

# Balazs Kulcsar

## List of Publications by Year in descending order

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67  
papers

1,045  
citations

471509

17  
h-index

454955

30  
g-index

67  
all docs

67  
docs citations

67  
times ranked

799  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Game Approach for Charging Station Placement Based on User Preferences and Crowdedness. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 3654-3669.	8.0	16
2	Bilevel Optimization for Bunching Mitigation and Eco-Driving of Electric Bus Lines. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 10662-10679.	8.0	7
3	Can AI Abuse Personal Information in an EV Fast-Charging Market?. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 8759-8769.	8.0	3
4	Dynamic stochastic electric vehicle routing with safe reinforcement learning. Transportation Research, Part E: Logistics and Transportation Review, 2022, 157, 102496.	7.4	50
5	Incident indicators for freeway traffic flow models. Communications in Transportation Research, 2022, 2, 100060.	10.7	14
6	Electric vehicle routing problem with machine learning for energy prediction. Transportation Research Part B: Methodological, 2021, 145, 24-55.	5.9	76
7	A platoon regulation algorithm to improve the traffic performance of highway work zones. Computer-Aided Civil and Infrastructure Engineering, 2021, 36, 941-956.	9.8	38
8	A modular, adaptive, and autonomous transit system (MAATS): An in-motion transfer strategy and performance evaluation in urban grid transit networks. Transportation Research, Part A: Policy and Practice, 2021, 151, 81-98.	4.2	28
9	Pro-social control of connected automated vehicles in mixed-autonomy multi-lane highway traffic. Communications in Transportation Research, 2021, 1, 100019.	10.7	34
10	Set-based multi-objective control of metered ramps at ring road junctions. Transportmetrica A: Transport Science, 2020, 16, 337-357.	2.0	2
11	Induced L2-gain computation for rational LPV systems using Finsler's lemma and minimal generators. Systems and Control Letters, 2020, 142, 104738.	2.3	3
12	Emergency vehicle lane pre-clearing: From microscopic cooperation to routing decision making. Transportation Research Part B: Methodological, 2020, 141, 223-239.	5.9	60
13	Public transport trajectory planning with probabilistic guarantees. Transportation Research Part B: Methodological, 2020, 139, 81-101.	5.9	25
14	Network-level optimal control for public bus operation. IFAC-PapersOnLine, 2020, 53, 15003-15010.	0.9	0
15	Hierarchical Control of Electric Bus Lines. IFAC-PapersOnLine, 2020, 53, 14179-14184.	0.9	1
16	Energy-aware predictive control for electrified bus networks. Applied Energy, 2019, 252, 113477.	10.1	5
17	Energy consumption estimation integrated into the Electric Vehicle Routing Problem. Transportation Research, Part D: Transport and Environment, 2019, 69, 141-167.	6.8	130
18	Passivity analysis of rational LPV systems using Finsler's lemma. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
19	Kőtelez Á. Ájtvteli rendszerben benyújtott naperm ± látes Át Ási igények, megvalósulásának hatása a magyarországi települések villamosenergia-ellátására. International Journal of Engineering and Management Sciences, 2019, 4, 54-60.	0.1	0
20	Robust tracking controller design for active dolly steering. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2018, 232, 695-706.	1.9	3
21	Optimal headway merging for balanced public transport service in urban networks. IFAC-PapersOnLine, 2018, 51, 416-421.	0.9	1
22	Towards a robust traffic admission control in homogeneous urban vehicular networks under QoS constraints. , 2018, , .		2
23	Optimally combined headway and timetable reliable public transport system. Transportation Research Part C: Emerging Technologies, 2018, 92, 1-26.	7.6	28
24	Network traffic flow optimization under performance constraints. Transportation Research Part C: Emerging Technologies, 2017, 83, 120-133.	7.6	25
25	Variable speed limit design based on mode dependent Cell Transmission Model. Transportation Research Part C: Emerging Technologies, 2017, 85, 429-450.	7.6	15
26	Distributed LPV State-Feedback Control Under Control Input Saturation. IEEE Transactions on Automatic Control, 2017, 62, 2450-2456.	5.7	18
27	Traffic flow optimization with QoS constrained network admission control " "This research is supported by Chalmers' initiatives in transport research, the Transport Area of Advance at Chalmers University of Technology and SAFER (Vehicle and Traffic Safety Centre) and by the National Research, Development and Innovation Office of Hungary - NKFIH through grant No. 115694.. IFAC-PapersOnLine, 2017, 50, 5275-5280.	0.9	1
28	Distributed Ramp Metering "A Constrained Discharge Flow Maximization Approach. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 2525-2538.	8.0	16
29	Ramp metering for flow maximisation and emission reduction " a set-based multi-objective design approach. Transportation Research Procedia, 2017, 27, 937-944.	1.5	1
30	Set-theoretic analysis of the isolated ramp metering problem. International Journal of Robust and Nonlinear Control, 2016, 26, 1246-1266.	3.7	6
31	Distributed dynamic output feedback control for discrete-time linear parameter varying systems. , 2016, , .		0
32	Traffic aware electric vehicle routing. , 2016, , .		9
33	Back-Pressure Traffic Signal Control With Fixed and Adaptive Routing for Urban Vehicular Networks. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 2134-2143.	8.0	79
34	Villamosenergia ellátás megújuló energiaforrások segítségével egy település áldáján keresztül. International Journal of Engineering and Management Sciences, 2016, 1, 9-17.	0.1	0
35	Single-region robust perimeter traffic flow control. , 2015, , .		12
36	Distributed LPV state-feedback control with application to motorway ramp metering. , 2015, , .		6

