Andrea Garulli

List of Publications by Year in descending order

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108	3,173	26	54
papers	citations	h-index	g-index
110	110	110	2269
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Sum-of-Norms Periodic Model Predictive Control for Space Rendezvous. IEEE Transactions on Control Systems Technology, 2022, 30, 1311-1318.	5.2	4
2	Variable-Horizon Guidance for Autonomous Rendezvous and Docking to a Tumbling Target. Journal of Guidance, Control, and Dynamics, 2022, 45, 846-858.	2.8	7
3	On the advantage of centralized strategies in the three-pursuer single-evader game. Systems and Control Letters, 2022, 160, 105122.	2.3	4
4	Optimal Low-Thrust Orbit Transfers Made Easy: A Direct Approach. Journal of Spacecraft and Rockets, 2021, 58, 1904-1914.	1.9	6
5	An adaptive groundtrack maintenance scheme for spacecraft with electric propulsion. Acta Astronautica, 2020, 167, 460-466.	3.2	2
6	Asynchronous Distributed Learning From Constraints. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 4367-4373.	11.3	4
7	Upper Body Pose Estimation Using Wearable Inertial Sensors and Multiplicative Kalman Filter. IEEE Sensors Journal, 2020, 20, 492-500.	4.7	33
8	Satellite Relative Motion Modeling and Estimation via Nodal Elements. Journal of Guidance, Control, and Dynamics, 2020, 43, 1904-1914.	2.8	8
9	Orbit Control Techniques for Space Debris Removal Missions Using Electric Propulsion. Journal of Guidance, Control, and Dynamics, 2020, 43, 1259-1268.	2.8	16
10	Cooperative versus non-cooperative strategies in three-pursuer single-evader games., 2020,,.		1
11	Sum-Of-Norms MPC for Linear Periodic Systems with Application to Spacecraft Rendezvous. , 2020, , .		1
12	Sum-of-Norms Model Predictive Control for Spacecraft Maneuvering., 2019, 3, 649-654.		16
13	Distributed Interpolatory Algorithms for Set Membership Estimation. IEEE Transactions on Automatic Control, 2019, 64, 3817-3822.	5.7	6
14	A distributed asynchronous method of multipliers for constrained nonconvex optimization. Automatica, 2019, 103, 243-253.	5.0	20
15	A discrete-time pursuit–evasion game in convex polygonal environments. Systems and Control Letters, 2019, 125, 22-28.	2.3	9
16	A bilevel programming framework for piecewise affine system identification. , 2019, , .		1
17	Distributed set membership estimation with time-varying graph topology. , 2019, , .		1
18	A new class of pursuer strategies for the discrete-time lion and man problem. Automatica, 2019, 100, 162-170.	5.0	1

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19	Asymptotic behaviours of a class of threshold models for collective action in social networks. International Journal of Control, 2018, 91, 2230-2249.	1.9	O
20	$ Asynchronous\ Distributed\ Method\ of\ Multipliers\ for\ Constrained\ Nonconvex\ optimization.\ ,\ 2018,\ ,\ .$		4
21	State Feedback Control in Equinoctial Variables for Orbit Phasing Applications. Journal of Guidance, Control, and Dynamics, 2018, 41, 1815-1822.	2.8	9
22	Minimum Switching Thruster Control for Spacecraft Precision Pointing. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 683-697.	4.7	6
23	An Improved Lion Strategy for the Lion and Man Problem. , 2017, 1, 38-43.		11
24	A recursive technique for tracking the feasible parameter set in bounded error estimation. International Journal of Adaptive Control and Signal Processing, 2017, 31, 1456-1466.	4.1	3
25	A class of globally stabilizing feedback controllers for the orbital rendezvous problem. International Journal of Robust and Nonlinear Control, 2017, 27, 4607-4621.	3.7	6
26	Regional <mml:math altimg="si7.gif" display="inline" overflow="scroll" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi mathvariant="script">L</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn><mml:mi>mrow><mml:mi></mml:mi></mml:mi></mml:mrow></mml:msub></mml:math>	nl:5.0 nl:mrow><	:/mml:msub>
27	Propulsion options for very low Earth orbit microsatellites. Acta Astronautica, 2017, 133, 444-454.	3.2	52
28	A novel family of pursuit strategies for the lion and man problem. , 2017, , .		3
29	Walking Ahead: The Headed Social Force Model. PLoS ONE, 2017, 12, e0169734.	2.5	91
30	MARS: An Educational Environment for Multiagent Robot Simulations. Modelling and Simulation in Engineering, 2016, 2016, 1-13.	0.7	0
31	Nonlinear orbit control with longitude tracking. , 2016, , .		3
32	When Helbing meets Laumond: The Headed Social Force Model. , 2016, , .		12
33	MARS: a Matlab simulator for mobile robotics experiments. IFAC-PapersOnLine, 2016, 49, 69-74.	0.9	6
34	Analysis of threshold models for collective actions in social networks. , 2015, , .		5
35	Minimum switching control for spacecraft precision pointing with on/off actuators. , $2015, \ldots$		1
36	Model Predictive Control for pressure regulation and surge prevention in centrifugal compressors. , 2015, , .		7

