Wen-Long Jin

List of Publications by Year
in descending order

100 papers	2,130 citations	218381 26 h-index	253896 43 g-index
102 all docs	102 docs citations	102 times ranked	1190 citing authors

#	Article	IF	Citations
1	A kinematic wave theory of lane-changing traffic flow. Transportation Research Part B: Methodological, 2010, 44, 1001-1021.	2.8	155
2	Broadcasting safety information in vehicular networks: issues and approaches. IEEE Network, 2010, 24, 20-25.	4.9	140
3	On the distribution schemes for determining flows through a merge. Transportation Research Part B: Methodological, 2003, 37, 521-540.	2.8	124
4	An analytical model of multihop connectivity of inter-vehicle communication systems. IEEE Transactions on Wireless Communications, 2010, 9, 106-112.	6.1	88
5	A control theoretic formulation ofgreen driving strategies based on inter-vehicle communications. Transportation Research Part C: Emerging Technologies, 2014, 41, 48-60.	3.9	81
6	Mobility and environment improvement of signalized networks through Vehicle-to-Infrastructure (V2I) communications. Transportation Research Part C: Emerging Technologies, 2016, 68, 70-82.	3.9	81
7	Instantaneous information propagation in a traffic stream through inter-vehicle communication. Transportation Research Part B: Methodological, 2006, 40, 230-250.	2.8	78
8	A dynamical system model of the traffic assignment problem. Transportation Research Part B: Methodological, 2007, 41, 32-48.	2.8	69
9	Control of a lane-drop bottleneck through variable speed limits. Transportation Research Part C: Emerging Technologies, 2015, 58, 568-584.	3.9	69
10	A multi-commodity Lighthillâ€“Whithamâ€“Richards model of lane-changing traffic flow. Transportation Research Part B: Methodological, 2013, 57, 361-377.	2.8	61
11	Kinematic Wave Traffic Flow Model for Mixed Traffic. Transportation Research Record, 2002, 1802, 197-204.	1.0	58
12	The formation and structure of vehicle clusters in the Payneâ€“Whitham traffic flow model. Transportation Research Part B: Methodological, 2003, 37, 207-223.	2.8	50
13	The Inhomogeneous Kinematic Wave Traffic Flow Model as a Resonant Nonlinear System. Transportation Science, 2003, 37, 294-311.	2.6	48
14	Multicommodity Kinematic Wave Simulation Model for Network Traffic Flow. Transportation Research Record, 2004, 1883, 59-67.	1.0	42
15	Continuous formulations and analytical properties of the link transmission model. Transportation Research Part B: Methodological, 2015, 74, 88-103.	2.8	41
16	A kinematic wave theory of multi-commodity network traffic flow. Transportation Research Part B: Methodological, 2012, 46, 1000-1022.	2.8	39
17	Continuous kinematic wave models of merging traffic flow. Transportation Research Part B: Methodological, 2010, 44, 1084-1103.	2.8	38
18	Generalized bathtub model of network trip flows. Transportation Research Part B: Methodological, 2020, 136, 138-157.	2.8	37

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19	Macroscopic Characteristics of Lane-Changing Traffic. Transportation Research Record, 2010, 2188, 55-63.	1.0	36
20	Kinematic wave models of sag and tunnel bottlenecks. Transportation Research Part B: Methodological, 2018, 107, 41-56.	2.8	36
21	The process of information propagation in a traffic stream with a general vehicle headway: A revisit. Transportation Research Part C: Emerging Technologies, 2010, 18, 367-375.	3.9	34
22	On the equivalence between continuum and car-following models of traffic flow. Transportation Research Part B: Methodological, 2016, 93, 543-559.	2.8	34
23	A modified Cell Transmission Model with realistic queue discharge features at signalized intersections. Transportation Research Part B: Methodological, 2015, 81, 302-315.	2.8	32
24	Simultaneous estimation of states and parameters in Newellâ€™s simplified kinematic wave model with Eulerian and Lagrangian traffic data. Transportation Research Part B: Methodological, 2017, 104, 106-122.	2.8	32
25	A Multi-commodity Lighthill-Whitham-Richards Model of Lane-changing Traffic Flow. Procedia, Social and Behavioral Sciences, 2013, 80, 658-677.	0.5	29
26	A kinematic wave theory of capacity drop. Transportation Research Part B: Methodological, 2015, 81, 316-329.	2.8	28
27	Point queue models: A unified approach. Transportation Research Part B: Methodological, 2015, 77, 1-16.	2.8	26
28	A kinematic wave approach to traffic statics and dynamics in a double-ring network. Transportation Research Part B: Methodological, 2013, 57, 114-131.	2.8	24
29	The traffic statics problem in a road network. Transportation Research Part B: Methodological, 2012, 46, 1360-1373.	2.8	23
30	Bounded acceleration traffic flow models: A unified approach. Transportation Research Part B: Methodological, 2018, 111, 1-18.	2.8	23
31	Asymptotic traffic dynamics arising in divergeâ€“merge networks with two intermediate links. Transportation Research Part B: Methodological, 2009, 43, 575-595.	2.8	22
32	A first-order behavioral model of capacity drop. Transportation Research Part B: Methodological, 2017, 105, 438-457.	2.8	22
33	Automatic identification of near-stationary traffic states based on the PELT changepoint detection. Transportation Research Part B: Methodological, 2018, 108, 39-54.	2.8	21
34	An improved Dial's algorithm for logit-based traffic assignment within a directed acyclic network. Transportation Planning and Technology, 2010, 33, 123-137.	0.9	20
35	Kinematic wave models of lane-drop bottlenecks. Transportation Research Part B: Methodological, 2017, 105, 507-522.	2.8	17
36	An instantaneous kinematic wave theory of diverging traffic. Transportation Research Part B: Methodological, 2013, 48, 1-16.	2.8	16

