

Luigi Glielmo

List of Publications by Year in descending order

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155
papers

3,436
citations

257101

24
h-index

182168

51
g-index

156
all docs

156
docs citations

156
times ranked

2977
citing authors

#	ARTICLE	IF	CITATIONS
1	A Model Predictive Control Approach to Microgrid Operation Optimization. IEEE Transactions on Control Systems Technology, 2014, 22, 1813-1827.	3.2	621
2	Use of model predictive control for experimental microgrid optimization. Applied Energy, 2014, 115, 37-46.	5.1	184
3	Gearshift control for automated manual transmissions. IEEE/ASME Transactions on Mechatronics, 2006, 11, 17-26.	3.7	176
4	Closed-Loop Control of Deep Brain Stimulation: A Simulation Study. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 15-24.	2.7	175
5	State of charge Kalman filter estimator for automotive batteries. Control Engineering Practice, 2006, 14, 267-275.	3.2	123
6	Model Predictive Control-Based Optimal Operations of District Heating System With Thermal Energy Storage and Flexible Loads. IEEE Transactions on Automation Science and Engineering, 2017, 14, 547-557.	3.4	110
7	Stochastic model predictive control for economic/environmental operation management of microgrids: An experimental case study. Journal of Process Control, 2016, 43, 24-37.	1.7	108
8	Stability robustness of interval matrices via Lyapunov quadratic forms. IEEE Transactions on Automatic Control, 1993, 38, 281-284.	3.6	83
9	A review on the use of drones for precision agriculture. IOP Conference Series: Earth and Environmental Science, 2019, 275, 012022.	0.2	74
10	Energy efficient microgrid management using Model Predictive Control. , 2011, , .		68
11	Auto-regulation of Secretory Flux by Sensing and Responding to the Folded Cargo Protein Load in the Endoplasmic Reticulum. Cell, 2019, 176, 1461-1476.e23.	13.5	65
12	New results on composite control of singularly perturbed uncertain linear systems. Automatica, 1993, 29, 387-400.	3.0	61
13	A mixed integer linear formulation for microgrid economic scheduling. , 2011, , .		61
14	OPTIMAL TRACKING FOR AUTOMOTIVE DRY CLUTCH ENGAGEMENT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 367-372.	0.4	51
15	Modeling of an Electromechanical Engine Valve Actuator Based on a Hybrid Analytical-FEM Approach. IEEE/ASME Transactions on Mechatronics, 2008, 13, 625-637.	3.7	49
16	LTV-MPC for Yaw Rate Control and Side Slip Control with Dynamically Constrained Differential Braking. European Journal of Control, 2009, 15, 468-479.	1.6	49
17	Feedback stabilization control design for switched Boolean control networks. Automatica, 2020, 116, 108934.	3.0	49
18	On the Exponential Stability of Singularly Perturbed Systems. SIAM Journal on Control and Optimization, 1992, 30, 1338-1360.	1.1	48

