Andreas Hegyi

List of Publications by Year
in descending order

62 papers	2,109 citations	430754 18 h-index	289141 40 g-index
62 all docs	62 docs citations	62 times ranked	1227 citing authors

#	Article	IF	Citations
1	Optimized Speed Trajectories for Cyclists, Based on Personal Preferences and Traffic Light Information-A Stochastic Dynamic Programming Approach. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 777-793.	4.7	3
2	Linear MPC-Based Urban Traffic Control Using the Link Transmission Model. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 4133-4148.	4.7	13
3	Hierarchical ramp metering in freeways: An aggregated modeling and control approach. Transportation Research Part C: Emerging Technologies, 2020, 110, 1-19.	3.9	46
4	A Hierarchical Control Framework for Coordination of Intersection Signal Timings in All Traffic Regimes. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 1815-1827.	4.7	18
5	Design analysis of a decentralized equilibrium-routing strategy for intelligent vehicles. Transportation Research Part C: Emerging Technologies, 2019, 103, 308-327.	3.9	11
6	Freeway Traffic Management and Control. , 2019, , 167-193.		0
7	An Extended Linear Quadratic Model Predictive Control Approach for Multi-Destination Urban Traffic Networks. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 3647-3660.	4.7	11
8	Efficient Freeway MPC by Parameterization of ALINEA and a Speed-Limited Area. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 16-29.	4.7	17
9	Resolving freeway jam waves by discrete first-order model-based predictive control of variable speed limits. Transportation Research Part C: Emerging Technologies, 2017, 77, 405-420.	3.9	91
10	Validation of an extended discrete first-order model with variable speed limits. Transportation Research Part C: Emerging Technologies, 2017, 83, 1-17.	3.9	22
11	Definition of a merging assistant strategy using intelligent vehicles. Transportation Research Part C: Emerging Technologies, 2017, 82, 161-179.	3.9	34
12	Freeway Traffic Management and Control. , 2017, , 1-28.		4
13	New Extended Discrete First-Order Model to Reproduce Propagation of Jam Waves. Transportation Research Record, 2016, 2560, 108-118.	1.0	14
14	Effects of Dynamic Speed Limits on a Dutch Freeway. Transportation Research Record, 2016, 2560, 87-96.	1.0	2
15	Intersection Control and MFD Shape: Vehicle-Actuated versus Back-Pressure Control. IFAC-PapersOnLine, 2016, 49, 153-158.	0.5	6
16	Urban Storage Space Selection Method for Integrated Control on a Freeway Bottleneck. Transportation Research Record, 2016, 2554, 89-100.	1.0	0
17	Integrated Predictive Control of Freeway Networks Using the Extended Link Transmission Model. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 65-78.	4.7	23
18	Coordinated Ramp Metering Based on On-Ramp Saturation Time Synchronization. Transportation Research Record, 2015, 2484, 50-59.	1.0	9

#	ARTICLE	IF	CITATIONS
19	Analysis of Driver Response and Traffic Evolution under Variable Speed Limit Control. Transportation Research Record, 2015, 2490, 1-10.	1.0	7
20	On-ramp Selection Methodology for Coordinated Ramp Metering Schemes. , 2015, , .		2
21	Linear Quadratic MPC for Integrated Route Guidance and Ramp Metering. , 2015, , .		9
22	Integrated Variable Speed Limit and Ramp Metering Control Against Jam Waves -- A COSCAL v2 Based Approach. , 2015, , .		6
23	Improving the road network performance with dynamic route guidance by considering the indifference band of road users. IET Intelligent Transport Systems, 2015, 9, 897-906.	1.7	11
24	Efficient Model Predictive Control for Variable Speed Limits by Optimizing Parameterized Control Schemes. , 2015, , .		4
25	Introduction to the Special Issue on the 16th IEEE International Conference on Intelligent Transportation Systems (ITSC'13). IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 417-418.	4.7	2
26	Analysis of Traffic Performance of a Merging Assistant Strategy Using Cooperative Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 2094-2103.	4.7	32
27	Ex-ante data analysis approach for assessing the effect of variable speed limits. , 2014, , .		2
28	Variable speed limit control for steady and oscillatory queues at fixed freeway bottlenecks. Transportation Research Part B: Methodological, 2014, 70, 340-358.	2.8	67
29	An overview of speed control approaches to improve freeway traffic flow. , 2014, , .		2
30	On a spatiotemporally discrete urban traffic model. IET Intelligent Transport Systems, 2014, 8, 219-231.	1.7	5
31	2013 IEEE Intelligent Transportation Systems Conference - Report: Future of Transport Discussed in Stately Dutch Heritage Site [Conference Report]. IEEE Intelligent Transportation Systems Magazine, 2014, 6, 76-79.	2.6	0
32	Considerations for model-based traffic control. Transportation Research Part C: Emerging Technologies, 2013, 35, 1-19.	3.9	49
33	Analysis of traffic performance of a ramp metering strategy using cooperative vehicles. , 2013, , .		11
34	Integrated macroscopic traffic flow, emission, and fuel consumption model for control purposes. Transportation Research Part C: Emerging Technologies, 2013, 31, 158-171.	3.9	123
35	A cooperative system based variable speed limit control algorithm against jam waves - an extension of the SPECIALIST algorithm. , 2013, , .		17
36	Dynamic lane separation to prevent blocking back - A comparison of two dynamic lane separation controllers. , 2012, , .		1

