Constantin Florin Caruntu

List of Publications by Year
in descending order

71	579	1306789 7	839053 18
papers	citations	h-index	g-index

72	72	72	399
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stochastic stability of switching linear systems with application to an automotive powertrain model. Mathematics and Computers in Simulation, 2022, 191, 278-287.	2.4	1
2	Coalitional Distributed Model Predictive Control Strategy for Vehicle Platooning Applications. Sensors, 2022, 22, 997.	2.1	6
3	Model predictive control of switching continuousâ€time systems with stochastic jumps: Application to an electric current source. IET Control Theory and Applications, 2022, 16, 454-463.	1.2	4
4	Shaking Table Attached to Magnetorheological Damper: Simulation and Experiments for Structural Engineering. Sensors, 2022, 22, 3644.	2.1	0
5	Adaptive SNN for Anthropomorphic Finger Control. Sensors, 2021, 21, 2730.	2.1	5
6	Multivariable Optimisation for Waiting-Time Minimisation at Roundabout Intersections in a Cyber-Physical Framework. Sensors, 2021, 21, 3968.	2.1	1
7	Trajectory Planner based on Third-order Polynomials applied for Platoon Merging and Splitting. , 2021, , .		4
8	A Coalitional Distributed Model Predictive Control Perspective for a Cyber-Physical Multi-Agent Application. Sensors, 2021, 21, 4041.	2.1	7
9	TrueTime Testing of Inter-Vehicular Communications for Cooperative Vehicles using Distributed Generalized Predictive Control. , 2021, , .		2
10	TrueTime-based Analysis of a Distributed Generalized Predictive Control Architecture for CACC Systems. , 2021, , .		6
11	Control Architecture for Cooperative Autonomous Vehicles Driving in Platoons at Highway Speeds. IEEE Access, 2021, 9, 153472-153490.	2.6	7
12	DMPC-based Data-packet Dropout Compensation in Vehicle Platooning Applications using V2V Communications. , 2021, , .		2
13	Cooperative Platoons Merging for Obstacle Avoidance on Highways. , 2021, , .		2
14	Trajectory optimization through connected cooperative control for multiple-vehicle flocking. , 2020, , .		3
15	Distributed Model Predictive Control Algorithm with Communication Delays for a Cooperative Adaptive Cruise Control Vehicle Platoon. , 2020, , .		8
16	TrueTime-based Analysis of the Communication Networks used in Vehicle Control Structures. , 2020, , .		1
17	Bio-inspired Coordination and Control of Autonomous Vehicles in Future Manufacturing and Goods Transportation. IFAC-PapersOnLine, 2020, 53, 10861-10866.	0.5	3
18	Cooperative Vehicle Following based on Predictive Control with Communication Delay Compensation. , 2020, , .		0

#	Article	IF	Citations
19	Trajectory Planning and Tracking for Cooperative Automated Vehicles in a Platoon. , 2020, , .		3
20	Distributed Model Predictive Control Algorithm with Time-Varying Communication Delays for a CACC Vehicle Platoon. , 2020, , .		11
21	A Less Conservative Condition for Flexible Control Lyapunov Functions used in Networked Predictive Control Systems. , 2019, , .		0
22	Min-Max Coalitional Model Predictive Control Algorithm. , 2019, , .		2
23	A Concept of Multiple-lane Vehicle Grouping by Swarm Intelligence. , 2019, , .		6
24	Comparative Analysis of Distributed Model Predictive Control Strategies. , 2019, , .		3
25	Redundancy Based V2V Communication Platform for Vehicle Platooning. , 2019, , .		1
26	Robotic Joint Control System based on Analogue Spiking Neural Networks and SMA Actuators. , 2019, , .		6
27	Distributed predictive control for wind farms efficiency maximization: challenges and opportunities. , 2019, , .		1
28	Decentralized Predictive Formation Control for Mobile Robots without Communication. , 2019, , .		2
29	Multi-Objective Predictive Control Optimization with Varying Term Objectives: A Wind Farm Case Study. Processes, 2019, 7, 778.	1.3	10
30	Connected cooperative control for multiple-lane automated vehicle flocking on highway scenarios. , 2019, , .		7
31	Predictive Control for the Lateral and Longitudinal Dynamics in Automated Vehicles. , 2019, , .		17
32	Intelligent Motion Planning and Control for Robotic Joints Using Bio-Inspired Spiking Neural Networks. International Journal of Humanoid Robotics, 2019, 16, 1950012.	0.6	7
33	Stability of switching linear systems with switching signals driven by stochastic processes. Journal of the Franklin Institute, 2019, 356, 31-41.	1.9	4
34	Arterial Intersection Improvement by Using Vehicle Platooning and Coordinated Start. IFAC-PapersOnLine, 2018, 51, 136-141.	0.5	13
35	Multiple-Lane Vehicle Platooning based on a Multi-Agent Distributed Model Predictive Control Strategy. , 2018, , .		5
36	Model Predictive Control of Stochastic Linear Systems with Probability Constraints. International Journal of Computers, Communications and Control, 2018, 13, 927-937.	1.2	3