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37	Continuum car-following model of capacity drop at sag and tunnel bottlenecks. Transportation Research Part C: Emerging Technologies, 2020, 113, 260-276.	3.9	16
38	Optimal location problem for variable speed limit application areas. Transportation Research Part B: Methodological, 2020, 138, 221-246.	2.8	16
39	Modeling Connectivity of Inter-Vehicle Communication Systems with Road-Side Stations. Open Transportation Journal, 2008, 2, 1-6.	0.4	14
40	On the existence of stationary states in general road networks. Transportation Research Part B: Methodological, 2015, 81, 917-929.	2.8	13
41	A Riemann solver for a system of hyperbolic conservation laws at a general road junction. Transportation Research Part B: Methodological, 2017, 98, 21-41.	2.8	13
42	Monte Carlo Simulation Model of Intervehicle Communication. Transportation Research Record, 2007, 2000, 8-15.	1.0	12
43	Multi-Hop Broadcasting in Vehicular Ad Hoc Networks with Shockwave Traffic. , 2010, , .		12
44	Stability and bifurcation in network traffic flow: A PoincarÃ© map approach. Transportation Research Part B: Methodological, 2013, 57, 191-208.	2.8	12
45	On the stability of stationary states in general road networks. Transportation Research Part B: Methodological, 2017, 98, 42-61.	2.8	12
46	Stable dynamic pricing scheme independent of lane-choice models for high-occupancy-toll lanes. Transportation Research Part B: Methodological, 2020, 140, 64-78.	2.8	12
47	Paramics Simulation of Periodic Oscillations Caused by Network Geometry. , 0, .		12
48	Instantaneous information propagation in free flow, synchronized flow, stop-and-go waves in a cellular automaton model. Chinese Physics B, 2008, 17, 829-835.	0.7	11
49	A Study on Information Throughput of Inter-vehicle Communications in a Unidirectional Traffic Stream. , 2009, , .		10
50	Instantaneous multihop connectivity of one-dimensional vehicular ad hoc networks with general distributions of communication nodes. Transportation Research Part B: Methodological, 2016, 91, 159-177.	2.8	10
51	Analysis of Traffic Statics and Dynamics in Signalized Networks: A PoincarÃ© Map Approach. Transportation Science, 2017, 51, 1009-1029.	2.6	10
52	Stable Day-to-Day Dynamics for Departure Time Choice. Transportation Science, 2020, 54, 42-61.	2.6	10
53	Validation of a Macroscopic Lane-Changing Model. Transportation Research Record, 2013, 2391, 113-123.	1.0	8
54	Analysis and design of a variable speed limit control system at a freeway lane-drop bottleneck: A switched systems approach. , 2014, , .		8

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55	Network sensor health problem. Transportation Research Part C: Emerging Technologies, 2016, 68, 300-310.	3.9	8
56	â„“1-minimization method for link flow correction. Transportation Research Part B: Methodological, 2017, 104, 398-408.	2.8	8
57	An extension of Newellâ€™s simplified kinematic wave model to account for first-in-first-out violation: With an application to vehicle trajectory estimation. Transportation Research Part C: Emerging Technologies, 2019, 109, 79-94.	3.9	8
58	Security analysis for fixed-time traffic control systems. Transportation Research Part B: Methodological, 2020, 139, 473-495.	2.8	8
59	Analysis of Kinematic Waves Arising in Diverging Traffic Flow Models. Transportation Science, 2015, 49, 28-45.	2.6	7
60	Advances in Dynamic Traffic Assgmnt: TAC. Networks and Spatial Economics, 2015, 15, 617-634.	0.7	7
61	Field tests of a dynamic green driving strategy based on inter-vehicle communication. Transportation Research, Part D: Transport and Environment, 2018, 59, 289-300.	3.2	7
62	Instantaneous communication throughputs of vehicular ad hoc networks. Transportation Research Part C: Emerging Technologies, 2015, 53, 19-34.	3.9	6
63	Nonstandard second-order formulation of the LWR model. Transportmetrica B, 2019, 7, 1338-1355.	1.4	6
64	First In, First Out Properties of a Commodity-Based Kinematic Wave Simulation Model. , 0, .		6
65	First In, First Out Properties of a Commodity-Based Kinematic Wave Simulation Model. Transportation Research Record, 2005, 1934, 197-207.	1.0	5
66	Studies of Emergency Evacuation Strategies based on Kinematic Wave Models of Network Vehicular Traffic. , 2008, , .		4
67	An Urban Intersection Model Based on Multi-commodity Kinematic Wave Theories. , 2008, , .		4
68	ON THE STABILITY OF USER EQUILIBRIA IN STATIC TRANSPORTATION NETWORKS. Transportmetrica, 2008, 4, 1-17.	1.8	4
69	Dynamic transmission range in inter-vehicle communication with stop-and-go traffic. , 2010, , .		4
70	A Link Queue Model of Network Traffic Flow. Transportation Science, 2021, 55, 436-455.	2.6	4
71	Stable local dynamics for day-to-day departure time choice. Transportation Research Part B: Methodological, 2021, 149, 463-479.	2.8	4
72	Left-Lane Changes in Laterally Unbalanced Traffic. Transportation Research Record, 2015, 2490, 106-115.	1.0	3