#	ARTICLE	IF	CITATIONS
19	Optimal Control of Dry Clutch Engagement. , 2000, , .		48
20	Hybrid control of dry clutch engagement. , 2001, , .		44
21	Real Time Control of a Prototype for Pressure Regulation and Energy Production in Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	40
22	A Survey on Model-Based Mission Planning and Execution for Autonomous Spacecraft. IEEE Systems Journal, 2018, 12, 3893-3905.	2.9	34
23	A survey on the application of path-planning algorithms for multi-rotor UAVs in precision agriculture. Journal of Navigation, 2022, 75, 364-383.	1.0	34
24	Real-Time Control of a PRV in Water Distribution Networks for Pressure Regulation: Theoretical Framework and Laboratory Experiments. Journal of Water Resources Planning and Management - ASCE, 2018, 144, 04017075.	1.3	33
25	Optimal operations for hydrogen-based energy storage systems in wind farms via model predictive control. International Journal of Hydrogen Energy, 2021, , .	3.8	33
26	Robust and quadratic stability via polytopic set covering. International Journal of Robust and Nonlinear Control, 1995, 5, 745-756.	2.1	31
27	An interlaced extended Kalman filter. IEEE Transactions on Automatic Control, 1999, 44, 1546-1549.	3.6	31
28	A Bibliometric Review of the Use of Unmanned Aerial Vehicles in Precision Agriculture and Precision Viticulture for Sensing Applications. Remote Sensing, 2022, 14, 1604.	1.8	31
29	Stochastic Model Predictive Control for economic/environmental operation management of microgrids. , 2013, , .		29
30	Output Tracking Control Design of Switched Boolean Control Networks. , 2020, 4, 355-360.		27
31	A Semantic-Middleware-Supported Receding Horizon Optimal Power Flow in Energy Grids. IEEE Transactions on Industrial Informatics, 2018, 14, 35-46.	7.2	24
32	Operation of a Prototype for Real Time Control of Pressure and Hydropower Generation in Water Distribution Networks. Water Resources Management, 2019, 33, 697-712.	1.9	23
33	Robust vehicle lateral stabilisation via set-based methods for uncertain piecewise affine systems. Vehicle System Dynamics, 2012, 50, 861-882.	2.2	22
34	A data-driven approximate dynamic programming approach based on association rule learning: Spacecraft autonomy as a case study. Information Sciences, 2019, 504, 501-519.	4.0	19
35	Control of Auxiliary Power Unit for Hybrid Electric Vehicles. IEEE Transactions on Control Systems Technology, 2007, 15, 1122-1130.	3.2	18
36	A preliminary study to integrate LTV-MPC lateral vehicle dynamics control with a slip control. , 2009, , .		18

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37	Double Deep-Q Learning-Based Output Tracking of Probabilistic Boolean Control Networks. IEEE Access, 2020, 8, 199254-199265.	2.6	18
38	Model-Free Self-Triggered Control Co-Design for Probabilistic Boolean Control Networks. , 2021, 5, 1639-1644.		18
39	Exponential Stability of Singularly Perturbed Systems. , 1991, , .		18
40	A model predictive control scheme for regenerative braking in vehicles with hybridized architectures via aftermarket kits. Control Engineering Practice, 2022, 123, 105142.	3.2	18
41	New converse Lyapunov theorems and related results on exponential stability. Mathematics of Control, Signals, and Systems, 1998, 11, 79-100.	1.4	17
42	On-board diagnosis for three-way catalytic converters. International Journal of Robust and Nonlinear Control, 2001, 11, 1073-1094.	2.1	17
43	A hybrid procedure strategy for vehicle localization system: Design and prototyping. Control Engineering Practice, 2009, 17, 14-25.	3.2	17
44	Demand Side Management for heating controls in Microgrids. IFAC-PapersOnLine, 2016, 49, 611-616.	0.5	17
45	A Multi-Step Anomaly Detection Strategy Based on Robust Distances for the Steel Industry. IEEE Access, 2021, 9, 53827-53837.	2.6	17
46	On output feedback control of singularly perturbed systems. Applied Mathematics and Computation, 2010, 217, 1053-1070.	1.4	16
47	Multi-objective optimization for environmental/economic microgrid scheduling. , 2012, , .		16
48	Mixed Logic Dynamic Models for MPC Control of Wind Farm Hydrogen-Based Storage Systems. Inventions, 2019, 4, 57.	1.3	15
49	Support Vector Representation Machine for superalloy investment casting optimization. Applied Mathematical Modelling, 2019, 72, 324-336.	2.2	15
50	A Cyber-Physical Systems Approach for Implementing the Receding Horizon Optimal Power Flow in Smart Grids. IEEE Transactions on Sustainable Computing, 2018, 3, 98-111.	2.2	14
51	Self-triggered control of probabilistic Boolean control networks: A reinforcement learning approach. Journal of the Franklin Institute, 2022, 359, 6173-6195.	1.9	14
52	Basal Ganglia Modeling in Healthy and Parkinson's Disease State. I. Isolated Neurons Activity. Proceedings of the American Control Conference, 2007, , .	0.0	13
53	Spacecraft autonomy modeled via Markov decision process and associative rule-based machine learning. , 2017, , .		13
54	Output Tracking Control of Probabilistic Boolean Control Networks. , 2019, , .		13

