Xuesong Zhou

List of Publications by Year
in descending order

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103	6,001	57631	76769
papers	citations	44 h-index	74 g-index

104	104	104	3182
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Computational graph-based framework for integrating econometric models and machine learning algorithms in emerging data-driven analytical environments. Transportmetrica A: Transport Science, 2022, 18, 1346-1375.	1.3	3
2	Integrated line planning and train timetabling through price-based cross-resolution feedback mechanism. Transportation Research Part B: Methodological, 2022, 155, 240-277.	2.8	29
3	A Review of Big Data Applications in Urban Transit Systems. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 2535-2552.	4.7	23
4	Domain adaptation from daytime to nighttime: A situation-sensitive vehicle detection and traffic flow parameter estimation framework. Transportation Research Part C: Emerging Technologies, 2021, 124, 102946.	3.9	41
5	Analytical characterization of multi-state effective discharge rates for bus-only lane conversion scheduling problem. Transportation Research Part B: Methodological, 2021, 148, 106-131.	2.8	3
6	How many trip requests could we support? An activity-travel based vehicle scheduling approach. Transportation Research Part C: Emerging Technologies, 2021, 128, 103222.	3.9	6
7	Synchronizing time-dependent transportation services: Reformulation and solution algorithm using quadratic assignment problem. Transportation Research Part B: Methodological, 2021, 152, 140-179.	2.8	12
8	Detecting phoneâ€related pedestrian distracted behaviours via a twoâ€branch convolutional neural network. IET Intelligent Transport Systems, 2021, 15, 147-158.	1.7	8
9	Operational design for shuttle systems with modular vehicles under oversaturated traffic: Continuous modeling method. Transportation Research Part B: Methodological, 2020, 132, 76-100.	2.8	44
10	A stepwise interpretable machine learning framework using linear regression (LR) and long short-term memory (LSTM): City-wide demand-side prediction of yellow taxi and for-hire vehicle (FHV) service. Transportation Research Part C: Emerging Technologies, 2020, 120, 102786.	3.9	38
11	Green logistics location-routing problem with eco-packages. Transportation Research, Part E: Logistics and Transportation Review, 2020, 143, 102118.	3.7	118
12	Integrated vehicle assignment and routing for system-optimal shared mobility planning with endogenous road congestion. Transportation Research Part C: Emerging Technologies, 2020, 117, 102675.	3.9	23
13	A mixed integer programming formulation and scalable solution algorithms for traffic control coordination across multiple intersections based on vehicle space-time trajectories. Transportation Research Part B: Methodological, 2020, 134, 266-304.	2.8	25
14	Trajectory data-based traffic flow studies: A revisit. Transportation Research Part C: Emerging Technologies, 2020, 114, 225-240.	3.9	128
15	Two-phase optimization model for ride-sharing with transfers in short-notice evacuations. Transportation Research Part C: Emerging Technologies, 2020, 114, 272-296.	3.9	13
16	Yard crane and AGV scheduling in automated container terminal: A multi-robot task allocation framework. Transportation Research Part C: Emerging Technologies, 2020, 114, 241-271.	3.9	97
17	Study on High-Speed Railway Emergency Spare Locomotive Deployment Scheme. , 2020, , .		1
18	Managed gating control strategy for emergency evacuation. Transportmetrica A: Transport Science, 2019, 15, 963-992.	1.3	2

