Salvatore Monaco

List of Publications by Year
in descending order

118 papers	2,322 citations	279487 23 h-index	253896 43 g-index
119 all docs	119 docs citations	119 times ranked	905 citing authors

#	Article	IF	Citations
1	Nonlinear decoupling via feedback: A differential geometric approach. IEEE Transactions on Automatic Control, 1981, 26, 331-345.	3.6	523
2	Zero dynamics of sampled nonlinear systems. Systems and Control Letters, 1988, 11, 229-234.	1.3	115
3	On the observer design in discrete-time. Systems and Control Letters, 2003, 49, 255-265.	1.3	84
4	Advanced Tools for Nonlinear Sampled-Data Systemsâ€™ Analysis and Control. European Journal of Control, 2007, 13, 221-241.	1.6	74
5	The immersion under feedback of a multidimensional discrete-time non-linear system into a linear system. International Journal of Control, 1983, 38, 245-261.	1.2	68
6	Sampled-Data Stabilization; A PBC Approach. IEEE Transactions on Automatic Control, 2011, 56, 907-912.	3.6	62
7	Asymptotic properties of incrementally stable systems. IEEE Transactions on Automatic Control, 1996, 41, 721-723.	3.6	57
8	Locally (f,g) invariant distributions. Systems and Control Letters, 1981, 1, 12-15.	1.3	56
9	On regulation under sampling. IEEE Transactions on Automatic Control, 1997, 42, 864-868.	3.6	54
10	Nonlinear regulation for a class of discrete-time systems. Systems and Control Letters, 1993, 20, 57-65.	1.3	53
11	Invariant distributions for discrete-time nonlinear systems. Systems and Control Letters, 1984, 5, 191-196.	1.3	45
12	From Chronological Calculus to Exponential Representations of Continuous and Discrete-Time Dynamics: A Lie-Algebraic Approach. IEEE Transactions on Automatic Control, 2007, 52, 2227-2241.	3.6	44
13	Nonlinear average passivity and stabilizing controllers in discrete time. Systems and Control Letters, 2011, 60, 431-439.	1.3	41
14	Quadratic forms and approximate feed back linearization in discrete time. International Journal of Control, 1997, 67, 567-586.	1.2	38
15	Backstepping Control Under Multi-Rate Sampling. IEEE Transactions on Automatic Control, 2016, 61, 1208-1222.	3.6	37
16	Nonlinear Autopilot Design for an Asymmetric Missile Using Robust Backstepping Control. Journal of Guidance, Control, and Dynamics, 2014, 37, 1462-1476.	1.6	36
17	Sampled-Data Stabilization of Nonlinear Dynamics With Input Delays Through Immersion and Invariance. IEEE Transactions on Automatic Control, 2017, 62, 2561-2567.	3.6	33
18	Nonlinear discrete-time control of systems with a Naimarkâ€“Sacker bifurcation. Systems and Control Letters, 2001, 44, 245-258.	1.3	32

