Arne Kesting

List of Publications by Year
in descending order

35 papers	4,344 citations	331670 21 h-index	552781 26 g-index
36 all docs	36 docs citations	36 times ranked	2185 citing authors

#	Article	IF	Citations
1	The Intelligent Driver Model with stochasticity â€" New insights into traffic flow oscillations. Transportation Research Part B: Methodological, 2018, 117, 613-623.	5.9	51
2	The Intelligent Driver Model with Stochasticity -New Insights Into Traffic Flow Oscillations. Transportation Research Procedia, 2017, 23, 174-187.	1.5	75
3	Automatic and efficient driving strategies while approaching a traffic light. , 2014, , .		10
4	Microscopic Calibration and Validation of Car-Following Models â€" A Systematic Approach. Procedia, Social and Behavioral Sciences, 2013, 80, 922-939.	0.5	106
5	Theoretical vs. Empirical Classification and Prediction of Congested Traffic States. Lecture Notes in Mathematics, 2013, , 303-333.	0.2	1
6	Validation of traffic flow models with respect to the spatiotemporal evolution of congested traffic patterns. Transportation Research Part C: Emerging Technologies, 2012, 21, 31-41.	7.6	69
7	Evidence of convective instability in congested traffic flow: A systematic empirical and theoretical investigation. Transportation Research Part B: Methodological, 2011, 45, 1362-1377.	5.9	59
8	Reconstructing the Traffic State by Fusion of Heterogeneous Data. Computer-Aided Civil and Infrastructure Engineering, 2011, 26, 408-419.	9.8	110
9	Evidence of Convective Instability in Congested Traffic Flow: A Systematic Empirical and Theoretical Investigation. Procedia, Social and Behavioral Sciences, 2011, 17, 683-701.	0.5	14
10	Three-phase traffic theory and two-phase models with a fundamental diagram in the light of empirical stylized facts. Transportation Research Part B: Methodological, 2010, 44, 983-1000.	5.9	159
11	Connectivity Statistics of Store-and-Forward Intervehicle Communication. IEEE Transactions on Intelligent Transportation Systems, 2010, 11, 172-181.	8.0	95
12	Enhanced intelligent driver model to access the impact of driving strategies on traffic capacity. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 4585-4605.	3.4	600
13	Trajektoriendaten und Floating-Car-Daten. Springer-Lehrbuch, 2010, , 7-11.	0.0	0
14	Modellgestützte Optimierung des Verkehrsflusses. Springer-Lehrbuch, 2010, , 289-301.	0.0	0
15	Fahrstreifenwechsel und andere diskrete Entscheidungen. Springer-Lehrbuch, 2010, , 197-209.	0.0	0
16	Stauentstehung und Stauausbreitung. Springer-Lehrbuch, 2010, , 257-266.	0.0	0
17	Calibration of Car-Following Models Using Floating Car Data. , 2009, , 117-127.		8
18	Modeling Lane-Changing Decisions with MOBIL. , 2009, , 211-221.		22

#	Article	IF	Citations
19	Modelling and Simulating Several Time-Delay Mechanisms in Human and Automated Driving. , 2009, , 413-419.		1
20	Adaptive cruise control design for active congestion avoidance. Transportation Research Part C: Emerging Technologies, 2008, 16, 668-683.	7.6	470
21	How Reaction Time, Update Time, and Adaptation Time Influence the Stability of Traffic Flow. Computer-Aided Civil and Infrastructure Engineering, 2008, 23, 125-137.	9.8	145
22	Calibrating Car-Following Models by Using Trajectory Data. Transportation Research Record, 2008, 2088, 148-156.	1.9	339
23	Longitudinal hopping in intervehicle communication: Theory and simulations on modeled and empirical trajectory data. Physical Review E, 2008, 78, 036102.	2.1	12
24	Estimating Acceleration and Lane-Changing Dynamics from Next Generation Simulation Trajectory Data. Transportation Research Record, 2008, 2088, 90-101.	1.9	311
25	Decentralized Approaches to Adaptive Traffic Control. Understanding Complex Systems, 2008, , 189-199.	0.6	3
26	Influence of Reaction Times and Anticipation on Stability of Vehicular Traffic Flow. Transportation Research Record, 2007, 1999, 23-29.	1.9	54
27	General Lane-Changing Model MOBIL for Car-Following Models. Transportation Research Record, 2007, 1999, 86-94.	1.9	802
28	Autonomous Detection and Anticipation of Jam Fronts from Messages Propagated by Intervehicle Communication. Transportation Research Record, 2007, 1999, 3-12.	1.9	35
29	Extending Adaptive Cruise Control to Adaptive Driving Strategies. Transportation Research Record, 2007, 2000, 16-24.	1.9	97
30	Jam-Avoiding Adaptive Cruise Control (ACC) and its Impact on Traffic Dynamics. , 2007, , 633-643.		42
31	Understanding widely scattered traffic flows, the capacity drop, and platoons as effects of variance-driven time gaps. Physical Review E, 2006, 74, 016123.	2.1	138
32	INFLUENCE OF REACTION TIMES AND ANTICIPATION ON THE STABILITY OF VEHICULAR TRAFFIC FLOW. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 205-210.	0.4	10
33	Delays, inaccuracies and anticipation in microscopic traffic models. Physica A: Statistical Mechanics and Its Applications, 2006, 360, 71-88.	2.6	425
34	Understanding interarrival and interdeparture time statistics from interactions in queuing systems. Physica A: Statistical Mechanics and Its Applications, 2006, 363, 62-72.	2.6	38
35	Coupled vehicle and information flows: Message transport on a dynamic vehicle network. Physica A: Statistical Mechanics and Its Applications, 2006, 363, 73-81.	2.6	43