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19	ADMM-based problem decomposition scheme for vehicle routing problem with time windows. Transportation Research Part B: Methodological, 2019, 129, 156-174.	2.8	68
20	A cumulative service state representation for the pickup and delivery problem with transfers. Transportation Research Part B: Methodological, 2019, 129, 351-380.	2.8	24
21	Observability quantification of public transportation systems with heterogeneous data sources: An information-space projection approach based on discretized space-time network flow models. Transportation Research Part B: Methodological, 2019, 128, 302-323.	2.8	14
22	Solving cyclic train timetabling problem through model reformulation: Extended time-space network construct and Alternating Direction Method of Multipliers methods. Transportation Research Part B: Methodological, 2019, 128, 344-379.	2.8	77
23	Operational design for shuttle systems with modular vehicles under oversaturated traffic: Continuous modeling method. Transportation Research Procedia, 2019, 38, 359-379.	0.8	2
24	Open-Source Public Transportation Mobility Simulation Engine DTALite-S: A Discretized Spaceâ€“Time Network-Based Modeling Framework for Bridging Multi-agent Simulation and Optimization. Urban Rail Transit, 2019, 5, 1-16.	0.9	24
25	Integrating Lagrangian and Eulerian observations for passenger flow state estimation in an urban rail transit network: A space-time-state hyper network-based assignment approach. Transportation Research Part B: Methodological, 2019, 121, 135-167.	2.8	66
26	Analyzing the Impact of Traffic Congestion Mitigation: From an Explainable Neural Network Learning Framework to Marginal Effect Analyses. Sensors, 2019, 19, 2254.	2.1	13
27	Balancing a oneâ€way corridor capacity and safetyâ€oriented reliability: A stochastic optimization approach for metro train timetabling. Naval Research Logistics, 2019, 66, 297-320.	1.4	11
28	An integrated train service plan optimization model with variable demand: A team-based scheduling approach with dual cost information in a layered network. Transportation Research Part B: Methodological, 2019, 125, 1-28.	2.8	48
29	Operational design for shuttle systems with modular vehicles under oversaturated traffic: Discrete modeling method. Transportation Research Part B: Methodological, 2019, 122, 1-19.	2.8	60
30	Kinematic wave-oriented Markov Chain model to capture the spatiotemporal correlations of coupled traffic states. , 2019, , .		0
31	A Cooperative Scheduling Framework for Shared Transportation Services. , 2019, , .		0
32	Finding robust and consistent space-time delivery paths for multi-day vehicle routing problem*. , 2019, , .		0
33	Accessibility with time and resource constraints: Computing hyper-prisms for sustainable transportation planning. Computers, Environment and Urban Systems, 2019, 73, 171-183.	3.3	19
34	Optimizing resource recharging location-routing plans: A resource-space-time network modeling framework for railway locomotive refueling applications. Computers and Industrial Engineering, 2019, 127, 1241-1258.	3.4	21
35	Solving the time-dependent multi-trip vehicle routing problem with time windows and an improved travel speed model by a hybrid solution algorithm. Cluster Computing, 2019, 22, 15459-15470.	3.5	14
36	Smart Urban Transit Systems: From Integrated Framework to Interdisciplinary Perspective. Urban Rail Transit, 2018, 4, 49-67.	0.9	33

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37	Network-oriented household activity pattern problem for system optimization. Transportation Research Part C: Emerging Technologies, 2018, 94, 250-269.	3.9	13
38	Coordinating assignment and routing decisions in transit vehicle schedules: A variable-splitting Lagrangian decomposition approach for solution symmetry breaking. Transportation Research Part B: Methodological, 2018, 107, 70-101.	2.8	51
39	Hierarchical travel demand estimation using multiple data sources: A forward and backward propagation algorithmic framework on a layered computational graph. Transportation Research Part C: Emerging Technologies, 2018, 96, 321-346.	3.9	66
40	Automatic train regulation of complex metro networks with transfer coordination constraints: A distributed optimal control framework. Transportation Research Part B: Methodological, 2018, 117, 228-253.	2.8	20
41	Open-source VRPLite Package for Vehicle Routing with Pickup and Delivery: A Path Finding Engine for Scheduled Transportation Systems. Urban Rail Transit, 2018, 4, 68-85.	0.9	26
42	Quantifying travel time variability at a single bottleneck based on stochastic capacity and demand distributions. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2017, 21, 79-93.	2.6	28
43	Eco-reliable path finding in time-variant and stochastic networks. Energy, 2017, 121, 372-387.	4.5	9
44	Multi-scenario optimization approach for assessing the impacts of advanced traffic information under realistic stochastic capacity distributions. Transportation Research Part C: Emerging Technologies, 2017, 77, 113-133.	3.9	17
45	Joint optimization of high-speed train timetables and speed profiles: A unified modeling approach using space-time-speed grid networks. Transportation Research Part B: Methodological, 2017, 97, 157-181.	2.8	110
46	Optimizing on-time arrival probability and percentile travel time for elementary path finding in time-dependent transportation networks: Linear mixed integer programming reformulations. Transportation Research Part B: Methodological, 2017, 96, 68-91.	2.8	78
47	Large-scale dynamic transportation network simulation: A space-time-event parallel computing approach. Transportation Research Part C: Emerging Technologies, 2017, 75, 1-16.	3.9	24
48	Customized bus service design for jointly optimizing passenger-to-vehicle assignment and vehicle routing. Transportation Research Part C: Emerging Technologies, 2017, 85, 451-475.	3.9	141
49	Recasting and optimizing intersection automation as a connected-and-automated-vehicle (CAV) scheduling problem: A sequential branch-and-bound search approach in phase-time-traffic hypernetwork. Transportation Research Part B: Methodological, 2017, 105, 479-506.	2.8	69
50	Green accessibility: Estimating the environmental costs of network-time prisms for sustainable transportation planning. Journal of Transport Geography, 2017, 64, 109-119.	2.3	17
51	Network-oriented Household Activity Pattern Problem for System Optimization. Transportation Research Procedia, 2017, 23, 827-847.	0.8	7
52	Dynamic programming-based multi-vehicle longitudinal trajectory optimization with simplified car following models. Transportation Research Part B: Methodological, 2017, 106, 102-129.	2.8	96
53	Survey on Driverless Train Operation for Urban Rail Transit Systems. Urban Rail Transit, 2016, 2, 106-113.	0.9	45
54	A comprehensive modeling framework for transportation-induced population exposure assessment. Transportation Research, Part D: Transport and Environment, 2016, 46, 94-113.	3.2	36

