

Jorge A Laval

List of Publications by Year in descending order

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39
papers

2,382
citations

304368

22
h-index

315357

38
g-index

39
all docs

39
docs citations

39
times ranked

1163
citing authors

#	ARTICLE	IF	CITATIONS
1	Parameter estimation of the macroscopic fundamental diagram: A maximum likelihood approach. <i>Transportation Research Part C: Emerging Technologies</i> , 2022, 140, 103678.	3.9	13
2	Dynamic traffic assignment using the macroscopic fundamental diagram: A Review of vehicular and pedestrian flow models. <i>Transportation Research Part B: Methodological</i> , 2020, 137, 99-118.	2.8	32
3	A continuum model for cities based on the macroscopic fundamental diagram: A semi-Lagrangian solution method. <i>Transportation Research Part B: Methodological</i> , 2020, 132, 101-116.	2.8	10
4	Genetic algorithm-based simulation optimization of the ALINEA ramp metering system: a case study in Atlanta. <i>Transportation Planning and Technology</i> , 2020, 43, 475-487.	0.9	1
5	Combined Ramp-Metering and Variable Speed Limit System for Capacity Drop Control at Merge Bottlenecks. <i>Journal of Transportation Engineering Part A: Systems</i> , 2020, 146, .	0.8	5
6	Analysis of a Two-Regime Stochastic Car-Following Model: Explaining Capacity Drop and Oscillation Instabilities. <i>Transportation Research Record</i> , 2019, 2673, 610-619.	1.0	18
7	Comparing bus holding methods with and without real-time predictions. <i>Transportation Research Part C: Emerging Technologies</i> , 2018, 87, 197-211.	3.9	57
8	Minimal parameter formulations of the dynamic user equilibrium using macroscopic urban models: Freeway vs city streets revisited. <i>Transportation Research Part B: Methodological</i> , 2018, 117, 676-686.	2.8	22
9	Macroscopic urban dynamics: Analytical and numerical comparisons of existing models. <i>Transportation Research Part B: Methodological</i> , 2017, 101, 245-267.	2.8	110
10	Minimal Parameter Formulations of the Dynamic User Equilibrium using Macroscopic Urban Models: Freeway vs City Streets Revisited. <i>Transportation Research Procedia</i> , 2017, 23, 517-530.	0.8	11
11	Microsimulation-Based Real-Time Congestion Pricing Strategy for Managed Lane. <i>Transportation Research Record</i> , 2016, 2554, 19-26.	1.0	3
12	The impact of source terms in the variational representation of traffic flow. <i>Transportation Research Part B: Methodological</i> , 2016, 94, 204-216.	2.8	9
13	Symmetries in the kinematic wave model and a parameter-free representation of traffic flow. <i>Transportation Research Part B: Methodological</i> , 2016, 89, 168-177.	2.8	23
14	Stochastic Approximations for the Macroscopic Fundamental Diagram of Urban Networks. <i>Transportation Research Procedia</i> , 2015, 7, 615-630.	0.8	29
15	Stochastic approximations for the macroscopic fundamental diagram of urban networks. <i>Transportation Research Part B: Methodological</i> , 2015, 81, 904-916.	2.8	71
16	A real-time bus dispatching policy to minimize passenger wait on a high frequency route. <i>Transportation Research Part B: Methodological</i> , 2015, 81, 377-389.	2.8	101
17	Real-time congestion pricing strategies for toll facilities. <i>Transportation Research Part B: Methodological</i> , 2015, 71, 19-31.	2.8	24
18	A parsimonious model for the formation of oscillations in car-following models. <i>Transportation Research Part B: Methodological</i> , 2014, 70, 228-238.	2.8	129

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19	The Distribution of Congestion on a Class of Stochastic Kinematic Wave Models. <i>Transportation Science</i> , 2014, 48, 217-224.	2.6	14
20	Microsimulation-Based Framework for Freeway Travel Time Forecasting. <i>Transportation Research Record</i> , 2014, 2470, 34-45.	1.0	5
21	The Hamilton-Jacobi partial differential equation and the three representations of traffic flow. <i>Transportation Research Part B: Methodological</i> , 2013, 52, 17-30.	2.8	81
22	Stochastic Extension of Newell's Three-Detector Method. <i>Transportation Research Record</i> , 2012, 2315, 73-80.	1.0	27
23	Microscopic traffic hysteresis in traffic oscillations: A behavioral perspective. <i>Transportation Research Part B: Methodological</i> , 2012, 46, 1440-1453.	2.8	81
24	Hysteresis in traffic flow revisited: An improved measurement method. <i>Transportation Research Part B: Methodological</i> , 2011, 45, 385-391.	2.8	100
25	Capacity drops at merges: An endogenous model. <i>Transportation Research Part B: Methodological</i> , 2011, 45, 1302-1313.	2.8	80
26	Capacity Drops at Merges: an endogenous model. <i>Procedia, Social and Behavioral Sciences</i> , 2011, 17, 12-26.	0.5	77
27	Optimal dynamic pricing strategies for high-occupancy/toll lanes. <i>Transportation Research Part C: Emerging Technologies</i> , 2011, 19, 64-74.	3.9	81
28	A mechanism to describe the formation and propagation of stop-and-go waves in congested freeway traffic. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 4519-4541.	1.6	197
29	Continuum Approximation for Congestion Dynamics Along Freeway Corridors. <i>Transportation Science</i> , 2010, 44, 87-97.	2.6	13
30	Graphical solution and continuum approximation for the single destination dynamic user equilibrium problem. <i>Transportation Research Part B: Methodological</i> , 2009, 43, 108-118.	2.8	10
31	Effects of geometric design on freeway capacity: Impacts of truck lane restrictions. <i>Transportation Research Part B: Methodological</i> , 2009, 43, 720-728.	2.8	24
32	Microscopic modeling of the relaxation phenomenon using a macroscopic lane-changing model. <i>Transportation Research Part B: Methodological</i> , 2008, 42, 511-522.	2.8	174
33	System optimum dynamic traffic assignment graphical solution method for a congested freeway and one destination. <i>Transportation Research Part B: Methodological</i> , 2006, 40, 1-15.	2.8	39
34	Lane-changing in traffic streams. <i>Transportation Research Part B: Methodological</i> , 2006, 40, 251-264.	2.8	520
35	A macroscopic theory of two-lane rural roads. <i>Transportation Research Part B: Methodological</i> , 2006, 40, 937-944.	2.8	16
36	Stochastic Processes of Moving Bottlenecks. <i>Transportation Research Record</i> , 2006, 1988, 86-91.	1.0	21

#	ARTICLE	IF	CITATIONS
37	On the numerical treatment of moving bottlenecks. Transportation Research Part B: Methodological, 2005, 39, 31-46.	2.8	61
38	Moving bottlenecks: A numerical method that converges in flows. Transportation Research Part B: Methodological, 2005, 39, 855-863.	2.8	78
39	Stochastic Processes of Moving Bottlenecks: Approximate Formulas for Highway Capacity. , 0, .		15