Filippo Cacace

List of Publications by Year
in descending order

105 papers	1,429 citations	430754 18 h-index	434063 31 g-index
107 all docs	107 docs citations	107 times ranked	896 citing authors

#	Article	IF	Citations
1	An observer for a class of nonlinear systems with time varying observation delay. Systems and Control Letters, 2010, 59, 305-312.	1.3	121
2	A New Approach to Design Interval Observers for Linear Systems. IEEE Transactions on Automatic Control, 2015, 60, 1665-1670.	3.6	106
3	A Chain Observer for Nonlinear Systems with Multiple Time-Varying Measurement Delays. SIAM Journal on Control and Optimization, 2014, 52, 1862-1885.	1.1	88
4	Integrating object-oriented data modelling with a rule-based programming paradigm. , 1990, , .		83
5	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.	1.0	75
6	Output feedback control of linear systems with input, state and output delays by chains of predictors. Automatica, 2017, 85, 455-461.	3.0	48
7	Stabilization of strict-feedback nonlinear systems with input delay using closed-loop predictors. International Journal of Robust and Nonlinear Control, 2016, 26, 3524-3540.	2.1	46
8	Seamless internetworking of WLANs and cellular networks: architecture and performance issues in a mobile IPv6 scenario. IEEE Personal Communications, 2005, 12, 73-80.	4.5	44
9	Managing mobility and adaptation in upcoming 802.21 enabled devices. , 2006, , .		38
10	Vertical handoff performance in heterogeneous networks. , 2004, , .		36
11	Distributed Kalman Filtering Over Sensor Networks With Unknown Random Link Failures. , 2018, 2, 587-592.		35
12	Optimal Impulsive Control With Application to Antiangiogenic Tumor Therapy. IEEE Transactions on Control Systems Technology, 2020, 28, 106-117.	3.2	33
13	Predictor-based control of linear systems with large and variable measurement delays. International Journal of Control, 2014, 87, 704-714.	1.2	31
14	Exponential stabilization of linear systems with time-varying delayed state feedback via partial spectrum assignment. Systems and Control Letters, 2014, 69, 47-52.	1.3	31
15	Optimal control of linear systems with large and variable input delays. Systems and Control Letters, 2016, 89, 1-7.	1.3	29
16	Asymptotically optimal consensus-based distributed filtering of continuous-time linear systems. Automatica, 2020, 122, 109189.	3.0	27
17	A New Approach to the Internally Positive Representation of Linear MIMO Systems. IEEE Transactions on Automatic Control, 2012, 57, 119-134.	3.6	25
18	Internally Positive Representation of a Class of Continuous Time Systems. IEEE Transactions on Automatic Control, 2012, 57, 3158-3163.	3.6	25

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19	Memoryless Approach to the LQ and LQG Problems With Variable Input Delay. IEEE Transactions on Automatic Control, 2016, 61, 216-221.	3.6	22
20	OpenCAPWAP: An open source CAPWAP implementation for the management and configuration of WiFi hot-spots. Computer Networks, 2009, 53, 217-230.	3.2	20
21	Closed-loop control of tumor growth by means of anti-angiogenic administration. Mathematical Biosciences and Engineering, 2018, 15, 827-839.	1.0	20
22	Analysis and Experimentation over Heterogeneous Wireless Networks. , 0, , .		18
23	A stability with optimality analysis of consensus-based distributed filters for discrete-time linear systems. Automatica, 2021, 129, 109589.	3.0	18
24	Topology-induced containment for general linear systems on weakly connected digraphs. Automatica, 2021, 131, 109734.	3.0	17
25	Mobility Management for VoIP on Heterogeneous Networks: Evaluation of Adaptive Schemes. IEEE Transactions on Mobile Computing, 2007, 6, 1035-1047.	3.9	16
26	An exponential observer with delay-dependent gain for a class of nonlinear systems with time-varying measurement delay. , 2012, , .		15
27	Stable Internally Positive Representations of Continuous Time Systems. IEEE Transactions on Automatic Control, 2014, 59, 1048-1053.	3.6	15
28	Feedback polynomial filtering and control of non-Gaussian linear time-varying systems. Systems and Control Letters, 2019, 123, 108-115.	1.3	15
29	Filtering Continuous-Time Linear Systems With Time-Varying Measurement Delay. IEEE Transactions on Automatic Control, 2015, 60, 1368-1373.	3.6	14
30	Feedback quadratic filtering. Automatica, 2017, 82, 158-164.	3.0	14
31	A survey of parallel execution strategies for transitive closure and logic programs. Distributed and Parallel Databases, 1993, 1, 337-382.	1.0	13
32	Stochastic Modeling of Expression Kinetics Identifies Messenger Half-Lives and Reveals Sequential Waves of Co-ordinated Transcription and Decay. PLoS Computational Biology, 2012, 8, e1002772.	1.5	12
33	Predictor-based control of stochastic systems with nonlinear diffusions and input delay. Automatica, 2019, 107, 43-51.	3.0	12
34	Delay identification for a class of nonlinear systems. International Journal of Control, 2016, 89, 2350-2359.	1.2	11
35	Kalman-like filtering with intermittent observations and non-Gaussian noise. IFAC-PapersOnLine, 2019, 52, 61-66.	0.5	11
36	An overview of parallel strategies for transitive closure on algebraic machines. Lecture Notes in Computer Science, 1991, , 44-62.	1.0	11