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55	Model Checking Techniques Applied to Satellite Operational Mode Management. IEEE Systems Journal, 2019, 13, 1018-1029.	2.9	13
56	Reinforcement Learning Approach to Feedback Stabilization Problem of Probabilistic Boolean Control Networks. , 2020, , 1-1.		13
57	Decentralized Hierarchical Planning of PEVs Based on Mean-Field Reverse Stackelberg Game. IEEE Transactions on Automation Science and Engineering, 2020, 17, 2014-2024.	3.4	13
58	Reduced Kalman filtering for indirect adaptive control of the induction motor. International Journal of Adaptive Control and Signal Processing, 1994, 8, 527-541.	2.3	12
59	ROBUST SMOOTH ENGAGEMENT OF AN AUTOMOTIVE DRY CLUTCH. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 632-637.	0.4	12
60	Equilibrium and stability analysis of X-chromosome linked recessive diseases model. , 2012, , .		12
61	Flight control system for small-size unmanned aerial vehicles: Design and software-in-the-loop validation. , 2013, , .		12
62	Optimal Power Flow model with energy storage, an extension towards large integration of renewable energy sources.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9456-9461.	0.4	12
63	Optimal operation of a district heating power plant with thermal energy storage. , 2016, , .		12
64	A Scenario-Based Branch-and-Bound Approach for MES Scheduling in Urban Buildings. IEEE Transactions on Industrial Informatics, 2020, 16, 7510-7520.	7.2	12
65	Sampled-Data Set Stabilization of Switched Boolean Control Networks. IFAC-PapersOnLine, 2020, 53, 6139-6144.	0.5	12
66	A machine learning approach to modeling and identification of automotive three-way catalytic converters. IEEE/ASME Transactions on Mechatronics, 2000, 5, 132-141.	3.7	11
67	An Algorithm for the Calibration of Wall-Wetting Model Parameters. , 2003, , .		11
68	Robust vehicle lateral stabilization via set-based methods for uncertain piecewise affine systems: Experimental results. , 2011, , .		11
69	A Two-Time-Scale Infinite-Adsorption Model of Three Way Catalytic Converters During the Warm-Up Phase1. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2001, 123, 62-70.	0.9	10
70	A comparison between LTV-MPC and LQR Yaw Rate-Side Slip Controller. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 154-159.	0.4	10
71	An MPC scheme with guaranteed stability for linear singularly perturbed systems. , 2010, , .		10
72	Use of Hydraulically Operated PRVs for Pressure Regulation and Power Generation in Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2020, 146, 04020047.	1.3	10

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73	Modelling and solving resource allocation problems via a dynamic programming approach. International Journal of Control, 2021, 94, 1544-1555.	1.2	10
74	A biophysically inspired microelectrode recording-based model for the subthalamic nucleus activity in Parkinson's disease. Biomedical Signal Processing and Control, 2008, 3, 203-211.	3.5	9
75	Robust vehicle stability control with an uncertain driver model. , 2013, , .		9
76	The application of the data mining in the integration of RES in the smart grid: Consumption and generation forecast in the I3RES project. , 2015, , .		9
77	In cylinder air charge prediction for VVA system: Experimental validation. , 2008, , .		8
78	State aggregation approximate dynamic programming for model-based spacecraft autonomy. , 2016, , .		8
79	Robust decentralised mean field control in leader following multi-agent systems. IET Control Theory and Applications, 2017, 11, 2707-2715.	1.2	8
80	A lab prototype of pressure control in water distribution networks. IFAC-PapersOnLine, 2017, 50, 15373-15378.	0.5	8
81	Emission reduction during TWC warm-up: control synthesis and hardware-in-the-loop verification. International Journal of Modelling, Identification and Control, 2008, 3, 233.	0.2	7
82	An Integrated LTV-MPC Lateral Vehicle Dynamics Control: Simulation Results. Lecture Notes in Control and Information Sciences, 2010, , 231-255.	0.6	7
83	A receding horizon approach for the power flow management with renewable energy and energ storage systems. , 2015, , .		7
84	Control of Switched Boolean Control Networks by State Feedback. , 2019, , .		7
85	Modeling and Optimal Control of a Hydrogen Storage System for Wind Farm Output Power Smoothing. , 2020, , .		7
86	CONTROL OF THE EXHAUST GAS EMISSIONS DURING THE WARM-UP PROCESS OF A TWC-EQUIPPED SI ENGINE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 301-306.	0.4	6
87	Probabilistic model checking applied to autonomous spacecraft reconfiguration. , 2016, , .		6
88	Distributed Cycle Detection and Removal. IEEE Transactions on Control of Network Systems, 2018, 5, 194-204.	2.4	6
89	Condition-based maintenance: an industrial application on rotary machines. Journal of Quality in Maintenance Engineering, 2021, 27, 565-585.	1.0	6
90	On-line plasma shape identification via magnetic measurements. IEEE Transactions on Magnetics, 1992, 28, 1601-1604.	1.2	5