#	ARTICLE	IF	CITATIONS
19	Canonical observer forms for multi-output systems up to coordinate and output transformations in discrete time. Automatica, 2009, 45, 2483-2490.	3.0	31
20	On multi-consensus and almost equitable graph partitions. Automatica, 2019, 103, 53-61.	3.0	30
21	Kinetics of photoinduced matter transport driven by intensity and polarization in thin films containing azobenzene. Physical Review B, 2012, 86, .	1.1	27
22	On the discrete-time normal form. IEEE Transactions on Automatic Control, 1998, 43, 1654-1658.	3.6	25
23	The weighted incremental norm approach: from linear to nonlinear Hâˆž control. Automatica, 2001, 37, 1585-1592.	3.0	25
24	Functional expansions for nonlinear discrete-time systems. Mathematical Systems Theory, 1988, 21, 235-254.	0.5	24
25	Immersion and invariance stabilization of strict-feedback dynamics under sampling. Automatica, 2017, 76, 78-86.	3.0	24
26	On the immersion of a discrete-time polynomial analytic system into a polynomial affine one. Systems and Control Letters, 1983, 3, 83-90.	1.3	23
27	Discrete-time approximated linearization of SISO systems under output feedback. IEEE Transactions on Automatic Control, 1999, 44, 1729-1733.	3.6	23
28	A link between input-output stability and Lyapunov stability. Systems and Control Letters, 1996, 27, 243-248.	1.3	22
29	â€œGalileo Galileiâ€•(GG) a small satellite to test the equivalence principle of Galileo, Newton and Einstein. Experimental Astronomy, 2009, 23, 689-710.	1.6	22
30	Stabilization of Discrete Port-Hamiltonian Dynamics via Interconnection and Damping Assignment. , 2021, 5, 103-108.		22
31	Distribution of major and trace elements in La Luna Formation, Southwestern Venezuelan Basin. Organic Geochemistry, 2002, 33, 1593-1608.	0.9	21
32	From passivity under sampling to a new discrete-time passivity concept. , 2008, , .		21
33	Lyapunov-Based Design of a Distributed Wardrop Load-Balancing Algorithm With Application to Software-Defined Networking. IEEE Transactions on Control Systems Technology, 2019, 27, 1924-1936.	3.2	20
34	Normal forms and approximated feedback linearization in discrete time. Systems and Control Letters, 2006, 55, 71-80.	1.3	18
35	IDA-PBC under sampling for port-controlled hamiltonian systems. , 2010, , .		18
36	Topology-induced containment for general linear systems on weakly connected digraphs. Automatica, 2021, 131, 109734.	3.0	17

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37	Multirate Sampling and Zero Dynamics: from linear to nonlinear. , 1991, , 200-213.		17
38	Cluster partitioning of heterogeneous multi-agent systems. Automatica, 2022, 138, 110136.	3.0	17
39	Evaluation of a proposed test of the weak equivalence principle using Earth-orbiting bodies in high-speed co-rotation: re-establishing the physical bases. Classical and Quantum Gravity, 1999, 16, 1463-1470.	1.5	16
40	Feedforwarding Under Sampling. IEEE Transactions on Automatic Control, 2019, 64, 4668-4675.	3.6	16
41	OnHâˆž-control of discrete-time nonlinear systems. International Journal of Robust and Nonlinear Control, 1996, 6, 633-643.	2.1	15
42	On halo orbits spacecraft stabilization. Acta Astronautica, 1996, 38, 903-925.	1.7	15
43	Toward a mobile autonomous robotic system for Mars exploration. Planetary and Space Science, 2004, 52, 23-30.	0.9	13
44	Nonlinear port controlled Hamiltonian systems under sampling. , 2009, , .		13
45	Multi-agent quality of experience control. International Journal of Control, Automation and Systems, 2017, 15, 892-904.	1.6	13
46	Sampled-Data Reduction of Nonlinear Input-Delayed Dynamics. , 2017, 1, 116-121.		13
47	Discrete port-controlled Hamiltonian dynamics and average passivation. , 2019, , .		13
48	On the realization of nonlinear discrete-time systems. Systems and Control Letters, 1984, 5, 145-152.	1.3	12
49	Nonlinear discrete-time systems with delayed control: A reduction. Systems and Control Letters, 2018, 114, 31-37.	1.3	12
50	Finite Volterra-series realizations and input-output approximations of non-linear discrete-time systems. International Journal of Control, 1987, 45, 1771-1787.	1.2	11
51	First Steps in the FTU Migration Towards a Modular and Distributed Real-Time Control Architecture Based on MARTe. IEEE Transactions on Nuclear Science, 2011, 58, 1778-1783.	1.2	11
52	Analysis and Control of Nonlinear Singularly Perturbed Systems under Sampling1 1The first part of this work concerning the discretization of NLSP systems was partially presented in the Ph.D. dissertation of N. Pantalos. Control and Dynamic Systems, 1996, , 203-246.	0.1	10
53	Non-linear non-interacting control with stability in discrete-time: A geometric framework. International Journal of Control, 2002, 75, 11-22.	1.2	10
54	On the Exact Steering of Finite Sampled Nonlinear Dynamics with Input Delaysâˆ—âˆ—This work was supported by the Italian Ministry of Education, Research and University, namely by the PLATINO PON project (www.progettoplatino.it), under Grant Agreement no. PON01 01007.. IFAC-PapersOnLine, 2015, 48, 674-679.	0.5	10