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55	Finding optimal solutions for vehicle routing problem with pickup and delivery services with time windows: A dynamic programming approach based on stateâ€“spaceâ€“time network representations. Transportation Research Part B: Methodological, 2016, 89, 19-42.	2.8	226
56	Capacitated transit service network design with boundedly rational agents. Transportation Research Part B: Methodological, 2016, 93, 225-250.	2.8	74
57	Modeling Visit Probabilities within Networkâ€Time Prisms Using <scp>M</scp>arkov Techniques. Geographical Analysis, 2016, 48, 18-42.	1.9	23
58	How Many and Where to Locate Parking Lots? A Spaceâ€“time Accessibility-Maximization Modeling Framework for Special Event Traffic Management. Urban Rail Transit, 2016, 2, 59-70.	0.9	21
59	Eco-system optimal time-dependent flow assignment in a congested network. Transportation Research Part B: Methodological, 2016, 94, 217-239.	2.8	41
60	Evacuation planning for disaster responses: A stochastic programming framework. Transportation Research Part C: Emerging Technologies, 2016, 69, 150-172.	3.9	39
61	Estimating the most likely spaceâ€“time paths, dwell times and path uncertainties from vehicle trajectory data: A time geographic method. Transportation Research Part C: Emerging Technologies, 2016, 66, 176-194.	3.9	46
62	A Train Dispatching Model Under a Stochastic Environment: Stable Train Routing Constraints and Reformulation. Networks and Spatial Economics, 2016, 16, 791-820.	0.7	17
63	Personalized real-time traffic information provision: Agent-based optimization model and solution framework. Transportation Research Part C: Emerging Technologies, 2016, 64, 164-182.	3.9	45
64	Integration of signal timing estimation model and dynamic traffic assignment in feedback loops: system design and case study. Journal of Advanced Transportation, 2015, 49, 683-699.	0.9	9
65	A Space-Time Network-Based Modeling Framework for Dynamic Unmanned Aerial Vehicle Routing in Traffic Incident Monitoring Applications. Sensors, 2015, 15, 13874-13898.	2.1	26
66	Hierarchical Multiresolution Traffic Simulator for Metropolitan Areas. Transportation Research Record, 2015, 2497, 63-72.	1.0	4
67	Method for investigating intradriver heterogeneity using vehicle trajectory data: A Dynamic Time Warping approach. Transportation Research Part B: Methodological, 2015, 73, 59-80.	2.8	85
68	Traffic zone division based on big data from mobile phone base stations. Transportation Research Part C: Emerging Technologies, 2015, 58, 278-291.	3.9	109
69	A mixed integer programming model for optimizing multi-level operations process in railroad yards. Transportation Research Part B: Methodological, 2015, 80, 19-39.	2.8	29
70	Characterizing corridor-level travel time distributions based on stochastic flows and segment capacities. Cogent Engineering, 2015, 2, 990672.	1.1	3
71	Integrating a simplified emission estimation model and mesoscopic dynamic traffic simulator to efficiently evaluate emission impacts of traffic management strategies. Transportation Research, Part D: Transport and Environment, 2015, 37, 123-136.	3.2	81
72	Demand-Driven Train Schedule Synchronization for High-Speed Rail Lines. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 2642-2652.	4.7	58

