

Alessandro Colombo

List of Publications by Year in descending order

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49
papers

954
citations

623734

14
h-index

580821

25
g-index

50
all docs

50
docs citations

50
times ranked

596
citing authors

#	ARTICLE	IF	CITATIONS
1	Scheduling and Robust Invariance in Networked Control Systems. IEEE Transactions on Automatic Control, 2022, 67, 3075-3082.	5.7	2
2	The Basic Reproduction Number as a Loop Gain Matrix. , 2022, 6, 199-204.		0
3	Optimal Control Design for Perturbed Constrained Networked Control Systems. , 2021, 5, 553-558.		21
4	Robust Supervisors for Intersection Collision Avoidance in the Presence of Legacy Vehicles. International Journal of Control, Automation and Systems, 2020, 18, 384-393.	2.7	2
5	Abstraction-Based Safety Verification and Control of Cooperative Vehicles at Road Intersections. IEEE Transactions on Automatic Control, 2020, 65, 4061-4074.	5.7	4
6	Receding-horizon robust online communication scheduling for constrained networked control systems. , 2019, , .		5
7	A nonlinear model of bicycle shimmy. Vehicle System Dynamics, 2019, 57, 315-335.	3.7	10
8	Composition of Least Restrictive Controllers, With Application to Collision Avoidance in Multiagent Systems. IEEE Transactions on Automatic Control, 2018, 63, 3972-3978.	5.7	6
9	Safety Verification Methods for Human-Driven Vehicles at Traffic Intersections: Optimal Driver-Adaptive Supervisory Control. IEEE Transactions on Human-Machine Systems, 2018, 48, 72-84.	3.5	10
10	Measurement Scheduling for Control Invariance in Networked Control Systems. , 2018, , .		8
11	Computational techniques to locate crossing/sliding regions and their sets of attraction in non-smooth dynamical systems. Discrete and Continuous Dynamical Systems - Series B, 2018, 23, 2911-2934.	0.9	1
12	Control of a City Road Network: Distributed Exact Verification of Traffic Safety. IEEE Transactions on Automatic Control, 2017, 62, 4933-4948.	5.7	19
13	Supervisory control for collision avoidance in vehicular networks using discrete event abstractions. Discrete Event Dynamic Systems: Theory and Applications, 2017, 27, 1-44.	1.5	14
14	Constant-time discontinuity map for forward sensitivity analysis to initial conditions: Spurs detection in fractional-N PLL as a case study. , 2017, , .		0
15	Necessary and Sufficient Conditions for the Noninvertibility of Fundamental Solution Matrices of a Discontinuous System. SIAM Journal on Applied Dynamical Systems, 2016, 15, 84-105.	1.6	1
16	Optimal and least restrictive supervisory control: Safety verification methods for human-driven vehicles at traffic intersections. , 2015, , .		17
17	Numerically efficient robustness test for nonlinear circuit models. , 2015, , .		0
18	Least Restrictive Supervisors for Intersection Collision Avoidance: A Scheduling Approach. IEEE Transactions on Automatic Control, 2015, 60, 1515-1527.	5.7	104

#	ARTICLE	IF	CITATIONS
19	Experimental testing of a semi-autonomous multi-vehicle collision avoidance algorithm at an intersection testbed. , 2015, , .		15
20	Cooperative Intersection Collision Avoidance in a Constrained Communication Environment. , 2015, , .		3
21	Connectivity interplays with age in shaping contagion over networks with vital dynamics. Physical Review E, 2015, 91, 022809.	2.1	9
22	Supervisory control for intersection collision avoidance in the presence of uncontrolled vehicles. , 2014, , .		31
23	A mathematical framework for cooperative collision avoidance of human-driven vehicles at intersections. , 2014, , .		10
24	The two-fold singularity of nonsmooth flows: Leading order dynamics in n -dimensions. Physica D: Nonlinear Phenomena, 2013, 263, 1-10.	2.8	23
25	Supervisory control for collision avoidance in vehicular networks using discrete event abstractions. , 2013, , .		14
26	Supervisory control for collision avoidance in vehicular networks with imperfect measurements. , 2013, , .		16
27	Robust multi-agent collision avoidance through scheduling. , 2013, , .		35
28	An approximate abstraction approach to safety control of differentially flat systems. , 2013, , .		7
29	Bifurcations of piecewise smooth flows: Perspectives, methodologies and open problems. Physica D: Nonlinear Phenomena, 2012, 241, 1845-1860.	2.8	92
30	Efficient algorithms for collision avoidance at intersections. , 2012, , .		95
31	Two Degenerate Boundary Equilibrium Bifurcations in Planar Filippov Systems. SIAM Journal on Applied Dynamical Systems, 2011, 10, 1525-1553.	1.6	33
32	Nondeterministic Chaos, and the Two-fold Singularity in Piecewise Smooth Flows. SIAM Journal on Applied Dynamical Systems, 2011, 10, 423-451.	1.6	69
33	Codimension-two singularities on the stability boundary in 2D Filippov systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13281-13286.	0.4	0
34	Supervisory control of differentially flat systems based on abstraction. , 2011, , .		20
35	Two-fold singularity in nonsmooth electrical systems. , 2011, , .		13
36	Enforcing safety of cyberphysical systems using flatness and abstraction. ACM SIGBED Review, 2011, 8, 11-14.	1.8	8

#	ARTICLE	IF	CITATIONS
37	Teixeira singularities in 3D switched feedback control systems. <i>Systems and Control Letters</i> , 2010, 59, 615-622.	2.3	34
38	Full Characterization of Act-and-wait Control for First-order Unstable Lag Processes. <i>JVC/Journal of Vibration and Control</i> , 2010, 16, 1209-1233.	2.6	24
39	Discontinuity Induced Bifurcations of Nonhyperbolic Cycles in Nonsmooth Systems. <i>SIAM Journal on Applied Dynamical Systems</i> , 2010, 9, 62-83.	1.6	32
40	On the Boundaries of Basins of Attraction in Piecewise Smooth Systems. , 2010, , .		1
41	The Two-Fold Singularity of Discontinuous Vector Fields. <i>SIAM Journal on Applied Dynamical Systems</i> , 2009, 8, 624-640.	1.6	70
42	Two-Parameter Bifurcation Analysis of the Buck Converter. <i>SIAM Journal on Applied Dynamical Systems</i> , 2009, 8, 1507-1522.	1.6	16
43	BORDER COLLISION OF NON-HYPERBOLIC FIXED POINTS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009, 42, 98-103.	0.4	0
44	Boundary intersection crossing bifurcation in the presence of sliding. <i>Physica D: Nonlinear Phenomena</i> , 2008, 237, 2900-2912.	2.8	12
45	Remarks on Metacommunity Synchronization with Application to Preyâ€Predator Systems. <i>American Naturalist</i> , 2008, 171, 430-442.	2.1	16
46	CHAOS IN TWO-PARTY DEMOCRACIES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2008, 18, 2133-2140.	1.7	4
47	BIFURCATION ANALYSIS OF AN IMPACT MODEL FOR FOREST FIRE PREDICTION. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2008, 18, 2275-2288.	1.7	6
48	Complex Dynamics in a Hysteretic Relay Feedback System with Delay. <i>Journal of Nonlinear Science</i> , 2007, 17, 85-108.	2.1	19
49	Optimal scheduling and control for constrained multiâ€agent networked control systems. <i>Optimal Control Applications and Methods</i> , 0, , .	2.1	3