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55	Lyapunov design under sampling for a synchronous machine. , 2009, , .		9
56	Digital stabilization of delayed-input strict-feedforward dynamics. , 2012, , .		9
57	A Q-Learning based approach to Quality of Experience control in cognitive Future Internet networks. , 2015, , .		9
58	On the differential/difference representation of sampled dynamics. , 0, , .		8
59	Forwarding stabilization in discrete time. Automatica, 2019, 109, 108532.	3.0	8
60	On the control of regularly e-perturbed nonlinear systems. International Journal of Control, 1994, 59, 1255-1279.	1.2	7
61	Lyapunov stabilization of discrete-time feedforward dynamics. , 2017, , .		7
62	Gradient and Hamiltonian dynamics under sampling. IFAC-PapersOnLine, 2019, 52, 472-477.	0.5	7
63	Nonlinear Hamiltonian Systems Under Sampling. IEEE Transactions on Automatic Control, 2022, 67, 4598-4613.	3.6	7
64	Stabilization of feedforward discrete-time dynamics through immersion and invariance. , 2016, , .		6
65	Functional output Îµ-controllability for linear systems on Hilbert spaces. Systems and Control Letters, 1983, 2, 313-320.	1.3	5
66	Average passivity for discrete-time and sampled-data linear systems. , 2010, , .		5
67	Sampled-data redesign of stabilizing feedback. , 2010, , .		5
68	Nonlinear optimal stabilizing control in discrete time. , 2012, , .		5
69	A multi-agent reinforcement learning based approach to Quality of Experience control in Future Internet networks. , 2015, , .		5
70	A reinforcement learning approach for QoS/QoE model identification. , 2015, , .		5
71	Immersion and invariance stabilization of nonlinear discrete-time dynamics with delays. , 2015, , .		5
72	Multi-rate sampled-data stabilization of a class of nonlinear systems. , 2015, , .		5

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73	Distributed Control in Virtualized Networks. Procedia Computer Science, 2015, 56, 276-283.	1.2	5
74	Non-linear non-interacting control with stability in discrete time: a dynamic solution. International Journal of Control, 2005, 78, 443-459.	1.2	4
75	Linearization by Output Injection under Approximate Sampling. European Journal of Control, 2009, 15, 205-217.	1.6	4
76	Adaptive inverse control using kernel identification. , 2012, , .		4
77	A control approach for plasma density in tokamak machines. Fusion Engineering and Design, 2013, 88, 1097-1100.	1.0	4
78	Digital stabilization of strict feedback dynamics through immersion and invarianceâˆ—âˆ—This work is supported by a public grant overseen by the French National research Agency (ANR) as part of the Investissement d'Avenir program, through the â€œiCODEâ€•project funded by the IDEX Paris-Saclay, ANR-11IDEX-0003-02". IFAC-PapersOnLine, 2015, 48, 1074-1079.	0.5	4
79	Further results on sampled-data stabilization of time-delay systems * *This work was partially supported by a CNRS-ST2I International Scientific Project - PICS - for cooperation between France and Italy. Mattia Mattioni thanks the UniversitÃ© Franco-Italienne/UniversitÃ Italo-Francese (UFI/UIF) for supporting his mobility from France to Italy within his PhD program.. IFAC-PapersOnLine, 2017, 50, 14350-14355.	0.5	4
80	IDA-PBC for LTI Dynamics Under Input Delays: A Reduction Approach. , 2021, 5, 1465-1470.		4
81	Immersion and Invariance in delayed input sampled-data stabilization. , 2015, , .		3
82	Sampled-data stabilisation of a class of state-delayed nonlinear dynamics. , 2015, , .		3
83	Robust Nonlinear Attitude Stabilization of a Spacecraft through Digital Implementation of an Immersion & Invariance Stabilizer11This work was supported by the Italian project PLATINO (Grant) Tj ETQq1 1 0.784314 rg BT /Overl	0.5	3
84	Sampled-data stabilization of feedforward dynamics with Lyapunov cross-term. , 2016, , .		3
85	Reduction-based stabilization of time-delay nonlinear dynamics. , 2018, , .		3
86	Controller and Observer Normal Forms in Discrete-Time. , 2008, , 377-396.		3
87	Digital stabilization of finite sampled nonlinear dynamics with delays: The unicycle example. , 2013, , .		3
88	Sampled-data tracking under model predictive control and multi-rate planning. IFAC-PapersOnLine, 2020, 53, 3620-3625.	0.5	3
89	Station-Keeping of L2 Halo Orbits Under Sampled-Data Model Predictive Control. Journal of Guidance, Control, and Dynamics, 2022, 45, 1337-1346.	1.6	3
90	Quaternion-Based Attitude Stabilization via Discrete-Time IDA-PBC. , 2022, 6, 2665-2670.		3

