Mauro Franceschelli

List of Publications by Year
in descending order

74 papers	1,077 citations	623734 14 h-index	552781 26 g-index
74 all docs	74 docs citations	74 times ranked	805 citing authors

#	Article	IF	Citations
1	Dynamic Min and Max Consensus and Size Estimation of Anonymous Multiagent Networks. IEEE Transactions on Automatic Control, 2023, 68, 202-213.	5.7	13
2	Dynamic Resilient Containment Control in Multirobot Systems. IEEE Transactions on Robotics, 2022, 38, 57-70.	10.3	14
3	Resilient Constrained Optimization in Multi-Agent Systems With Improved Guarantee on Approximation Bounds. , 2022, 6, 2659-2664.		3
4	Discrete-Time Dynamic Consensus on the Max Value. Lecture Notes in Control and Information Sciences - Proceedings, 2022, , 367-383.	0.1	1
5	Distributed Mode Computation in Open Multi-Agent Systems. , 2022, 6, 3481-3486.		3
6	Secure rendezvous and static containment in multi-agent systems with adversarial intruders. Automatica, 2022, 143, 110456.	5.0	4
7	Multi-Agent Coordination of Thermostatically Controlled Loads by Smart Power Sockets for Electric Demand Side Management. IEEE Transactions on Control Systems Technology, 2021, 29, 731-743.	5.2	16
8	Sliding Mode-Based Robustification of Consensus and Distributed Optimization Control Protocols. IEEE Transactions on Automatic Control, 2021, 66, 1207-1214.	5.7	16
9	Stability of Open Multiagent Systems and Applications to Dynamic Consensus. IEEE Transactions on Automatic Control, 2021, 66, 2326-2331.	5.7	20
10	Distributed Fiedler Vector Estimation With Application to Desynchronization of Harmonic Oscillator Networks. , 2021, 5, 659-664.		4
11	A Distributed Optimization and Control Framework for a Network of Constraint Coupled Residential BESSs. , 2021, , .		2
12	A Discrete Event Formulation for Multi-Robot Collision Avoidance on Pre-planned Trajectories. IEEE Access, 2020, , 1-1.	4.2	5
13	A nonlinear Perronâ€"Frobenius approach for stability and consensus of discrete-time multi-agent systems. Automatica, 2020, 118, 109025.	5.0	7
14	Delta modulation (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline") Tj ETQq0 0 0 rgBT /Overlock 10 Tf control technique. Control Engineering Practice, 2019, 92, 104129.	5.5	5
15	Dynamic Consensus on the Median Value in Open Multi-Agent Systems. , 2019, , .		10
16	Robust Containment Control in Multi-Agent Systems with Common Coordinate Frames and Bearing Angle Measurements. , 2019, , .		2
17	A Duality-Based Approach for Distributed Minâ€"Max Optimization. IEEE Transactions on Automatic Control, 2019, 64, 2559-2566.	5.7	17
18	Multi-stage discrete time and randomized dynamic average consensus. Automatica, 2019, 99, 69-81.	5.0	15

#	Article	IF	Citations
19	Lyapunov-Free Analysis for Consensus of Nonlinear Discrete-Time Multi-Agent Systems. , 2018, , .		2
20	Proportional Dynamic Consensus in Open Multi-Agent Systems. , 2018, , .		16
21	VIRTUALENERGY: A project for testing ICT for virtual energy management. , 2018, , .		2
22	A Heuristic approach for Online Distributed optimization of Multi-Agent Networks of Smart Sockets and Thermostatically Controlled Loads based on Dynamic Average Consensus. , 2018, , .		8
23	High Accuracy Sigma-Delta Modulator implementations via Suboptimal Quasi-Sliding Mode Control. , 2018, , .		1
24	Finite-Time Consensus on the Median Value With Robustness Properties. IEEE Transactions on Automatic Control, 2017, 62, 1652-1667.	5.7	60
25	Retaining Connectivity In Mobile Communication Mesh Networks. IFAC-PapersOnLine, 2017, 50, 800-807.	0.9	1
26	Gossip based asynchronous and randomized distributed task assignment with guaranteed performance on heterogeneous networks. Nonlinear Analysis: Hybrid Systems, 2017, 26, 292-306.	3.5	3
27	Robust distributed consensus on the median value for networks of heterogeneously perturbed agents. , 2016, , .		5
28	Multi-stage discrete time dynamic average consensus. , 2016, , .		7
29	A duality-based approach for distributed min-max optimization with application to demand side management. , 2016, , .		9
30	Coordination of electric thermal systems for distributed demand-side management: A gossip-based cooperative approach. , 2016, , .		9
31	Integral sliding modes for the robustification of consensus-based multi-agent based systems. , 2016, , .		8
32	A discontinuous algorithm for distributed convex optimization. , 2016, , .		8
33	Deployment of Applications in Wireless Sensor Networks: A Gossip-Based Lifetime Maximization Approach. IEEE Transactions on Control Systems Technology, 2016, 24, 1828-1836.	5.2	10
34	Simulation Study on the Convergence Time of a Discrete Consensus Algorithm for Distributed Task Assignment. , 2015, , .		1
35	Distributed Task Assignment Based on Gossip with Guaranteed Performance on Heterogeneous Networks**The research leading to these results has received funding from Region Sardinia, LR 7/2007 (call 2010) under project SIAR (CRP24709) and from Italian grant SIR â€œScienti_c Independence of young Researchersâ€; project CoNetDomeSys, code RBSI14OF6H, funded by the Italian Ministry of Research and Education (MIUR).. IFAC-PapersOnLine, 2015, 48, 218-223.	0.9	1
36	Fast discrete consensus based on gossip for makespan minimization in networked systems. Automatica, 2015, 56, 60-69.	5.0	12

