Alexander Schirrer

List of Publications by Year
in descending order

31	190	1307594 7	1125743 13
papers	citations	h-index	g-index

31	31	31	198
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cooperative Fuzzy Model-Predictive Control. IEEE Transactions on Fuzzy Systems, 2016, 24, 471-482.	9.8	28
2	Catenary emulation for hardware-in-the-loop pantograph testing with a model predictive energy-conserving control algorithm. Mechatronics, 2017, 41, 17-28.	3.3	27
3	Hierarchical Predictive Load Control in Smart Grids. IEEE Transactions on Smart Grid, 2017, 8, 190-199.	9.0	22
4	Safe and Efficient Cooperative Platooning. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 1368-1380.	8.0	21
5	String Stable and Collision-Safe Model Predictive Platoon Control. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 19358-19373.	8.0	15
6	Efficient simulation of railway pantograph/catenary interaction using pantograph-fixed coordinates. IFAC-PapersOnLine, 2015, 48, 61-66.	0.9	9
7	Optimization based determination of highly absorbing boundary conditions for linear finite difference schemes. Journal of Sound and Vibration, 2016, 365, 45-69.	3.9	9
8	Multi-objective parameter identification of Eulerâ€“Bernoulli beams under axial load. Journal of Sound and Vibration, 2015, 341, 86-99.	3.9	7
9	A Probability-Based Short-Term Velocity Prediction Method for Energy-Efficient Cruise Control. IEEE Transactions on Vehicular Technology, 2020, 69, 14424-14435.	6.3	7
10	Hierarchical application of model-predictive control for efficient integration of active buildings into low voltage grids. , 2013, , .		5
11	Load management in smart grids with utilization of load-shifting potential in building climate control. , 2015, , .		5
12	Absorbing boundary layer control for linear one-dimensional wave propagation problems. JVC/Journal of Vibration and Control, 2018, 24, 1019-1031.	2.6	5
13	PHiL pantograph testing via FE-based catenary model with absorbing boundaries. Control Engineering Practice, 2019, 88, 97-109.	5.5	5
14	Actuator and Sensor Positioning Optimization in Control Design for a Large BWB Passenger Aircraft. ISRN Mechanical Engineering, 2011, 2011, 1-11.	0.9	3
15	Realtime-capable finite element model of railway catenary dynamics in moving coordinates. , 2016, , .		3
16	Real-time capable nonlinear pantograph models using local model networks in state-space configuration. Mechatronics, 2018, 50, 292-302.	3.3	3
17	Comparison of LQ-optimal actuator / sensor selection approaches for flexible structure systems. , 2012, , .		2
18	Comparison of real-time models for high-fidelity hardware-in-the-loop catenary emulation in a high-dynamic pantograph test rig. Procedia Engineering, 2017, 199, 3290-3295.	1.2	2

#	Article	IF	Citations
19	Accurate piecewise-affine time-discrete modeling of hysteresis-coupled system dynamics. IFAC-PapersOnLine, 2018, 51, 156-161.	0.9	2
20	3B13 Integrated input-output selection strategy for robust control of complex parameter varying systems. The Proceedings of the Symposium on the Motion and Vibration Control, 2010, 2010, _3B13-1_-_3B13-11_.	0.0	2
21	Stochastic Optimisation for the Design of Energy-Efficient Controllers for Cooperative Truck Platoons. International Journal of Intelligent Transportation Systems Research, 0, , 1.	1.1	2
22	Efficient Sensitivity-Based Cooperation Concept for Hierarchical Multilayer Process Automation of Steam-Powered Plants. IEEE Access, 2022, 10, 66844-66861.	4.2	2
23	Integrated Input-output Selection Strategy for Robust Control of Complex Parameter Depending Systems. Journal of System Design and Dynamics, 2011, 5, 1106-1118.	0.3	1
24	Multidisciplinary laboratory experiment for active vibration control with piezoelectric patches. , 2013, , .		1
25	Realtime-capable FE-based railway catenary emulation via pantograph test rig impedance control * *This work was financially supported by the Austrian Research Promotion Agency (project 841331).. IFAC-PapersOnLine, 2017, 50, 8636-8641.	0.9	1
26	Efficient piecewise-affine coupled-system feed-forward control of a nonlinear elastomer coupling âŽ âŽThis paper has been partially funded by Austrian Research Promotion (FFG) project 850737.. IFAC-PapersOnLine, 2018, 51, 861-866.	0.9	1
27	A Flexible MATLAB-Based Simulation Framework for Dynamic Catenary-Pantograph Interaction and Co-simulation. , 2013, , .		0
28	Multi-modal transport prediction for linear one-dimensional wave propagation problems. IFAC-PapersOnLine, 2018, 51, 565-570.	0.9	0
29	High-Dynamic Accurate Railway Catenary Emulation by Real-Time Mechanical Impedance Control for Pantograph Testing. , 2016, , 277-295.		0
30	Hardware-in-the-Loop Testing of High-Speed Pantographs Using Real-Time Catenary Emulation. , 2017, , 75-83.		0
31	Power-HIL-Emulation der Dynamik einer Zug-Oberleitung mittels Echtzeit-Finite-Elemente-Modell in bewegten Koordinaten und modellprÄdiktiver Regelung. Automatisierungstechnik, 2020, 68, 641-653.	0.8	0