Pasquale Palumbo

List of Publications by Year
in descending order

68	1,040	471509 17	434195 31
papers	citations	h-index	g-index

69	69	69	881
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Symbolic Control Design of an Artificial Pancreas for Type-2 Diabetes. IEEE Transactions on Control Systems Technology, 2022, 30, 2131-2146.	5.2	7
2	A short-term food intake model involving glucose, insulin and ghrelin. Discrete and Continuous Dynamical Systems - Series B, 2021, .	0.9	1
3	Optimal design of lock-down and reopening policies for early-stage epidemics through SIR-D models. Annual Reviews in Control, 2021, 51, 511-524.	7.9	11
4	The Double Phospho/Dephosphorylation Cycle as a Benchmark to Validate an Effective Taylor Series Method to Integrate Ordinary Differential Equations. Symmetry, 2021, 13, 1684.	2.2	1
5	Semiglobal Sampled-Data Dynamic Output Feedback Controller for the Glucoseâ€“Insulin System. IEEE Transactions on Control Systems Technology, 2020, 28, 16-32.	5.2	16
6	Optimal Impulsive Control With Application to Antiangiogenic Tumor Therapy. IEEE Transactions on Control Systems Technology, 2020, 28, 106-117.	5.2	33
7	Time Delays in a Genetic Positive-Feedback Circuit. , 2020, 4, 163-168.		7
8	Cubification of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e22" altimg="si2.svg"><mml:mrow><mml:mi>Ïƒ</mml:mi><mml:mi>Ï€</mml:mi></mml:mrow></mml:math>-SDE and exact moment equations. Systems and Control Letters, 2020, 136, 104602.	2.3	1
9	Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. IEEE Transactions on Automatic Control, 2020, 65, 3961-3976.	5.7	4
10	Mixture distributions in a stochastic gene expression model with delayed feedback: a WKB approximation approach. Journal of Mathematical Biology, 2020, 81, 343-367.	1.9	12
11	Editorial overview: Network analysis and experimental models for the understanding of multifactorial human diseases. Current Opinion in Biotechnology, 2020, 63, vi-viii.	6.6	0
12	On a stochastic approach to model the double phosphorylation/dephosphorylation cycle. Mathematics and Mechanics of Complex Systems, 2020, 8, 261-285.	0.9	4
13	Deterministic vs stochastic formulations and qualitative analysis of a recent tumour growth model. IFAC-PapersOnLine, 2020, 53, 16418-16423.	0.9	2
14	A Stochastic Optimal Regulator for a Class of Nonlinear Systems. Mathematical Problems in Engineering, 2019, 2019, 1-8.	1.1	0
15	Symbolic models approximating possibly unstable time-delay systems with application to the artificial pancreas. , 2019, , .		2
16	An Integrated Model Quantitatively Describing Metabolism, Growth and Cell Cycle in Budding Yeast. Communications in Computer and Information Science, 2018, , 165-180.	0.5	3
17	Modeling Biological Timing and Synchronization Mechanisms by Means of Interconnections of Stochastic Switches. , 2018, 2, 19-24.		2
18	Luenberger-Like Observers for Nonlinear Time-Delay Systems with Application to the Artificial Pancreas: The Attainment of Good Performance. IEEE Control Systems, 2017, 37, 33-49.	0.8	75

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19	Effective Control of Glycemia using a Simple Discrete-delay Model. IFAC-PapersOnLine, 2017, 50, 13526-13531.	0.9	2
20	On enzymatic reactions: The role of a feedback from the substrate. , 2017, , .		0
21	Glucose control with incomplete information. , 2016, , .		0
22	Carleman discretization of impulsive systems: application to the optimal control problem of anti-angiogenic tumor therapies. , 2016, , .		1
23	Cubification of nonlinear stochastic differential equations and approximate moments calculation of the Langevin Equation. , 2016, , .		1
24	Impact of negative feedback in metabolic noise propagation. IET Systems Biology, 2016, 10, 179-186.	1.5	25
25	A state predictor for continuous-time stochastic systems. Systems and Control Letters, 2016, 98, 37-43.	2.3	7
26	Whi5 phosphorylation embedded in the G1/S network dynamically controls critical cell size and cell fate. Nature Communications, 2016, 7, 11372.	12.8	35
27	Recent Results on Glucoseâ€“Insulin Predictions by Means of a State Observer for Time Delay Systems. Lecture Notes in Bioengineering, 2016, , 227-241.	0.4	2
28	Metabolic noise reduction for enzymatic reactions: The role of a negative feedback. , 2015, , .		5
29	Closed-loop control of tumor growth by means of anti-angiogenic administration. , 2015, , .		3
30	A Unifying Organ Model of Pancreatic Insulin Secretion. PLoS ONE, 2015, 10, e0142344.	2.5	12
31	Simulation of insulin regimen and glucose profiles in Type 1 diabetic patient. , 2014, , .		3
32	Modules Identification in Protein Structures: The Topological and Geometrical Solutions. Journal of Chemical Information and Modeling, 2014, 54, 159-168.	5.4	38
33	A Carleman discretization approach to filter nonlinear stochastic systems with sampled measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9534-9539.	0.4	3
34	DDE Models of the Glucose-Insulin System: A Useful Tool for the Artificial Pancreas. Springer Proceedings in Mathematics and Statistics, 2014, , 109-117.	0.2	3
35	Data-Driven Modeling of Diabetes Progression. Lecture Notes in Bioengineering, 2014, , 165-186.	0.4	3
36	DDE Model-Based Control of Glycemia via Sub-cutaneous Insulin Administration. Advances in Delays and Dynamics, 2014, , 229-240.	0.4	1