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37	All-Electric Spacecraft Precision Pointing Using Model Predictive Control. Journal of Guidance, Control, and Dynamics, 2015, 38, 161-168.	2.8	15
38	Minimum switching control for systems of coupled double integrators. Automatica, 2015, 60, 115-121.	5.0	8
39	Navigation assistance and guidance of older adults across complex public spaces: the DALiÂapproach. Intelligent Service Robotics, 2015, 8, 77-92.	2.6	58
40	Models and Techniques for Electric Load Forecasting in the Presence of Demand Response. IEEE Transactions on Control Systems Technology, 2015, 23, 1087-1097.	5.2	84
41	Multivariable control for regulating high pressure centrifugal compressor with variable speed and IGV. , 2014 , , .		7
42	A Remote Lab for Experiments with a Team of Mobile Robots. Sensors, 2014, 14, 16486-16507.	3.8	27
43	Feasible Parameter Set Approximation for Linear Models with Bounded Uncertain Regressors. IEEE Transactions on Automatic Control, 2014, 59, 2910-2920.	5.7	14
44	Minimum switching limit cycle oscillations for systems of coupled double integrators. , 2014, , .		7
45	A constraint selection technique for set membership estimation of time-varying parameters. , 2014, , .		7
46	Equivalence of sum of squares convex relaxations for quadratic distance problems. International Journal of Robust and Nonlinear Control, 2013, 23, 965-977.	3.7	3
47	An MPC-based attitude control system for all-electric spacecraft with on/off actuators. , 2013, , .		7
48	Global Stability and FiniteL2m-Gain of Saturated Uncertain Systems via Piecewise Polynomial Lyapunov Functions. IEEE Transactions on Automatic Control, 2013, 58, 242-246.	5.7	8
49	Robust finite-frequency analysis of uncertain systems with application to flight comfort analysis. Control Engineering Practice, 2013, 21, 887-897.	5.5	2
50	Remote pursuer-evader experiments with mobile robots in the Automatic Control Telelab. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 66-71.	0.4	5
51	Electric load forecasting in the presence of Active Demand. , 2012, , .		7
52	A remote lab for multi-robot experiments with virtual obstacles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 354-359.	0.4	3
53	Bounding nonconvex feasible sets in set membership identification: OE and ARX models with quantized information. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1191-1196.	0.4	2
54	A survey on switched and piecewise affine system identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 344-355.	0.4	115

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55	A Trajectory Generation Algorithm for Optimal Consumption in Electromagnetic Actuators. IEEE Transactions on Control Systems Technology, 2012, 20, 1025-1032.	5.2	32
56	Input design in worst-case system identification with quantized measurements. Automatica, 2012, 48, 2997-3007.	5.0	36
57	Cooperative SLAM using -Space representation of linear features. Robotics and Autonomous Systems, 2012, 60, 1267-1278.	5.1	10
58	Lyapunov-Based Robustness Analysis Techniques for Clearance. Lecture Notes in Control and Information Sciences, 2012, , 161-178.	1.0	0
59	Applications of IQC-Based Analysis Techniques for Clearance. Lecture Notes in Control and Information Sciences, 2012, , 277-297.	1.0	1
60	Load forecasting for active distribution networks. , 2011, , .		29
61	Input Design in Worst-Case System Identification Using Binary Sensors. IEEE Transactions on Automatic Control, 2011, 56, 1186-1191.	5.7	42
62	Identification of Piecewise Affine LFR Models of Interconnected Systems. IEEE Transactions on Control Systems Technology, 2011, 19, 148-155.	5.2	11
63	Autonomous Low-Earth-Orbit Station-Keeping with Electric Propulsion. Journal of Guidance, Control, and Dynamics, 2011, 34, 1683-1693.	2.8	30
64	Piecewise polynomial Lyapunov functions for global asymptotic stability of saturated uncertain systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14470-14476.	0.4	3
65	A LEGO Mindstorms multi-robot setup in the Automatic Control Telelab. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9812-9817.	0.4	13
66	On the calculation of the robust finite frequency H2 norm. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3360-3365.	0.4	2
67	Comparison of EKF and UKF for Spacecraft Localization via Angle Measurements. IEEE Transactions on Aerospace and Electronic Systems, 2011, 47, 75-84.	4.7	85
68	Path planning with uncertainty: A set membership approach. International Journal of Adaptive Control and Signal Processing, 2011, 25, 273-287.	4.1	0
69	Analysis of consensus protocols with bounded measurement errors. Systems and Control Letters, 2011, 60, 44-52.	2.3	51
70	Set-membership identification of ARX models with quantized measurements. , 2011, , .		7
71	Piecewise polynomial Lyapunov functions for stability and nonlinear & amp; #x2112; & lt; inf & gt; 2m & lt; / inf & gt; -gain computation of saturated uncertain systems., 2011, , .		2
72	A Matlab-based Remote Lab for Multi-Robot Experiments. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 42, 162-167.	0.4	8