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37	An efficient approach to the design of observers for continuous-time systems with discrete-time measurements. , 2011, , .		10
38	A CAPWAP-based solution for frequency planning in large scale networks of WiFi Hot-Spots. Computer Communications, 2011, 34, 1283-1293.	3.1	10
39	Cooperative Filtering with Absolute and Relative Measurements. , 2018, , .		10
40	LQ Non-Gaussian Regulator With Markovian Control. , 2019, 3, 679-684.		9
41	LTV stochastic systems stabilization with large and variable input delay. Automatica, 2021, 123, 109305.	3.0	9
42	Filtering linear systems with large time-varying measurement delays. Automatica, 2022, 136, 110084.	3.0	9
43	Adaptive streaming on heterogeneous networks. , 2005, , .		8
44	The observer follower filter: A new approach to nonlinear suboptimal filtering. Automatica, 2013, 49, 548-553.	3.0	8
45	Joint State Estimation and Delay Identification for Nonlinear Systems With Delayed Measurements. IEEE Transactions on Automatic Control, 2017, 62, 4848-4854.	3.6	8
46	Filtering of systems with nonlinear measurements with an application to target tracking. International Journal of Robust and Nonlinear Control, 2019, 29, 4956-4970.	2.1	8
47	An Enhanced Observer for Nonlinear Systems With Time-Varying Measurement Delays. IEEE Transactions on Automatic Control, 2021, 66, 5968-5973.	3.6	8
48	Designing and prototyping data-intensive applications in the Logres and Algres programming environment. IEEE Transactions on Software Engineering, 1992, 18, 534-546.	4.3	7
49	Observer-based techniques for the identification and analysis of avascular tumor growth. Mathematical Biosciences, 2011, 234, 147-153.	0.9	7
50	The state observer as a tool for the estimation of gene expression. Journal of Mathematical Analysis and Applications, 2012, 391, 382-396.	0.5	7
51	A state predictor for continuous-time stochastic systems. Systems and Control Letters, 2016, 98, 37-43.	1.3	7
52	Observability through delayed measurements: a new approach to state observers design. International Journal of Control, 2010, 83, 2395-2410.	1.2	6
53	State Feedback Stabilization of Linear Systems with Unknown Input Time Delay. IFAC-PapersOnLine, 2017, 50, 1245-1250.	0.5	6
54	The Polynomial Approach to the LQ non-Gaussian Regulator Problem through Output Injection. IEEE Transactions on Automatic Control, 2018, , 1-1.	3.6	6

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55	Predictor-Based Output-Feedback Control of Linear Stochastic Systems With Large I/O Delays. IEEE Transactions on Automatic Control, 2021, 66, 307-313.	3.6	6
56	Quadratic filtering of non-Gaussian systems with intermittent observations. , 2013, , .		5
57	A chain approach for state observation of a class of MIMO nonlinear systems with time-varying output delays. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 546-551.	0.4	5
58	On parameter estimation of Heston's stochastic volatility model: a polynomial filtering method. Decisions in Economics and Finance, 2019, 42, 503-525.	1.1	5
59	A Reactive Approach to QoS Provisioning in IEEE 802.11e WLANs. , 2008, , .		4
60	An Improved Approach to the LQ non-Gaussian Regulator Problem. IFAC-PapersOnLine, 2017, 50, 11808-11813.	0.5	4
61	Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. IEEE Transactions on Automatic Control, 2020, 65, 3961-3976.	3.6	4
62	Optimal linear and quadratic estimators for tracking from distance measurements. Systems and Control Letters, 2020, 139, 104674.	1.3	4
63	QoS Provisioning in IEEE 802.11e WLANs through Reactive Monitoring. , 2007, , .		3
64	A state observer approach to filter stochastic nonlinear differential systems. , 2011, , .		3
65	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
66	A new method for the simultaneous estimation of state and delay in time delay systems. , 2015, , .		3
67	Optimal linear filter for a class of nonlinear stochastic differential systems with discrete measurements. , 2017, , .		3
68	Output transformations and separation results for feedback linearisable delay systems. International Journal of Control, 2018, 91, 797-812.	1.2	3
69	Representation on a class of polynomial MIMO systems via positive realizations. , 2009, , .		3
70	A new approach to nonlinear filtering via a mixed state observer and polynomial scheme. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4477-4482.	0.4	2
71	Optimal reduced-order quadratic solution for the non-Gaussian finite-horizon regulator problem. , 2013, , .		2
72	Quadratic Filtering of non-Gaussian Linear Systems with Random Observation Matrices. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2370-2375.	0.4	2

