Silvia Siri

List of Publications by Year
in descending order

55 papers	985 citations	471371 17 h-index	477173 29 g-index
56 all docs	56 docs citations	56 times ranked	745 citing authors

#	Article	IF	Citations
1	Economic and environmental optimization model for the design andÂthe operation of a combined heat and power distributed generation system in an urban area. Energy, 2013, 55, 1014-1024.	4.5	165
2	Two-class freeway traffic regulation to reduce congestion and emissions via nonlinear optimal control. Transportation Research Part C: Emerging Technologies, 2015, 55, 85-99.	3.9	62
3	DESOD: a mathematical programming tool to optimally design a distributed energy system. Energy, 2016, 100, 298-309.	4.5	56
4	Event-triggered model predictive schemes for freeway traffic control. Transportation Research Part C: Emerging Technologies, 2015, 58, 554-567.	3.9	55
5	A multi-class model-based control scheme for reducing congestion and emissions in freeway networks by combining ramp metering and route guidance. Transportation Research Part C: Emerging Technologies, 2017, 80, 384-408.	3.9	55
6	Freeway traffic control: A survey. Automatica, 2021, 130, 109655.	3.0	43
7	Modelling and Optimal Receding-horizon Control of Maritime Container Terminals. Mathematical Modelling and Algorithms, 2007, 6, 109-133.	0.5	41
8	Exergetic optimization of single level combined gasâ€"steam power plants considering different objective functions. Energy, 2010, 35, 5365-5373.	4.5	37
9	Freeways as Systems of Systems: A Distributed Model Predictive Control Scheme. IEEE Systems Journal, 2015, 9, 312-323.	2.9	37
10	An Event-Triggered Receding-Horizon Scheme for Planning Rail Operations in Maritime Terminals. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 365-375.	4.7	31
11	Comparison of solution approaches for the train load planning problem in seaport terminals. Transportation Research, Part E: Logistics and Transportation Review, 2015, 79, 65-82.	3.7	28
12	An event-triggered Model Predictive Control scheme for freeway systems. , 2012, , .		26
13	Traffic control for freeway networks with sustainability-related objectives: Review and future challenges. Annual Reviews in Control, 2019, 48, 312-324.	4.4	26
14	An integrated simulation-optimization framework for the operational planning of seaport container terminals. Mathematical and Computer Modelling of Dynamical Systems, 2009, 15, 275-293.	1.4	25
15	Modeling and solving the train load planning problem in seaport container terminals. , 2011, , .		24
16	A mathematical model to evaluate different train loading and stacking policies in a container terminal. Maritime Economics and Logistics, 2013, 15, 292-308.	2.0	24
17	Design of networked freeway traffic controllers based on eventâ€triggered control concepts. International Journal of Robust and Nonlinear Control, 2016, 26, 1162-1183.	2.1	22
18	Freight transportation in railway networks with automated terminals: A mathematical model and MIP heuristic approaches. European Journal of Operational Research, 2011, 214, 588-594.	3.5	19

