Agachai Sumalee

List of Publications by Year
in descending order

107 papers	4,530 citations	81743 39 h-index	114278 63 g-index
111 all docs	111 docs citations	111 times ranked	2660 citing authors

#	Article	IF	Citations
1	Travel time reliability-based optimization problem for CAVs dedicated lanes. Transportmetrica A: Transport Science, 2022, 18, 1569-1600.	1.3	8
2	Estimation of the value of travel time and of travel time reliability for heterogeneous drivers in a road network. Transportation, 2021, 48, 1639-1670.	2.1	8
3	Multiclass multilane model for freeway traffic mixed with connected automated vehicles and regular human-piloted vehicles. Transportmetrica A: Transport Science, 2021, 17, 5-33.	1.3	31
4	Pricing Environmental Externality in Traffic Networks Mixed With Fuel Vehicles and Electric Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 5535-5554.	4.7	14
5	Dynamic System Optimum Analysis of Multi-Region Macroscopic Fundamental Diagram Systems With State-Dependent Time-Varying Delays. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 4000-4016.	4.7	12
6	Statistical estimation of freight activity analytics from Global Positioning System data of trucks. Transportation Research, Part E: Logistics and Transportation Review, 2020, 140, 101986.	3.7	21
7	Optimization of traffic count locations for estimation of travel demands with covariance between origin-destination flows. Transportation Research Part C: Emerging Technologies, 2019, 108, 49-73.	3.9	13
8	Boundary conditions and behavior of the macroscopic fundamental diagram based network traffic dynamics: A control systems perspective. Transportation Research Part B: Methodological, 2018, 111, 327-355.	2.8	37
9	Network-wide on-line travel time estimation with inconsistent data from multiple sensor systems under network uncertainty. Transportmetrica A: Transport Science, 2018, 14, 110-129.	1.3	9
10	A real-time bus arrival time information system using crowdsourced smartphone data: a novel framework and simulation experiments. Transportmetrica B, 2018, 6, 34-53.	1.4	10
11	Robust perimeter control for two urban regions with macroscopic fundamental diagrams: A control-Lyapunov function approach. Transportation Research Part B: Methodological, 2018, 117, 687-707.	2.8	48
12	Using Time-dependent Attractiveness to Evaluate Dynamic Place-based Accessibility. , 2018, , .		1
13	Freight Traffic Analytics from National Truck GPS Data in Thailand. Transportation Research Procedia, 2018, 34, 123-130.	0.8	17
14	An optimal control framework for multi-region macroscopic fundamental diagram systems with time delay, considering route choice and departure time choice. , 2018, , .		3
15	Smarter and more connected: Future intelligent transportation system. IATSS Research, 2018, 42, 67-71.	1.8	169
16	The use of natural rubber latex as a renewable and sustainable modifier of asphalt binder. International Journal of Pavement Engineering, 2017, 18, 547-559.	2.2	67
17	Link-based multi-class hazmat routing-scheduling problem: A multiple demon approach. European Journal of Operational Research, 2017, 261, 337-354.	3.5	15
18	Forecasting journey time distribution with consideration to abnormal traffic conditions. Transportation Research Part C: Emerging Technologies, 2017, 85, 292-311.	3.9	38