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73	A state observer for nonlinear systems with large and variable measurement delays. , 2015, , .		2
74	White Noise Solution for Nonlinear Stochastic Systems. IFAC-PapersOnLine, 2016, 49, 327-332.	0.5	2
75	Comments on â€œDistributed information-weighted Kalman consensus filter for sensor networksâ€. Automatica, 2019, 109, 108552.	3.0	2
76	Distributed infiniteâ€horizon optimal control of continuousâ€time linear systems over network. International Journal of Robust and Nonlinear Control, 2021, 31, 2082-2096.	2.1	2
77	Dynamic Configuration of MAC QoS Mechanisms in 802.11 Access Networks. Lecture Notes in Computer Science, 2006, , 542-553.	1.0	2
78	The sol object-oriented database language. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 1992, , 105-127.	0.2	1
79	OpenCAPWAP: an open-source CAPWAP implementation for management and QoS support. , 2008, , .		1
80	A method for Internally Positive Realization of continuous time systems. , 2010, , .		1
81	The roots of unity and a direct method for the computation of stable Internal Positive Representations of linear systems. , 2011, , .		1
82	The Observer Follower Filter for stochastic differential systems with sampled measurements. , 2013, , .		1
83	Partial Spectrum Assignment for Systems with Delayed State Feedback. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 18-23.	0.4	1
84	Quadratic filtering for non-Gaussian and not asymptotically stable linear discrete-time systems. , 2014, , .		1
85	Remarks on â€œDistributed synchronization under uncertainty: A fuzzy approachâ€. Fuzzy Sets and Systems, 2014, 235, 101-103.	1.6	1
86	A new filtering approach for continuous-time linear systems with delayed measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 3745-3750.	0.4	1
87	Carleman discretization of impulsive systems: application to the optimal control problem of anti-angiogenic tumor therapies. , 2016, , .		1
88	Karpelevich Theorem and the positive realization of matrices. , 2019, , .		1
89	Filtering discrete-time systems with multiplicative noise in L2 spaces with applications. , 2021, , 1-1.		1
90	Advanced Relational Programming. , 1996, , .		1

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91	The LOGRES prototype. SIGMOD Record, 1993, 22, 550-551.	0.7	0
92	Set-Oriented retrieval of complex objects in inheritance hierarchies. Computing (Vienna/New York), 1995, 55, 55-73.	3.2	0
93	Admission control of VoIP calls in EDCA WLANs: Analysis and experimentation. , 2008, , .		0
94	Observer-based identification of a Multi-Output Feedforward Loop from gene expression data. , 2009, , .		0
95	Discrete-time models for gene transcriptional regulation networks. , 2010, , .		0
96	Discussion on â€œEstimation of linear positive systems with unknown time-varying delaysâ€• European Journal of Control, 2013, 19, 188-189.	1.6	0
97	Filtering of nonlinear systems with sampled noisy data by output injection. , 2013, , .		0
98	A Positive Observer for Linear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5357-5362.	0.4	0
99	The feedback theorem for sub-optimal filters. , 2016, , .		0
100	LQ non-Gaussian Control with I/O packet losses. , 2020, , .		0
101	Management, Monitoring and QoS in Multi-cell Centralized WLANs. , 2010, , 197-229.		0
102	Management, Monitoring and QoS in Multi-cell Centralized WLANs. , 2013, , 177-209.		0
103	Asymptotically Optimal Distributed Filtering of Continuous-Time Linear Systems. IFAC-PapersOnLine, 2020, 53, 3242-3247.	0.5	0
104	Control of Flexible Euler-Bernoulli Beam with Input/Output Delay and Stochastic Disturbances. IFAC-PapersOnLine, 2020, 53, 7593-7598.	0.5	0
105	In-Silico Prediction of Oral Drug Bioavailability: A multi-boluses approach. Medical Engineering and Physics, 2021, 98, 140-150.	0.8	0