Pedro J Zufiria

List of Publications by Year
in descending order

61 papers	**962** citations	706676 **14** h-index
64 all docs	**64** docs citations	**64** times ranked

536525 **29** g-index
942 citing authors

#	Article	IF	Citations
1	Bus Headways Analysis for Anomaly Detection. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 18975-18988.	4.7	1
2	Port-Hamiltonian Modeling of Thermofluid Systems and Object-Oriented Implementation With Modelica I: Thermodynamic Part. IEEE Access, 2021, 9, 131496-131519.	2.6	2
3	Port-Hamiltonian Modeling of Multiphysics Systems and Object-Oriented Implementation With the Modelica Language. IEEE Access, 2020, 8, 105980-105996.	2.6	7
4	Rapid Multi-Dimensional Impact Assessment of Floods. Sustainability, 2020, 12, 4246.	1.6	9
5	A New Technique Based on Voronoi Tessellation to Assess the Space-Dependence of Categorical Variables. Entropy, 2019, 21, 774.	1.1	1
6	On the minimum number of general or dedicated controllers required for system controllability. Applied Mathematics and Computation, 2019, 355, 417-427.	1.4	1
7	Characterizing the Spatial Distribution of Geolocated Categorical Values. International Journal of Applied Physics and Mathematics, 2019, 9, 47-53.	0.3	1
8	Analysis of Basic Features in Dynamic Network Models. Entropy, 2018, 20, 681.	1.1	2
9	Identifying seasonal mobility profiles from anonymized and aggregated mobile phone data. Application in food security. PLoS ONE, 2018, 13, e0195714.	1.1	23
10	Generalized Lexicographic MultiObjective Combinatorial Optimization. Application to Cryptography. SIAM Journal on Optimization, 2017, 27, 2182-2201.	1.2	3
11	Entropy Characterization of Random Network Models. Entropy, 2017, 19, 321.	1.1	5
12	Characterization of Some Dynamic Network Models. Proceedings (mdpi), 2017, 2, .	0.2	0
13	Peer to Peer Energy Trading with Electric Vehicles. IEEE Intelligent Transportation Systems Magazine, 2016, 8, 33-44.	2.6	170
14	Algorithm 959. ACM Transactions on Mathematical Software, 2016, 42, 1-22.	1.6	4
15	Evolution models for dynamic networks. , 2015, , .		1
16	Controlling Systems with a Single Actuator. , 2015, , 1197-1202.		1
17	Mathematical Foundations for Efficient Structural Controllability and Observability Analysis of Complex Systems. Mathematical Problems in Engineering, 2014, 2014, 1-12.	0.6	4
18	The elliptic model for communication fluxes. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P04022.	0.9	3

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19	Fault isolation schemes for a class of continuous-time stochastic dynamical systems. Annual Reviews in Control, 2013, 37, 43-55.	4.4	1
20	Detection and Isolation of Simultaneous Additive and Parametric Faults in Nonlinear Stochastic Dynamical Systems. Mathematical Problems in Engineering, 2012, 2012, 1-17.	0.6	0
21	Fault Detection and Isolation on a Noisy Nonlinear Circuit. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1071-1076.	0.4	0
22	A mathematical framework for new fault detection schemes in nonlinear stochastic continuous-time dynamical systems. Applied Mathematics and Computation, 2012, 218, 11391-11403.	1.4	5
23	Cell Mapping Techniques for Tuning Dynamical Systems. , 2012, , 31-50.		4
24	Generating scale-free networks with adjustable clustering coefficient via random walks. , 2011, , .		21
25	Computational Schemes for Optimizing Domains of Attraction in Dynamical Systems. , 2011, , .		0
26	Fault Detection Schemes for Continuous-Time Stochastic Dynamical Systems. IEEE Transactions on Automatic Control, 2009, 54, 1820-1836.	3.6	27
27	Diagnosis of unknown parametric faults in non-linear stochastic dynamical systems. International Journal of Control, 2009, 82, 603-619.	1.2	13
28	A formulation for fault detection in stochastic continuous-time dynamical systems. International Journal of Computer Mathematics, 2009, 86, 1778-1797.	1.0	2
29	Estimating the Embedding Dimension Distribution of Time Series with SOMOS. Lecture Notes in Computer Science, 2009, , 1168-1175.	1.0	0
30	Dynamic behavior of DCT and DDT formulations for the Sanger neural network. Neurocomputing, 2007, 70, 2768-2774.	3.5	2
31	Design and comparison of adaptive power system stabilizers based on neural fuzzy networks and genetic algorithms. Neurocomputing, 2007, 70, 2902-2912.	3.5	55
32	A new approach for sizing stand alone photovoltaic systems based in neural networks. Solar Energy, 2005, 78, 313-319.	2.9	76
33	An application of the multilayer perceptron: Solar radiation maps in Spain. Solar Energy, 2005, 79, 523-530.	2.9	67
34	Analysis of the Sanger Hebbian Neural Network. Lecture Notes in Computer Science, 2005, , 9-16.	1.0	3
35	Global dynamics of a system governing an algorithm for regression with censored and non-censored data under general errors. Journal of Computational and Applied Mathematics, 2004, 166, 535-551.	1.1	2
36	Generalized neural networks for spectral analysis: dynamics and Liapunov functions. Neural Networks, 2004, 17, 233-245.	3.3	45