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73	Experimental validation of collective circular motion for nonholonomic multi-vehicle systems. Robotics and Autonomous Systems, 2010, 58, 1028-1036.	5.1	12
74	Robust finite-frequency ℋ <inf>2</inf> analysis., 2010,,.		6
75	Multi-robot SLAM using M-Space feature representation. , 2010, , .		5
76	A LEGO Mindstorms experimental setup for multi-agent systems. , 2009, , .		14
77	Convex relaxations in circuits, systems, and control. IEEE Circuits and Systems Magazine, 2009, 9, 46-56.	2.3	1
78	Input design for worst-case system identification with uniformly quantized measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 54-59.	0.4	6
79	Exploiting structure in piecewise affine identification of LFT systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 581-586.	0.4	0
80	Clearance of flight control laws via parameter-dependent Lyapunov functions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 337-342.	0.4	4
81	Homogeneous Polynomial Forms for Robustness Analysis of Uncertain Systems. Lecture Notes in Control and Information Sciences, 2009, , .	1.0	164
82	Collective circular motion of multi-vehicle systems. Automatica, 2008, 44, 3025-3035.	5.0	152
83	Efficient computation of â, "1 uncertainty model from an impulse response set. Automatica, 2008, 44, 2570-2576.	5.0	2
84	Application of Kalman Filter to Remove TMS-Induced Artifacts from EEG Recordings. IEEE Transactions on Control Systems Technology, 2008, 16, 1360-1366.	5.2	44
85	A necessary and sufficient condition for input-output realization of switched affine state space models. , 2008, , .		6
86	Convex relaxations for quadratic distance problems. , 2008, , .		1
87	A set-membership approach to consensus problems with bounded measurement errors. , 2008, , .		16
88	Optimal input design for identification of systems with quantized measurements., 2008,,.		8
89	Time complexity and input design in worst-case identification using binary sensors. , 2007, , .		28
90	An iterative procedure for piecewise affine identification of nonlinear interconnected systems. , 2007, , .		5

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91	Experimental validation of a decentralized control law for multi-vehicle collective motion., 2007,,.		3
92	SPACECRAFT LOCALIZATION VIA ANGLE MEASUREMENTS FOR AUTONOMOUS NAVIGATION IN DEEP SPACE MISSIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 551-556.	0.4	5
93	A Kalman filter approach to remove TMS-induced artifacts from EEG recordings. , 2007, , .		O
94	Robust stability of time-varying polytopic systems via parameter-dependent homogeneous Lyapunov functions. Automatica, 2007, 43, 309-316.	5.0	118
95	Off-line removal of TMS-induced artifacts on human electroencephalography by Kalman filter. Journal of Neuroscience Methods, 2007, 162, 293-302.	2.5	45
96	Convex relaxations for robust control problems., 2007, , . On input design in <mml:math <="" altimg="sil.gif" display="inline" overflow="scroll" td=""><td></td><td>0</td></mml:math>		0
97	xmins:xocs="http://www.eisevier.com/xmi/xocs/dtd" xmins:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/xml/common/struct-bib/dtd" xm	5.0	8
98	Auto Set Membership Localization and Map Building for Mobile Robots., 2006,, 289-308.		2
99	A bounded-error approach to piecewise affine system identification. IEEE Transactions on Automatic Control, 2005, 50, 1567-1580.	5.7	291
100	Polynomially parameter-dependent Lyapunov functions for robust stability of polytopic systems: an LMI approach. IEEE Transactions on Automatic Control, 2005, 50, 365-370.	5.7	217
101	Localization of Autonomous Underwater Vehicles by Floating Acoustic Buoys: A Set-Membership Approach. IEEE Journal of Oceanic Engineering, 2005, 30, 140-152.	3.8	104
102	Homogeneous Lyapunov functions for systems with structured uncertainties. Automatica, 2003, 39, 1027-1035.	5.0	172
103	Simultaneous localization and map building for a team of cooperating robots: a set membership approach. IEEE Transactions on Automation Science and Engineering, 2003, 19, 238-249.	2.3	63
104	Solving quadratic distance problems: an LMI-based approach. IEEE Transactions on Automatic Control, 2003, 48, 200-212.	5.7	146
105	Set Membership Identification of Piecewise Affine Models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 1789-1794.	0.4	5
106	Comparing different approaches to model error modeling in robust identification. Automatica, 2002, 38, 787-803.	5.0	141
107	Output-feedback predictive control of constrained linear systems via set-membership state estimation. International Journal of Control, 2000, 73, 655-665.	1.9	82
108	Recursive state bounding by parallelotopes. Automatica, 1996, 32, 1049-1055.	5.0	194