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91	Some results on the controllability of perturbed linear systems on Hilbert spaces. Systems and Control Letters, 1981, 1, 140-147.	1.3	2
92	Discrete-time versus hybrid systems. , 0, , .		2
93	Nonlinear Robust Autopilot for Rolling and Lateral Motions of an Aerodynamic Missile. , 2012, , .		2
94	Robust backstepping control of missile lateral and rolling motions in the presence of unmatched uncertainties. , 2012, , .		2
95	Stabilization of nonlinear discrete-time dynamics in strict-feedforward form. , 2013, , .		2
96	On optimality of passivity based controllers in discrete-time. Systems and Control Letters, 2015, 75, 117-123.	1.3	2
97	On partially minimum phase systems and nonlinear sampled-data control. , 2017, , .		2
98	On the Zero-Dynamics of a Class of Hybrid LTI Systems: A Geometric Approach. , 2019, 3, 703-708.		2
99	On partially minimum-phase systems and disturbance decoupling with stability. Nonlinear Dynamics, 2019, 97, 583-598.	2.7	2
100	On unconstrained MPC through multirate sampling. IFAC-PapersOnLine, 2019, 52, 388-393.	0.5	2
101	On feedback passivation under sampling. , 2021, , .		2
102	Approximate Transverse Feedback Linearization Under Digital Control. , 2022, 6, 13-18.		2
103	Reduction-based stabilization of nonlinear discrete-time systems through delayed state measurements. IFAC-PapersOnLine, 2020, 53, 5851-5856.	0.5	2
104	Authors' reply to Comments on 'On the discrete time normal form'. IEEE Transactions on Automatic Control, 2001, 45, 995.	3.6	1
105	Accessibility under multirate control for nilpotent lie algebra. , 2007, , .		1
106	Input-state matching under piecewise constant control for systems on matrix Lie groups. , 2010, , .		1
107	Nonlinear optimal stabilizing control under sampling. , 2012, , .		1
108	Future internet architecture: Control-based perspectives related to Quality of Experience (QoE) management. , 2015, , .		1

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109	Reduction of Discrete-Time Two-Channel Delayed Systems. , 2018, 2, 339-344.		1
110	Interconnection through u-average passivity in discrete time. , 2019, , .		1
111	Adaptive stabilization of discrete-time strict-feedback dynamics. , 1999, , .		1
112	Digital path-following for a car-like robot. IFAC-PapersOnLine, 2021, 54, 174-179.	0.5	1
113	Structure theory of state-affine systems. Journal of the Franklin Institute, 1977, 303, 189-199.	1.9	0
114	Nonlinear Torque Control for High Power Induction Motors with Digital Implementation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9905-9910.	0.4	0
115	Approximate transverse feedback linearization under digital control. , 2021, , .		0
116	IDA-PBC for LTI dynamics under input delays: a reduction approach. , 2021, , .		0
117	Nonlinear Sampled-Data Stabilization with Delays. Advances in Delays and Dynamics, 2019, , 299-315.	0.4	0
118	On stable right-inversion of non-minimum-phase systems. , 2020, , .		0