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	Simulation and control of an electro-hydraulic actuated clutch. Mechanical Systems and Signal Processing, 2011, 25, 1911-1922.	4.4	121
2	Lyapunov based predictive control of vehicle drivetrains over CAN. Control Engineering Practice, 2013, 21, 1884-1898.	3.2	81
3	A predictive control solution for driveline oscillations damping. , 2011, , .		30
4	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
5	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
6	Modelling and predictive control of an electro-hydraulic actuated wet clutch for automatic transmission. , 2010, , .		20
7	Predictive Control for the Lateral and Longitudinal Dynamics in Automated Vehicles. , 2019, , .		17
8	Spiking neural network for controlling the artificial muscles of a humanoid robotic arm. , 2014, , .		13
9	Cruise and headway control for vehicle platooning using a distributed model predictive control algorithm. , 2017, , .		13
10	Arterial Intersection Improvement by Using Vehicle Platooning and Coordinated Start. IFAC-PapersOnLine, 2018, 51, 136-141.	0.5	13
11	Cyber Physical Systems - Oriented Design of Cooperative Control for Vehicle Platooning. , 2017, , .		12
12	Distributed Model Predictive Control Algorithm with Time-Varying Communication Delays for a CACC Vehicle Platoon. , 2020, , .		11
13	Multi-Objective Predictive Control Optimization with Varying Term Objectives: A Wind Farm Case Study. Processes, 2019, 7, 778.	1.3	10
14	Distributed model predictive control algorithm for vehicle platooning. , 2016, , .		8
15	Distributed Model Predictive Control Algorithm with Communication Delays for a Cooperative Adaptive Cruise Control Vehicle Platoon. , 2020, , .		8
16	Longitudinal control of vehicle platoons for stop-and-go waves mitigation. , 2014, , .		7
17	Reference Tracking using a Non-Cooperative Distributed Model Predictive Control Algorithm. IFAC-PapersOnLine, 2016, 49, 1079-1084.	0.5	7
18	Connected cooperative control for multiple-lane automated vehicle flocking on highway scenarios. , 2019, , .		7

#	Article	IF	Citations
19	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
20	A Coalitional Distributed Model Predictive Control Perspective for a Cyber-Physical Multi-Agent Application. Sensors, 2021, 21, 4041.	2.1	7
21	Control Architecture for Cooperative Autonomous Vehicles Driving in Platoons at Highway Speeds. IEEE Access, 2021, 9, 153472-153490.	2.6	7
22	Nonlinear Model Predictive Control using Lyapunov Functions for Vehicle Lateral Dynamics. IFAC-PapersOnLine, 2016, 49, 135-140.	0.5	6
23	A Concept of Multiple-lane Vehicle Grouping by Swarm Intelligence. , 2019, , .		6
24	Robotic Joint Control System based on Analogue Spiking Neural Networks and SMA Actuators. , 2019, , .		6
25	TrueTime-based Analysis of a Distributed Generalized Predictive Control Architecture for CACC Systems. , 2021, , .		6
26	Coalitional Distributed Model Predictive Control Strategy for Vehicle Platooning Applications. Sensors, 2022, 22, 997.	2.1	6
27	Network delay predictive compensation based on time-delay modelling as disturbance. International Journal of Control, 0, , 1-15.	1.2	5
28	A Computationally Efficient Non-cooperative Distributed Model Predictive Control Algorithm for Two Agent Systems. , 2015, , .		5
29	Design and simulation evaluation of cooperative adaptive cruise control for a platoon of vehicles. , 2016, , .		5
30	Distributed model predictive control for vehicle platooning: A brief survey. , 2016, , .		5
31	Multiple-Lane Vehicle Platooning based on a Multi-Agent Distributed Model Predictive Control Strategy. , 2018, , .		5
32	Adaptive SNN for Anthropomorphic Finger Control. Sensors, 2021, 21, 2730.	2.1	5
33	Stabilizing MPC for network-controlled systems with an application to DC motors. , 2011, , .		4
34	Centralized model predictive control of autonomous driving vehicles with Lyapunov stability. , 2016, , .		4
35	Prototype model car design for vehicle platooning. , 2017, , .		4
36	Stability of switching linear systems with switching signals driven by stochastic processes. Journal of the Franklin Institute, 2019, 356, 31-41.	1.9	4