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91	Basal Ganglia Modeling in Healthy and Parkinson's Disease State. II. Network-based Multi-Units Simulation. Proceedings of the American Control Conference, 2007, , .	0.0	5
92	LTV-MPC for yaw rate control and side slip control with dynamically constrained differential braking. , 2009, , .		5
93	System identification of Local Field Potentials under Deep Brain Stimulation in a healthy primate. , 2010, 2010, 4144-7.		5
94	Non linear discrete time epidemiological model for X-linked recessive diseases. , 2014, , .		5
95	Reachability and Controllability of Delayed Switched Boolean Control Networks. , 2018, , .		5
96	Allocating resources via price management systems: a dynamic programming-based approach. International Journal of Control, 2021, 94, 2123-2143.	1.2	5
97	NICELY NONLINEAR ENGINE TORQUE ESTIMATOR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 218-223.	0.4	4
98	A Markovian based approach for autonomous space systems. , 2015, , .		4
99	Spacecraft autonomy and reliability in MTC satellite via On-board Control Procedures. , 2015, , .		4
100	A Least-Squares Temporal Difference based method for solving resource allocation problems. IFAC Journal of Systems and Control, 2020, 13, 100106.	1.1	4
101	An Actor-Critic approach for control of Residential Photovoltaic-Battery Systems. IFAC-PapersOnLine, 2021, 54, 222-227.	0.5	4
102	Decentralized Control of Residential Energy Storage System for Community Peak Shaving: A Constrained Aggregative Game. , 2021, , .		4
103	Robust Statistics-based Anomaly Detection in a Steel Industry*. , 2021, , .		4
104	Fault Detection and Diagnosis in Steel Industry: a One Class-Support Vector Machine Approach. , 2021, , .		4
105	Three-way Catalytic Converter Modelling: Neural Networks and Genetic Algorithms for the Reaction Kinetics Submodel. , 2000, , .		3
106	A novel work in progress based production control system. , 2003, , .		3
107	On-board Prototype of a vehicle localization system. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	3
108	A colored Gauss-Seidel approach for the distributed network flow problem. , 2015, , .		3

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109	Optimal operations and load allocation of a power plant equipped with a CCHP feeding power, steam and cold water to an industrial plant. , 2016, , .		3
110	Modeling of a Hydrogen Storage Wind Plant for Model Predictive Control Management Strategies. , 2019, , .		3
111	Effects of selection and mutation on epidemiology of X-linked genetic diseases. Mathematical Biosciences and Engineering, 2017, 14, 755-775.	1.0	3
112	Matrix and frequency-domain inequalities for all guaranteed cost controllers of uncertain linear systems with unmatched uncertainties. , 1999, , .		2
113	Identification and analysis of local field potentials in Parkinson's disease under Nonlinear Delayed Feedback Stimulation.. , 2010, , .		2
114	Point process modeling reveals anatomical non-uniform distribution across the Subthalamic Nucleus in Parkinson's disease. , 2012, 2012, 2539-42.		2
115	An Approach for Geostationary Satellite Mode Management. IFAC-PapersOnLine, 2017, 50, 7241-7246.	0.5	2
116	Decentralized Charging Coordination of Plug-in Electric Vehicles Based on Reverse Stackelberg Game. , 2019, , .		2
117	A Combined Support Vector Machine and Support Vector Representation Machine Method for Production Control *. , 2019, , .		2
118	A Vision-Based Algorithm for a Path Following Problem. , 2021, , .		2
119	A Deep Q-Learning based approach applied to the Snake game. , 2021, , .		2
120	Interlaced extended Kalman filter as deterministic nonlinear observer. , 1999, , .		1
121	DBS feedback controlled tremor suppression in Parkinson’s disease. , 2008, , .		1
122	Analyzing Local Field Potentials in the healthy basal ganglia under Deep Brain Stimulation. , 2010, , .		1
123	Towards automated navigation of deep brain stimulating electrodes: Analyzing neuronal activity near the target. , 2012, , .		1
124	Optimization of energy exchanges in utility grids with applications to residential, industrial and tertiary cases. , 2015, , .		1
125	Enabling technologies for Enterprise Wide Optimization. , 2015, , .		1
126	Asynchronous cooperative method for distributed model predictive control. , 2016, , .		1