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37	A Predictive Traffic Controller for Sustainable Mobility Using Parameterized Control Policies. IEEE Transactions on Intelligent Transportation Systems, 2012, 13, 1420-1429.	4.7	75
38	Policy-Based, Service Level–Oriented Route Guidance in Road Networks. Transportation Research Record, 2012, 2278, 115-124.	1.0	5
39	Vehicle Class–Specific Route Guidance of Freeway Traffic by Model-Predictive Control. Transportation Research Record, 2012, 2324, 53-62.	1.0	7
40	Blocking roads to increase the evacuation efficiency. Journal of Advanced Transportation, 2012, 46, 282-289.	0.9	9
41	Parallelized Particle and Gaussian Sum Particle Filters for Large-Scale Freeway Traffic Systems. IEEE Transactions on Intelligent Transportation Systems, 2012, 13, 36-48.	4.7	43
42	Motorway ramp-metering control with queuing consideration using Q-learning. , 2011, , .		23
43	SPECIALIST-RM — Integrated variable speed limit control and ramp metering based on shock wave theory. , 2011, , .		6
44	Service level-oriented route guidance in road traffic networks. , 2011, , .		2
45	Robust optimization of evacuation instructions, applied to capacity, hazard pattern, demand, and compliance uncertainty. , 2011, , .		3
46	A Comparison of Freeway Work Zone Capacity Prediction Models. Procedia, Social and Behavioral Sciences, 2011, 16, 419-429.	0.5	7
47	Bayesian neural networks for the prediction of stochastic travel times in urban networks. IET Intelligent Transport Systems, 2011, 5, 259-265.	1.7	37
48	A method to optimize evacuation instructions. OR Spectrum, 2011, 33, 595-627.	2.1	24
49	Variable analysis for freeway work zone capacity prediction. , 2010, , .		2
50	Model-based Control of Intelligent Traffic Networks. , 2010, , 277-310.		3
51	Control of day-to-day route choice in traffic networks with overlapping routes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 556-561.	0.4	0
52	Model Predictive Control for Multi-Class Traffic Flows. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 25-30.	0.4	17
53	Influencing route choice in traffic networks: A model predictive control approach based on mixed-integer linear programming. , 2008, , .		9
54	SPECIALIST: A dynamic speed limit control algorithm based on shock wave theory. , 2008, , .		106

#	Article	IF	Citations
55	Distributed Controller Design Approach to Dynamic Speed Limit Control against Shockwaves on Freeways. Transportation Research Record, 2008, 2086, 93-99.	1.0	36
56	Distributed Controller Design for Dynamic Speed Limit Control Against Shock Waves on Freeways. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 14060-14065.	0.4	12
57	Introduction to the Special Section on ITSC'05. IEEE Transactions on Intelligent Transportation Systems, 2007, 8, 1-3.	4.7	4
58	Freeway traffic estimation within particle filtering framework. Automatica, 2007, 43, 290-300.	3.0	177
59	Model predictive control for optimal coordination of ramp metering and variable speed limits. Transportation Research Part C: Emerging Technologies, 2005, 13, 185-209.	3.9	470
60	Optimal Control of Freeway Networks with Bottlenecks and Static Demand. Transportation Research Record, 2005, 1925, 29-37.	1.0	1
61	Optimal Coordination of Variable Speed Limits to Suppress Shock Waves. IEEE Transactions on Intelligent Transportation Systems, 2005, 6, 102-112.	4.7	322
62	Model Predictive Control Approach for Recovery from Delays in Railway Systems. Transportation Research Record, 2002, 1793, 15-20.	1.0	35