#	Article	IF	Citations
19	A control scheme for freeway traffic systems based on hybrid automata. Discrete Event Dynamic Systems: Theory and Applications, 2012, 22, 3-25.	0.6	18
20	Optimal Control for Reducing Congestion and Improving Safety in Freeway Systems. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 3613-3625.	4.7	17
21	Optimal design of electric mobility services for a Local Energy Community. Sustainable Energy, Grids and Networks, 2021, 26, 100440.	2.3	17
22	Ramp metering control for two vehicle classes to reduce traffic emissions in freeway systems. , 2014, , .		16
23	An MILP Optimization Problem for Sizing Port Rail Networks and Planning Shunting Operations in Container Terminals. IEEE Transactions on Automation Science and Engineering, 2016, 13, 1492-1503.	3.4	14
24	Freeway networks as Systems of Systems: An event-triggered distributed control scheme. , 2012, , .		13
25	Hierarchical Centralized/Decentralized Event-Triggered Control of Multiclass Traffic Networks. IEEE Transactions on Control Systems Technology, 2021, 29, 1549-1564.	3.2	12
26	The port as a system of systems: A System Dynamics simulation approach. , 2012, , .		10
27	Optimization of low-carbon multi-energy systems with seasonal geothermal energy storage: The Anergy Grid of ETH Zurich. Energy Conversion and Management: X, 2020, 8, 100052.	0.9	10
28	Event-triggered strategies for the networked control of freeway traffic systems. , 2014, , .		8
29	Supervisory Model Predictive Control for freeway traffic systems. , 2013, , .		7
30	Congestion and Emissions Reduction in Freeway Traffic Networks via Supervisory Event-triggered Control. IFAC-PapersOnLine, 2017, 50, 4240-4245.	0.5	7
31	Network performance evaluation under disruptive events through a progressive traffic assignment model. IFAC-PapersOnLine, 2020, 53, 15017-15022.	0.5	6
32	A multi-class ramp metering and routing control scheme to reduce congestion and traffic emissions in freeway networks. IFAC-PapersOnLine, 2016, 49, 329-334.	0.5	5
33	Integer programming and ant colony optimization for planning intermodal freight transportation operations. , 2011, , .		4
34	Time-varying triggering conditions for the robust control of freeway systems. , 2014, , .		4
35	Optimal Control of Production Processes with Variable Execution Times. Discrete Event Dynamic Systems: Theory and Applications, 2009, 19, 423-448.	0.6	3
36	Event-Based Control of Freeway Systems. , 2013, , .		3

#	Article	IF	Citations
37	Distributed Model Predictive Control for MLD systems: Application to freeway ramp metering. , 2014, , .		3
38	Traffic-Prediction-Based Optimal Control of Electric and Autonomous Buses. , 2022, 6, 3331-3336.		3
39	Platoon-actuated variable area mainstream traffic control for bottleneck decongestion. European Journal of Control, 2022, 68, 100687.	1.6	3
40	On an implicit and stable resolution scheme for the Payne–Whitham model. Mathematical and Computer Modelling, 2011, 54, 378-387.	2.0	2
41	Asynchronous regulation of service speed in inventory-production systems with time-varying positive demand. , 2011, , .		2
42	A hybrid automaton for multi-class ramp metering in freeway systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 344-349.	0.4	2
43	Computational analysis of freeway traffic control based on a linearized prediction model. , 2013, , .		2
44	Simulation-based assessment of natural robustness of freeway traffic systems controlled via MPC. , 2014, , .		2
45	Day-to-day discrete-time traffic assignment model for transport networks affected by disruptive events. European Journal of Control, 2022, 68, 100684.	1.6	2
46	A discrete-time model for optimizing the rail port cycle. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 83-88.	0.4	1
47	A receding-horizon planning approach for rail operations in seaport container terminals. , 2013, , .		1
48	Editorial for the Special Issue on recent trends in traffic modelling and control. International Journal of Robust and Nonlinear Control, 2016, 26, 1159-1161.	2.1	1
49	Two-Stage Multiclass Modeling Approach for Intermodal Rail-Road Transport Networks. IEEE Access, 2022, 10, 73583-73600.	2.6	1
50	Service rate optimization in inventory-production systems with time-varying and incomplete deterministic demand. , 2009, , .		0
51	Optimal control of freeway systems based on a linearized prediction model. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10715-10720.	0.4	0
52	Inventory optimization of distribution networks with discrete-event processes by vendor-managed policies. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9524-9529.	0.4	0
53	A mathematical framework for the planning and control of complex systems. , 2012, , .		0
54	Optimal Shipment Policies for Distribution Systems With a Limited Fleet of Capacitated Vehicles. IEEE Transactions on Automation Science and Engineering, 2014, 11, 948-953.	3.4	0

#	ARTICLE	IF	CITATIONS
55	Linear optimal control strategies for production systems with a discrete-event demand pattern. Discrete Event Dynamic Systems: Theory and Applications, 2014, 24, 339-352.	0.6	0