#	ARTICLE	IF	CITATIONS
37	Improved Optimal Control Methods Based Upon the Adjoining Cell Mapping Technique. Journal of Optimization Theory and Applications, 2003, 118, 657-680.	0.8	28
38	Differential-algebraic equations and singular perturbation methods in recurrent neural learning. Dynamical Systems, 2003, 18, 89-105.	0.2	10
39	On the discrete-time dynamics of the basic Hebbian neural network node. IEEE Transactions on Neural Networks, 2002, 13, 1342-1352.	4.8	82
40	Discretization of implicit ODEs for singular root-finding problems. Journal of Computational and Applied Mathematics, 2002, 140, 695-712.	1.1	11
41	On the role of singularities in Branin's method from dynamic and continuation perspectives. Applied Mathematics and Computation, 2002, 130, 593-618.	1.4	4
42	Generation of hourly irradiation synthetic series using the neural network multilayer perceptron. Solar Energy, 2002, 72, 441-446.	2.9	107
43	EM-Based Radial Basis Function Training with Partial Information. Lecture Notes in Computer Science, 2002, , 613-618.	1.0	1
44	Satellite data processing for meteorological nowcasting and very short range forecasting using neural networks. Intelligent Data Analysis, 2001, 5, 3-21.	0.4	3
45	Stability of Singular Equilibria in Quasilinear Implicit Differential Equations. Journal of Differential Equations, 2001, 171, 24-53.	1.1	14
46	Recurrent Neural Supervised Models for Generating Solar Radiation Synthetic Series. Journal of Intelligent and Robotic Systems: Theory and Applications, 2001, 31, 201-221.	2.0	43
47	Algorithms and Implementation Architectures for Hebbian Neural Networks. Lecture Notes in Computer Science, 2001, , 166-173.	1.0	3
48	Strong singularities and the continuous Newton method. , 2000, , 925-927.		3
49	Adaptive cellular integration of linearly implicit differential equations. Journal of Computational and Applied Mathematics, 1999, 111, 305-317.	1.1	6
50	Weak Singularities and the Continuous Newton Method. Journal of Mathematical Analysis and Applications, 1999, 236, 438-462.	0.5	13
51	Neural adaptive control of non-linear plants via a multiple inverse model approach. International Journal of Adaptive Control and Signal Processing, 1999, 13, 219-239.	2.3	7
52	Optimal control of non-linear systems through hybrid cell-mapping/artificial-neural-networks techniques. International Journal of Adaptive Control and Signal Processing, 1999, 13, 307-319.	2.3	9
53	Evaluation of Reinforcement Learning Autonomous Navigation Systems for a Nomad 200 Mobile Robot. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 309-314.	0.4	3
54	Two Modeling Approaches for Navigation Control of a Nomad 200 Mobile Robot. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 363-368.	0.4	1

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55	Video Sequence Compression via Supervised Training on Cellular Neural Networks. International Journal of Neural Systems, 1997, 08, 127-135.	3.2	1
56	Global Behavior of Branin's Method. , 1994, , 319-339.		0
57	Stability of controllers with on-line computations. , 1991, , 475-497.		0
58	Stability of controllers with on-line computations. Journal of Dynamical and Control Systems, 1991, 1, 151-175.	0.4	1
59	A Computational Method for Finding All the Roots of a Vector Function. Applied Mathematics and Computation, 1990, 35, 13-59.	1.4	16
60	On an application of dynamical systems theory to determine all the zeros of a vector function. Journal of Mathematical Analysis and Applications, 1990, 152, 269-295.	0.5	25
61	On a Class of Nonstandard Dynamical Systems: Singularity Issues. Control and Dynamic Systems, 1990, 34, 279-324.	0.1	7