#	Article	IF	Citations
37	Finite-Time Consensus With Disturbance Rejection by Discontinuous Local Interactions in Directed Graphs. IEEE Transactions on Automatic Control, 2015, 60, 1133-1138.	5.7	98
38	Consensus in multi-agent systems with second-order dynamics and non-periodic sampled-data exchange. , 2014, , .		6
39	Consensus in multi-agent systems with non-periodic sampled-data exchange and uncertain network topology. , 2014, , .		1
40	Finite-time consensus on the median value by discontinuous control. , 2014, , .		19
41	Gossip-Based Centroid and Common Reference Frame Estimation in Multiagent Systems. IEEE Transactions on Robotics, 2014, 30, 524-531.	10.3	20
42	Recent advances in sliding-mode based consensus strategies. , 2014, , .		15
43	Fast Discrete Consensus Based on Gossip for Makespan Optimization in Networked Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7418-7423.	0.4	0
44	A consensus algorithm for common reference frame estimation in networked multi-agent systems. , 2014, , .		3
45	Finite-time consensus for switching network topologies with disturbances. Nonlinear Analysis: Hybrid Systems, 2013, 10, 83-93.	3.5	50
46	Consensus of second-order multi-agent systems with time delays and slow switching topology. , 2013, , .		5
47	Gossip algorithms for heterogeneous multi-vehicle routing problems. Nonlinear Analysis: Hybrid Systems, 2013, 10, 156-174.	3.5	39
48	Decentralized estimation of Laplacian eigenvalues in multi-agent systems. Automatica, 2013, 49, 1031-1036.	5.0	117
49	Finite-time consensus for a network of perturbed double integrators by second-order sliding mode technique. , 2013, , .		22
50	Finite-time consensus with disturbance attenuation for directed switching network topologies by discontinuous local interactions. , 2013, , .		8
51	Discrete consensus in networks with constrained capacity. , 2013, , .		15
52	Consensus on the Average in Arbitrary Directed Network Topologies with Time-Delays*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 342-347.	0.4	1
53	Decentralized centroid estimation for multi-agent systems in absence of a common reference frame: A convergence analysis. , 2012, , .		6
54	A decentralized lifetime maximization algorithm for distributed applications in Wireless Sensor Networks. , 2012, , .		8

#	Article	IF	Citations
55	A Gossip Algorithm for Heterogeneous Multi-Vehicle Routing Problems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 325-332.	0.4	2
56	Finite-Time Consensus based Clock Synchronization by Discontinuous Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 172-177.	0.4	2
57	A Gossip Based Heuristic Algorithm for Heterogeneous Multi-Vehicle Routing Problems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 73-78.	0.4	1
58	Online distributed synchronizability check for networks of interconnected systems. , 2012, , .		0
59	Robust common reference estimation and formation control for multi-agent systems. , 2012, , .		1
60	Distributed Averaging in Sensor Networks Based on Broadcast Gossip Algorithms. IEEE Sensors Journal, 2011, 11, 808-817.	4.7	67
61	Quantized consensus in Hamiltonian graphs. Automatica, 2011, 47, 2495-2503.	5.0	20
62	Robust reconstruction of the discrete state for a class of nonlinear uncertain switched systems. Nonlinear Analysis: Hybrid Systems, 2011, 5, 220-232.	3.5	25
63	Observability and controllability verification in multi-agent systems through decentralized Laplacian spectrum estimation. , 2010, , .		17
64	On agreement problems with gossip algorithms in absence of common reference frames. , 2010, , .		22
65	Decentralized stabilization of heterogeneous linear multi-agent systems. , 2010, , .		11
66	A Gossip-Based Algorithm for Discrete Consensus Over Heterogeneous Networks. IEEE Transactions on Automatic Control, 2010, 55, 1244-1249.	5.7	27
67	Decentralized centroid estimation for multi-agent systems in absence of any common reference frame. , 2009, , .		4
68	Load balancing over heterogeneous networks with gossip-based algorithms. , 2009, , .		16
69	Constrained invariant motions for networked multi-agent systems. , 2009, , .		6
70	Decentralized Laplacian eigenvalues estimation for networked multi-agent systems. , 2009, , .		52
71	Decentralized fault diagnosis for sensor networks. , 2009, , .		6
72	Hamiltonian quantized gossip. , 2009, , .		1

#	ARTICLE	IF	CITATIONS
73	Motion probes for fault detection and recovery in networked control systems. , 2008, , .		32
74	Load balancing on networks with gossip-based distributed]algorithms. , 2007, , .		12