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127	Stochastic optimal controller design for medium access constrained networked control systems with unknown dynamics. Intelligent Decision Technologies, 2017, 11, 223-233.	0.6	1
128	Estimation, Learning, and Stability Analysis of Supply Function Equilibrium Game for Generation Companies. IEEE Systems Journal, 2018, 12, 2577-2588.	2.9	1
129	When sex matters: a complete model of X-linked diseases. International Journal of General Systems, 2018, 47, 549-568.	1.2	1
130	Storage Constrained Smart Meter Sensing using Semi-Tensor Product. , 2019, , .		1
131	A Heuristic Algorithm for Combined Heat and Power System Operation Management. Energies, 2021, 14, 1588.	1.6	1
132	Game-theoretic demand side management of a neighbourhood of smart homes with real and virtual energy storage. , 2021, , .		1
133	A Novel Algorithm for Lane Detection based on Iterative Tree Search. , 2021, , .		1
134	A Reinforcement Learning approach for pedestrian collision avoidance and trajectory tracking in autonomous driving systems. , 2021, , .		1
135	Dynamic mooring-forces allocation in dynamic ship positioning. Journal of Optimization Theory and Applications, 1989, 63, 309-332.	0.8	0
136	Robust stabilization of singularly perturbed nonlinear systems. International Journal of Robust and Nonlinear Control, 1993, 3, 105-114.	2.1	0
137	A Differential Game Approach to Guaranteed Cost Control Design for Singularly Perturbed Uncertain Linear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 433-438.	0.4	0
138	Control strategies for a spark ignition engine during the warm-up phase. , 2003, , .		0
139	Nicely Nonlinear LQ-based Control. , 2009, , .		0
140	“Ruzzle” arm: A low cost educational application in Real-Time Control course. , 2014, , .		0
141	Stability and sensitivity analysis of an epidemiological model of genetic diseases. , 2015, , .		0
142	Selection and mutation effects on equilibrium and stability of X-linked recessive diseases. , 2015, , .		0
143	Supply function equilibrium game with myopic adjustment and adaptive expectation. , 2015, , .		0
144	A complete epidemiological model of a class of genetic diseases. , 2015, , .		0

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145	Selection and mutation in X-linked recessive diseases epidemiological model. , 2015, 2015, 3993-6.		0
146	Stochastic model predictive control for optimal energy management of district heating power plants. , 2016, , .		0
147	Stochastic optimal controller design for medium access constrained networked control systems with unknown dynamics. Intelligent Decision Technologies, 2017, 11, 253-264.	0.6	0
148	Modelling and stability analysis in human population genetics with selection and mutation. Mathematical Methods in the Applied Sciences, 2018, 41, 1492-1508.	1.2	0
149	Price Management in Resource Allocation Problem with Approximate Dynamic Programming. , 2018, , .		0
150	Condition Based Maintenance for Industrial Labeling Machine. , 2019, , .		0
151	Model-free Self-triggered Control Co-design for Probabilistic Boolean Control Networks. , 2021, , .		0
152	Linear Quadratic control for restoring paralyzed muscles to standing through Functional Electrical Stimulation in paraplegic patients. , 2009, , .		0
153	A Method for Managing Transportation Requests and Subdivision Costs in Shared Mobility Systems. , 2015, , .		0
154	Access Time Eccentricity and Diameter. Lecture Notes in Control and Information Sciences, 2017, , 215-226.	0.6	0
155	A Model Predictive Scheme for Autonomous Vehicles Cybersecurity. , 2021, , .		0