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73	Train scheduling for minimizing passenger waiting time with time-dependent demand and skip-stop patterns: Nonlinear integer programming models with linear constraints. Transportation Research Part B: Methodological, 2015, 76, 117-135.	2.8	334
74	Solving simultaneous route guidance and traffic signal optimization problem using space-phase-time hypernetwork. Transportation Research Part B: Methodological, 2015, 81, 103-130.	2.8	53
75	Transportation network design for maximizing spaceâ€“time accessibility. Transportation Research Part B: Methodological, 2015, 81, 555-576.	2.8	125
76	Estimating risk effects of driving distraction: A dynamic errorable car-following model. Transportation Research Part C: Emerging Technologies, 2015, 50, 117-129.	3.9	36
77	Fast train: A computationally efficient train routing and scheduling engine for general rail networks. , 2014, , .		0
78	Short-Term Highway Traffic State Prediction Using Structural State Space Models. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2014, 18, 309-322.	2.6	24
79	DTALite: A queue-based mesoscopic traffic simulator for fast model evaluation and calibration. Cogent Engineering, 2014, 1, 961345.	1.1	113
80	A method of road traffic state acquisition based on wireless sensor networks. , 2014, , .		0
81	Credibility-based rescheduling model in a double-track railway network: a fuzzy reliable optimization approach. Omega, 2014, 48, 75-93.	3.6	85
82	Simultaneous train rerouting and rescheduling on an N-track network: A model reformulation with network-based cumulative flow variables. Transportation Research Part B: Methodological, 2014, 67, 208-234.	2.8	214
83	Constraint reformulation and a Lagrangian relaxation-based solution algorithm for a least expected time path problem. Transportation Research Part B: Methodological, 2014, 59, 22-44.	2.8	112
84	Use of Spatiotemporal Constraints to Quantify Transit Accessibility. Transportation Research Record, 2014, 2417, 130-138.	1.0	11
85	Linear Programming Model for Estimating High-Resolution Freeway Traffic States from Vehicle Identification and Location Data. Transportation Research Record, 2014, 2421, 151-160.	1.0	3
86	Traffic state estimation and uncertainty quantification based on heterogeneous data sources: A three detector approach. Transportation Research Part B: Methodological, 2013, 57, 132-157.	2.8	100
87	Optimizing urban rail timetable under time-dependent demand and oversaturated conditions. Transportation Research Part C: Emerging Technologies, 2013, 36, 212-230.	3.9	370
88	Dynamic originâ€“destination demand flow estimation under congested traffic conditions. Transportation Research Part C: Emerging Technologies, 2013, 34, 16-37.	3.9	84
89	Designing heterogeneous sensor networks for estimating and predicting path travel time dynamics: An information-theoretic modeling approach. Transportation Research Part B: Methodological, 2013, 57, 66-90.	2.8	45
90	Reformulation and Solution Algorithms for Absolute and Percentile Robust Shortest Path Problems. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 943-954.	4.7	38

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91	Incorporating Stochastic Road Capacity into Day-to-Day Traffic Simulation and Traveler Learning Framework. Transportation Research Record, 2011, 2254, 112-121.	1.0	27
92	Robust single-track train dispatching model under a dynamic and stochastic environment: A scenario-based rolling horizon solution approach. Transportation Research Part B: Methodological, 2011, 45, 1080-1102.	2.8	179
93	Finding the most reliable path with and without link travel time correlation: A Lagrangian substitution based approach. Transportation Research Part B: Methodological, 2011, 45, 1660-1679.	2.8	105
94	An Information-Theoretic Sensor Location Model for Traffic Origin-Destination Demand Estimation Applications. Transportation Science, 2010, 44, 254-273.	2.6	85
95	Equivalent gap function-based reformulation and solution algorithm for the dynamic user equilibrium problem. Transportation Research Part B: Methodological, 2009, 43, 345-364.	2.8	66
96	A bi-criterion dynamic user equilibrium traffic assignment model and solution algorithm for evaluating dynamic road pricing strategies. Transportation Research Part C: Emerging Technologies, 2008, 16, 371-389.	3.9	65
97	A structural state space model for real-time traffic originâ€“destination demand estimation and prediction in a day-to-day learning framework. Transportation Research Part B: Methodological, 2007, 41, 823-840.	2.8	138
98	Single-track train timetabling with guaranteed optimality: Branch-and-bound algorithms with enhanced lower bounds. Transportation Research Part B: Methodological, 2007, 41, 320-341.	2.8	243
99	Dynamic Originâ€“Destination Demand Estimation Using Automatic Vehicle Identification Data. IEEE Transactions on Intelligent Transportation Systems, 2006, 7, 105-114.	4.7	160
100	Dynamic Origin-Destination Trip Demand Estimation for Subarea Analysis. Transportation Research Record, 2006, 1964, 176-184.	1.0	12
101	Bicriteria train scheduling for high-speed passenger railroad planning applications. European Journal of Operational Research, 2005, 167, 752-771.	3.5	170
102	Dynamic Origin-Destination Demand Estimation with Multiday Link Traffic Counts for Planning Applications. Transportation Research Record, 2003, 1831, 30-38.	1.0	61
103	Number and Location of Sensors for Real-Time Network Traffic Estimation and Prediction: Sensitivity Analysis. , 0, .		28