Marcello Montanino

List of Publications by Year
in descending order

24 papers	**1,335** citations	430874 **18** h-index	713466 **21** g-index
24 all docs	**24** docs citations	**24** times ranked	**949** citing authors

#	Article	IF	Citations
1	Trajectory data reconstruction and simulation-based validation against macroscopic traffic patterns. Transportation Research Part B: Methodological, 2015, 80, 82-106.	5.9	212
2	A new look at planning and designing transportation systems: A decision-making model based on cognitive rationality, stakeholder engagement and quantitative methods. Transport Policy, 2015, 38, 27-39.	6.6	149
3	Making NGSIM Data Usable for Studies on Traffic Flow Theory. Transportation Research Record, 2013, 2390, 99-111.	1.9	127
4	Can Results of car-following Model Calibration Based on Trajectory Data be Trusted?. Transportation Research Record, 2012, 2315, 11-24.	1.9	95
5	Do We Really Need to Calibrate All the Parameters? Variance-Based Sensitivity Analysis to Simplify Microscopic Traffic Flow Models. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 184-193.	8.0	88
6	A behavioral model of accessibility based on the number of available opportunities. Journal of Transport Geography, 2016, 51, 45-58.	5.0	69
7	Thirty Years of Gippsâ€™ Car-Following Model. Transportation Research Record, 2012, 2315, 89-99.	1.9	66
8	On string stability of a mixed and heterogeneous traffic flow: A unifying modelling framework. Transportation Research Part B: Methodological, 2021, 144, 133-154.	5.9	64
9	About calibration of car-following dynamics of automated and human-driven vehicles: Methodology, guidelines and codes. Transportation Research Part C: Emerging Technologies, 2021, 128, 103165.	7.6	63
10	Speed or spacing? Cumulative variables, and convolution of model errors and time in traffic flow models validation and calibration. Transportation Research Part B: Methodological, 2016, 91, 21-33.	5.9	59
11	A New Measure of Accessibility based on Perceived Opportunities. Procedia, Social and Behavioral Sciences, 2013, 87, 117-132.	0.5	47
12	From homogeneous to heterogeneous traffic flows:$\mathscr{L}\mathbf{p}$String stability under uncertain model parameters. Transportation Research Part B: Methodological, 2021, 146, 136-154.	5.9	46
13	Does traffic-related calibration of car-following models provide accurate estimations of vehicle emissions?. Transportation Research, Part D: Transport and Environment, 2015, 34, 267-280.	6.8	43
14	Point-to-point speed enforcement systems: Speed limits design criteria and analysis of driversâ€™ compliance. Transportation Research Part C: Emerging Technologies, 2015, 53, 1-18.	7.6	37
15	Gaussian Process Metamodels for Sensitivity Analysis of Traffic Simulation Models. Transportation Research Record, 2013, 2390, 87-98.	1.9	33
16	Global sensitivity analysis techniques to simplify the calibration of traffic simulation models. Methodology and application to the IDM carâ€following model. IET Intelligent Transport Systems, 2014, 8, 479-489.	3.0	29
17	A two-level probabilistic approach for validation of stochastic traffic simulations: impact of driversâ€™ heterogeneity models. Transportation Research Part C: Emerging Technologies, 2020, 121, 102843.	7.6	27
18	Energy Consumption Modeling in Presence of Uncertainty. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 6330-6341.	8.0	20

#	Article	IF	Citations
19	Physics-augmented models to simulate commercial adaptive cruise control (ACC) systems. Transportation Research Part C: Emerging Technologies, 2022, 139, 103692.	7.6	16
20	Empirical Analysis of Effects of Automated Section Speed Enforcement System on Traffic Flow at Freeway Bottlenecks. Transportation Research Record, 2011, 2260, 83-93.	1.9	15
21	Microscopic energy consumption modelling of electric buses: model development, calibration, and validation. Transportation Research, Part D: Transport and Environment, 2021, 98, 102978.	6.8	15
22	Calibration of microscopic traffic flow models against time-series data. , 2012, , .		10
23	CoNL route choice model: numerical assessment on a real dataset of trajectories. , 2019, , .		4
24	Notice of Removal: Parameter sampling strategies in traffic microsimulation. , 2015, , .		1