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37	The observer follower filter: A new approach to nonlinear suboptimal filtering. Automatica, 2013, 49, 548-553.	5.0	8
38	Mathematical modeling of the glucoseâ€“insulin system: A review. Mathematical Biosciences, 2013, 244, 69-81.	1.9	119
39	The Observer Follower Filter for stochastic differential systems with sampled measurements. , 2013, , .		1
40	An islet population model of pancreatic insulin production. , 2013, , .		3
41	Time-Delay Model-Based Control of the Glucoseâ€“Insulin System, by Means of a State Observer. European Journal of Control, 2012, 18, 591-606.	2.6	50
42	The range of time delay and the global stability of the equilibrium for an IVGTT model. Mathematical Biosciences, 2012, 235, 128-137.	1.9	30
43	Modeling rejection immunity. Theoretical Biology and Medical Modelling, 2012, 9, 18.	2.1	2
44	Cell growth and cell cycle in Saccharomyces cerevisiae: Basic regulatory design and proteinâ€“protein interaction network. Biotechnology Advances, 2012, 30, 52-72.	11.7	48
45	The state observer as a tool for the estimation of gene expression. Journal of Mathematical Analysis and Applications, 2012, 391, 382-396.	1.0	7
46	Memoryless Solution to the Infinite Horizon Optimal Control of LTI Systems with Delayed Input. , 2012, , .		0
47	A state observer approach to filter stochastic nonlinear differential systems. , 2011, , .		3
48	An islet population model of the endocrine pancreas. Journal of Mathematical Biology, 2010, 61, 171-205.	1.9	13
49	Identification of Regulatory Network Motifs from Gene Expression Data. Mathematical Modelling and Algorithms, 2010, 9, 233-245.	0.5	6
50	Quadratic Optimal control of linear systems with time-varying input delay. , 2010, , .		8
51	Representation of a Class of MIMO Systems via Internally Positive Realization. European Journal of Control, 2010, 16, 291-304.	2.6	28
52	Networks and circuits in cell regulation. Biochemical and Biophysical Research Communications, 2010, 396, 881-886.	2.1	6
53	The Carleman Approximation Approach to Solve a Stochastic Nonlinear Control Problem. IEEE Transactions on Automatic Control, 2010, 55, 976-982.	5.7	13
54	Discrete-time models for gene transcriptional regulation networks. , 2010, , .		0

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55	Observer-based identification of a Multi-Output Feedforward Loop from gene expression data. , 2009, , .		0
56	Robust closed-loop control of plasma glycemia: A discrete-delay model approach. Discrete and Continuous Dynamical Systems - Series B, 2009, 12, 455-468.	0.9	21
57	A general approach to the apparent permeability index. Journal of Pharmacokinetics and Pharmacodynamics, 2008, 35, 235-248.	1.8	32
58	Delay model of glucoseâ€“insulin systems: Global stability and oscillated solutions conditional on delays. Journal of Mathematical Analysis and Applications, 2008, 343, 996-1006.	1.0	20
59	Mathematical models of diabetes progression. American Journal of Physiology - Endocrinology and Metabolism, 2008, 295, E1462-E1479.	3.5	73
60	A Carleman approximation scheme for a stochastic optimal control problem in the continuous-time framework. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8027-8032.	0.4	0
61	Simultaneous system identification and channel estimation: A hybrid system approach. , 2007, , .		1
62	State Feedback Control of the Glucose-Insulin System. , 2007, , 241-252.		2
63	State space representation of a class of MIMO Systems via positive systems. , 2007, , .		15
64	Filtering of Stochastic Nonlinear Differential Systems via a Carleman Approximation Approach. IEEE Transactions on Automatic Control, 2007, 52, 2166-2172.	5.7	58
65	A discrete Single Delay Model for the Intra-Venous Glucose Tolerance Test. Theoretical Biology and Medical Modelling, 2007, 4, 35.	2.1	78
66	Qualitative behavior of a family of delay-differential models of the Glucose-Insulin system. Discrete and Continuous Dynamical Systems - Series B, 2007, 7, 399-424.	0.9	68
67	A Robust Approximation Scheme for the LQG Control of an Undamped Flexible Beam with a Tip Mass. European Journal of Control, 2006, 12, 635-651.	2.6	2
68	Selfâ€regulation in a stochastic model of chemical selfâ€replication. International Journal of Robust and Nonlinear Control, 0, , .	3.7	0