#	ARTICLE	IF	CITATIONS
37	Traffic-adaptive signal control and vehicle routing using a decentralized back-pressure method. , 2015, , .		13
38	Fault estimation for discrete time LPV systems under noisy scheduling measurements. IFAC-PapersOnLine, 2015, 48, 1018-1023.	0.9	3
39	Freeway traffic incident reconstruction – A bi-parameter approach. Transportation Research Part C: Emerging Technologies, 2015, 58, 585-597.	7.6	7
40	Fault detection for LPV systems using model parameters that can be estimated via linear least squares. International Journal of Robust and Nonlinear Control, 2014, 24, 1989-1999.	3.7	7
41	Robust Control for Urban Road Traffic Networks. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 385-398.	8.0	61
42	Incident parameter scheduled freeway traffic control - a ramp meter approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 11338-11343.	0.4	5
43	Correction to –Robust Inversion Based Fault Estimation for Discrete-Time LPV Systems–[Jun 12 1581-1586]. IEEE Transactions on Automatic Control, 2012, 57, 2159-2159.	5.7	0
44	Robust Inversion Based Fault Estimation for Discrete-Time LPV Systems. IEEE Transactions on Automatic Control, 2012, 57, 1581-1586.	5.7	41
45	Linear Parameter Varying Identification of Freeway Traffic Models. IEEE Transactions on Control Systems Technology, 2011, 19, 31-45.	5.2	28
46	On The Similarity State Transformation for Linear Parameter-Varying Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4155-4160.	0.4	8
47	Robust servo control of a novel type 1 diabetic model. Optimal Control Applications and Methods, 2011, 32, 215-238.	2.1	29
48	Freeway ramp metering: An LPV set theoretical analysis. , 2011, , .		5
49	Parameter-dependent modeling of freeway traffic flow. Transportation Research Part C: Emerging Technologies, 2010, 18, 471-488.	7.6	18
50	Unknown input reconstruction for LPV systems. International Journal of Robust and Nonlinear Control, 2010, 20, 579-595.	3.7	27
51	Robust cautious data driven control with guaranteed mean square stability. , 2010, , .		1
52	Discrete time minimax tracking control with disturbance estimation. , 2009, , .		3
53	Induced L2 Norm Improvement by Interpolating Controllers for Discrete-time LPV Systems. European Journal of Control, 2009, 15, 545-559.	2.6	6
54	LPV Subspace Identification of a DC motor with unbalanced disc. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 856-861.	0.4	9

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55	Subspace based Fault Detection and Identification for LPV Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 336-341.	0.4	10
56	Induced L2-norm Minimization of Glucose-Insulin System for Type I Diabetic Patients. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 55-60.	0.4	3
57	An alternative formulation of the interpolation based constrained $H^\infty$ control of discrete-time LPV systems. , 2009, , .		0
58	Model-based nonlinear optimal blood glucose control of Type I diabetes patients. , 2008, 2008, 1607-10.		12
59	Piecewise linear parameter varying mathematical model of a Hybrid Solar Vehicle. , 2008, , .		3
60	Constrained $H^\infty$ control for discrete-time LPV systems using interpolation. , 2008, , .		0
61	An exact solution for the infinite horizon LQ optimal output tracking problem. , 2008, , .		3
62	On the use of proper weighting in reference tracking optimal control with guaranteed DARE solvability. , 2008, , .		1
63	Parameter dependent freeway modelling. Periodica Polytechnica Transportation Engineering, 2008, 36, 61.	1.2	1
64	Control Solutions for Hybrid Solar Vehicle Fuel Consumption Minimization. Intelligent Vehicles Symposium, 2009 IEEE, 2007, , .	0.0	18
65	ON THE DETECTION OF UNKNOWN INPUT IN POSITIONAL CONTROL PROBLEMS WITH NOISY MEASUREMENTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 802-807.	0.4	1
66	CONSTRAINED SPLIT RATE ESTIMATION BY MOVING HORIZON. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 78-83.	0.4	6
67	$H^\infty$ Disturbance Rejection on Residual Output. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 489-494.	0.4	1