#	Article	IF	Citations
37	Trajectory Planner based on Third-order Polynomials applied for Platoon Merging and Splitting. , 2021, , .		4
38	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
39	OSEK Based Embedded Networked Controller Handling Communication Delays. , 2011, , .		3
40	Predictive control based on piecewise nonlinear models for vehicle drivetrains. , 2015, , .		3
41	Comparative Analysis of Distributed Model Predictive Control Strategies. , 2019, , .		3
42	Trajectory optimization through connected cooperative control for multiple-vehicle flocking. , 2020, , .		3
43	Bio-inspired Coordination and Control of Autonomous Vehicles in Future Manufacturing and Goods Transportation. IFAC-PapersOnLine, 2020, 53, 10861-10866.	0.5	3
44	Model Predictive Control of Stochastic Linear Systems with Probability Constraints. International Journal of Computers, Communications and Control, 2018, 13, 927-937.	1.2	3
45	Trajectory Planning and Tracking for Cooperative Automated Vehicles in a Platoon. , 2020, , .		3
46	Model Predictive Control for Real-Time Simulation of a Network-Controlled Vehicle Drivetrain. , 2011, , .		2
47	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
48	Advanced control techniques to mitigate the stop-and-go waves on a highway traffic with different vehicles. , 2016, , .		2
49	Wireless vehicle-to-infrastructure data gathering for robot platooning. , 2017, , .		2
50	Further analysis on network-induced time-varying delay modeling methods used in GPC design. , 2017, , .		2
51	Chance-constrained model predictive control for vehicle drivetrains in a cyber-physical framework. , 2017, , .		2
52	Min-Max Coalitional Model Predictive Control Algorithm. , 2019, , .		2
53	Decentralized Predictive Formation Control for Mobile Robots without Communication. , 2019, , .		2
54	TrueTime Testing of Inter-Vehicular Communications for Cooperative Vehicles using Distributed Generalized Predictive Control. , 2021, , .		2

#	Article	IF	Citations
55	DMPC-based Data-packet Dropout Compensation in Vehicle Platooning Applications using V2V Communications. , 2021, , .		2
56	Cooperative Platoons Merging for Obstacle Avoidance on Highways. , 2021, , .		2
57	Performance evaluation of GPC algorithms based on different network-induced delay modeling methods. , 2014, , .		1
58	Networked communications over a lab-scale test bench for autonomous highway systems. , 2015, , .		1
59	Observer-based predictive controller design with network-enhanced time-delay compensation. International Journal of General Systems, 2015, 44, 182-197.	1.2	1
60	Robust MPC for networked control systems with data-packet dropouts modeled as disturbances. , 2017, , .		1
61	Redundancy Based V2V Communication Platform for Vehicle Platooning. , 2019, , .		1
62	Distributed predictive control for wind farms efficiency maximization: challenges and opportunities. , 2019, , .		1
63	TrueTime-based Analysis of the Communication Networks used in Vehicle Control Structures. , 2020, , .		1
64	Multivariable Optimisation for Waiting-Time Minimisation at Roundabout Intersections in a Cyber-Physical Framework. Sensors, 2021, 21, 3968.	2.1	1
65	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
66	Modeling and predictive control for compensating network-induced time-varying delays. , 2011, , .		0
67	Networked Predictive Cruise Control for Road Vehicles. , 2013, , .		0
68	A Less Conservative Condition for Flexible Control Lyapunov Functions used in Networked Predictive Control Systems. , 2019, , .		0
69	Lyapunov-Based Predictive Control Methodologies for Networked Control Systems. Advances in Computer and Electrical Engineering Book Series, 2018, , 81-111.	0.2	0
70	Cooperative Vehicle Following based on Predictive Control with Communication Delay Compensation. , 2020, , .		0
71	Shaking Table Attached to Magnetorheological Damper: Simulation and Experiments for Structural Engineering. Sensors, 2022, 22, 3644.	2.1	0