesia. , 2013, , .		1
82	Optimal time for constant drug infusion initialization in neuromuscular blockade control. , 2014, , .		1
83	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
84	GALENO: Computer aided system for modeling, monitoring, and control in anesthesia. Advanced Control for Applications, 0, , e87.	0.8	1
85	A Simplified Control Approach for the Neuromuscular Blockade Level. Lecture Notes in Electrical Engineering, 2017, , 37-44.	0.3	1
86	Predictive Adaptive Control of Unconsciousness - Exploiting Remifentanil as an Accessible Disturbance. , 2006, , .		1
87	An Individualized Automatically Tuned TCI Strategy for Neuromuscular Blockade Control. Cybernetics and Systems, 2022, 53, 44-57.	1.6	1
88	Control of Individualized Drug Dosage Regimens Based on Sparse Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 273-277.	0.4	0
89	HMM based sensor fault detection in neuromuscular blockade control. , 2007, , .		0
90	Online individualized dose estimation. , 2009, , .		0

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91	A switching control strategy for improving drug infusion. International Journal of Control, 2009, 82, 2221-2234.	1.2	0
92	Clustering in Supervised Multi-model Adaptive Control Applied to Neuromuscular Blockade. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1000-1005.	0.4	0
93	A linear model for estimating propofol individualized dosage. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 337-342.	0.4	0
94	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
95	Online evaluation of a changes detection algorithm for depth of anesthesia signals. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 343-348.	0.4	0
96	A set-valued observer approach to multiple-model adaptive control of neuromuscular blockade. , 2012, , .		0
97	A simple PK/PD model identification procedure for controller design in anesthesia. , 2013, , .		0
98	Robustness of a new nonlinear positive controller for BIS tracking. , 2014, , .		0
99	NMB target level tracking via an optimization based control law. IFAC-PapersOnLine, 2015, 48, 413-417.	0.5	0
100	Improving TCI control for the automatic delivery of rocuronium. , 2020, , .		0
101	An intelligent drug delivery system for neuromuscular blockade in healthcare. , 2021, , .		0
102	Probabilistic Description of Model Set Response in Neuromuscular Blockade. Advances in Intelligent Systems and Computing, 2014, , 405-414.	0.5	0
103	Individualized control of the depth of anesthesia based on online identification and retuning. IFAC-PapersOnLine, 2021, 54, 43-48.	0.5	0