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37	Lyapunov-Based Predictive Control Methodologies for Networked Control Systems. Advances in Computer and Electrical Engineering Book Series, 2018, , 81-111.	0.2	0
38	Prototype model car design for vehicle platooning. , 2017, , .		4
39	Wireless vehicle-to-infrastructure data gathering for robot platooning. , 2017, , .		2
40	Further analysis on network-induced time-varying delay modeling methods used in GPC design. , 2017, , .		2
41	Cyber Physical Systems - Oriented Design of Cooperative Control for Vehicle Platooning. , 2017, , .		12
42	Robust MPC for networked control systems with data-packet dropouts modeled as disturbances. , 2017, , .		1
43	Chance-constrained model predictive control for vehicle drivetrains in a cyber-physical framework. , 2017, , .		2
44	Cruise and headway control for vehicle platooning using a distributed model predictive control algorithm. , 2017, , .		13
45	Centralized model predictive control of autonomous driving vehicles with Lyapunov stability. , 2016, , .		4
46	Design and simulation evaluation of cooperative adaptive cruise control for a platoon of vehicles. , 2016, , .		5
47	Distributed model predictive control algorithm for vehicle platooning. , 2016, , .		8
48	Distributed model predictive control for vehicle platooning: A brief survey. , 2016, , .		5
49	Reference Tracking using a Non-Cooperative Distributed Model Predictive Control Algorithm. IFAC-PapersOnLine, 2016, 49, 1079-1084.	0.5	7
50	Advanced control techniques to mitigate the stop-and-go waves on a highway traffic with different vehicles. , 2016, , .		2
51	Nonlinear Model Predictive Control using Lyapunov Functions for Vehicle Lateral Dynamics. IFAC-PapersOnLine, 2016, 49, 135-140.	0.5	6
52	Driveline oscillations damping: A tractable predictive control solution based on a piecewise affine model. Nonlinear Analysis: Hybrid Systems, 2016, 19, 168-185.	2.1	22
53	Networked communications over a lab-scale test bench for autonomous highway systems. , 2015, , .		1
54	Observer-based predictive controller design with network-enhanced time-delay compensation. International Journal of General Systems, 2015, 44, 182-197.	1.2	1

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55	A Computationally Efficient Non-cooperative Distributed Model Predictive Control Algorithm for Two Agent Systems. , 2015, , .		5
56	Predictive control based on piecewise nonlinear models for vehicle drivetrains. , 2015, , .		3
57	Performance evaluation of GPC algorithms based on different network-induced delay modeling methods. , 2014, , .		1
58	Spiking neural network for controlling the artificial muscles of a humanoid robotic arm. , 2014, , .		13
59	Longitudinal control of vehicle platoons for stop-and-go waves mitigation. , 2014, , .		7
60	Networked Predictive Cruise Control for Road Vehicles. , 2013, , .		0
61	Lyapunov based predictive control of vehicle drivetrains over CAN. Control Engineering Practice, 2013, 21, 1884-1898.	3.2	81
62	Real-time Networked Predictive Control of a Vehicle Drivetrain with Backlash. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 484-489.	0.4	2
63	Robustly stabilising model predictive control design for networked control systems with an application to direct current motors. IET Control Theory and Applications, 2012, 6, 943.	1.2	22
64	Model Predictive Control for Real-Time Simulation of a Network-Controlled Vehicle Drivetrain. , 2011, , .		2
65	OSEK Based Embedded Networked Controller Handling Communication Delays. , 2011, , .		3
66	Stabilizing MPC for network-controlled systems with an application to DC motors. , 2011, , .		4
67	Simulation and control of an electro-hydraulic actuated clutch. Mechanical Systems and Signal Processing, 2011, 25, 1911-1922.	4.4	121
68	Modeling and predictive control for compensating network-induced time-varying delays. , 2011, , .		0
69	A predictive control solution for driveline oscillations damping. , 2011, , .		30
70	Modelling and predictive control of an electro-hydraulic actuated wet clutch for automatic transmission. , 2010, , .		20
71	Network delay predictive compensation based on time-delay modelling as disturbance. International Journal of Control, 0, , 1-15.	1.2	5