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73	Asymptotic solution and effective Hamiltonian of a Hamiltonâ€"Jacobi equation in the modeling of traffic flow on a homogeneous signalized road. Journal Des Mathematiques Pures Et Appliquees, 2015, 104, 982-1004.	0.8	3
74	Unifiable multi-commodity kinematic wave model. Transportation Research Part B: Methodological, 2018, 117, 639-659.	2.8	3
75	Microscopic Simulation Replicates the Capacity Drop Phenomenon. Procedia Computer Science, 2018, 130, 908-913.	1.2	3
76	Impact of VSL Location on Capacity Drop: A Case of Sag and Tunnel Bottlenecks. Transportation Research Procedia, 2018, 34, 12-19.	0.8	3
77	A New Cell Transmission Model with Priority Vehicles and Special Lanes. Transportation Research Procedia, 2018, 34, 28-35.	0.8	3
78	A formulation of unifiable multi-commodity kinematic wave model with relative speed ratios. Transportation Research Part B: Methodological, 2019, 128, 236-253.	2.8	3
79	A Control Theoretic Approach to Simultaneously Estimate Average Value of Time and Determine Dynamic Price for High-Occupancy Toll Lanes. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 7293-7305.	4.7	3
80	On Time-Dependent Trip Distance Distribution with For-Hire Vehicle Trips in Chicago. Transportation Research Record, 2021, 2675, 915-934.	1.0	3
81	A method for computing quadratic Brunovsky forms. Electronic Journal of Linear Algebra, 0, 13, .	0.6	3
82	Nonequilibrium Continuum Traffic Flow Model with Frozen Sound Wave Speed. Transportation Research Record, 2003, 1852, 183-192.	1.0	2
83	Instantaneous communication capacities of vehicular ad hoc networks. Transportation Research Part C: Emerging Technologies, 2016, 72, 325-341.	3.9	2
84	Unifiable multi-commodity kinematic wave model. Transportation Research Procedia, 2017, 23, 137-156.	0.8	2
85	Continuum car-following model of capacity drop at sag and tunnel bottlenecks. Transportation Research Procedia, 2019, 38, 668-687.	0.8	2
86	Eco-Driving Algorithm with a Moving Bottleneck on a Single-Lane Road. Transportation Research Record, 2020, 2674, 493-504.	1.0	2
87	Stochastic LWR model with heterogeneous vehicles: Theory and application for autonomous vehicles. Transportation Research Procedia, 2020, 47, 155-162.	0.8	2
88	Framework for Deriving Macroscopic Demand Functions from Microscopic Acceleration Models. Transportation Research Record, 2017, 2623, 40-48.	1.0	1
89	Compartmental model and fleet-size management for shared mobility systems with for-hire vehicles. Transportation Research Part C: Emerging Technologies, 2021, 129, 103236.	3.9	1
90	Attack Modeling Methodology and Taxonomy for Intelligent Transportation Systems. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 13255-13264.	4.7	1

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91	On the Existence of Stationary States in General Road Networks. Transportation Research Procedia, 2015, 7, 689-703.	0.8	0
92	Newell's simplified car-following model. , 2021, , 165-174.		0
93	Point queue model. , 2021, , 191-205.		0
94	The bathtub model. , 2021, , 207-242.		0
95	The Link Transmission Model (LTM). , 2021, , 151-164.		0
96	The Lighthill-Whitham-Richards (LWR) model. , 2021, , 75-103.		0
97	The link queue model. , 2021, , 177-189.		0
98	Definitions of variables. , 2021, , 13-31.		0
99	The Cell Transmission Model (CTM). , 2021, , 105-131.		0
100	Newell's simplified kinematic wave model. , 2021, , 133-150.		0