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19	Modeling the impacts of mandatory and discretionary lane-changing maneuvers. Transportation Research Part C: Emerging Technologies, 2016, 68, 403-424.	3.9	54
20	A cross-entropy method and probabilistic sensitivity analysis framework for calibrating microscopic traffic models. Transportation Research Part C: Emerging Technologies, 2016, 63, 147-169.	3.9	41
21	Simultaneous optimization of fuel surcharges and transit service runs in a multimodal transport network: a time-dependent activity-based approach. Transportation Letters, 2016, 8, 35-46.	1.8	9
22	Estimation of Mean and Covariance of Stochastic Multi-class OD Demands from Classified Traffic Counts. Transportation Research Procedia, 2015, 7, 192-211.	0.8	6
23	Evolutionary Marginal Cost Pricing Scheme Implementation Based on Stochastic Traffic Flow Information. Mathematical Problems in Engineering, 2015, 2015, 1-12.	0.6	0
24	Automatic Freeway Incident Detection for Free Flow Conditions: A Vehicle Reidentification Based Approach Using Image Data from Sparsely Distributed Video Cameras. Mathematical Problems in Engineering, 2015, 2015, 1-13.	0.6	2
25	A stochastic multimodal reliable network design problem under adverse weather conditions. Journal of Advanced Transportation, 2015, 49, 73-95.	0.9	7
26	Statistical approach for activity-based model calibration based on plate scanning and traffic counts data. Transportation Research Part B: Methodological, 2015, 78, 280-300.	2.8	10
27	Estimation of mean and covariance of stochastic multi-class OD demands from classified traffic counts. Transportation Research Part C: Emerging Technologies, 2015, 59, 92-110.	3.9	18
28	A Sustainable Road Network Design Problem with Land Use Transportation Interaction over Time. Networks and Spatial Economics, 2015, 15, 791-822.	0.7	109
29	Modeling the Effects of Public Bicycle Schemes in a Congested Multi-Modal Road Network. International Journal of Sustainable Transportation, 2015, 9, 282-297.	2.1	33
30	Reliable Shortest Path Problems in Stochastic Time-Dependent Networks. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2014, 18, 177-189.	2.6	85
31	Updating of Travel Behavior Model Parameters and Estimation of Vehicle Trip Chain Based on Plate Scanning. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2014, 18, 393-409.	2.6	7
32	Vehicle Reidentification With Self-Adaptive Time Windows for Real-Time Travel Time Estimation. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 540-552.	4.7	14
33	Optimal and robust strategies for freeway traffic management under demand and supply uncertainties: an overview and general theory. Transportmetrica A: Transport Science, 2014, 10, 849-877.	1.3	26
34	Bus lane safety implications: a case study in Hong Kong. Transportmetrica A: Transport Science, 2014, 10, 140-159.	1.3	16
35	Optimal Recovery Plan after Disaster: Continuum Modeling Approach. Journal of Transportation Engineering, 2014, 140, .	0.9	8
36	Estimation of mean and covariance of peak hour origin–destination demands from day-to-day traffic counts. Transportation Research Part B: Methodological, 2014, 68, 52-75.	2.8	61

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37	Design of Sustainable Cordon Toll Pricing Schemes in a Monocentric City. Networks and Spatial Economics, 2014, 14, 133-158.	0.7	39
38	Solving a mixed integer linear program approximation of the toll design problem using constraint generation within a branch-and-cut algorithm. Transportmetrica A: Transport Science, 2014, 10, 791-819.	1.3	8
39	Finding Reliable Shortest Paths in Road Networks Under Uncertainty. Networks and Spatial Economics, 2013, 13, 123-148.	0.7	118
40	Dynamic stochastic journey time estimation and reliability analysis using stochastic cell transmission model: Algorithm and case studies. Transportation Research Part C: Emerging Technologies, 2013, 35, 263-285.	3.9	38
41	A Continuum Modeling Approach for Network Vulnerability Analysis at Regional Scale. Procedia, Social and Behavioral Sciences, 2013, 80, 846-859.	0.5	11
42	Journey time estimator for assessment of road network performance under demand uncertainty. Transportation Research Part C: Emerging Technologies, 2013, 35, 244-262.	3.9	14
43	Stochastic cell transmission model for traffic network with demand and supply uncertainties. Transportmetrica A: Transport Science, 2013, 9, 567-602.	1.3	33
44	Shortest Path Finding Problem in Stochastic Time-Dependent Road Networks With Stochastic First-In-First-Out Property. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 1907-1917.	4.7	56
45	Short-Term Traffic State Prediction Based on Temporal–Spatial Correlation. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 1242-1254.	4.7	99
46	Introduction: Modeling for Sustainable Urban Transportation. International Journal of Sustainable Transportation, 2013, 7, 167-169.	2.1	2
47	A congestion-pricing problem with a polycentric region and multi-class users: a continuum modelling approach. Transportmetrica A: Transport Science, 2013, 9, 514-545.	1.3	15
48	Transport dynamics: its time has come!. Transportmetrica B, 2013, 1, 1-2.	1.4	2
49	Environmentally Sustainable Toll Design for Congested Road Networks with Uncertain Demand. International Journal of Sustainable Transportation, 2012, 6, 127-155.	2.1	83
50	Vulnerability analysis for large-scale and congested road networks with demand uncertainty. Transportation Research, Part A: Policy and Practice, 2012, 46, 501-516.	2.0	84
51	Optimizing toll locations and levels using a mixed integer linear approximation approach. Transportation Research Part B: Methodological, 2012, 46, 834-854.	2.8	40
52	Design of a rail transit line for profit maximization in a linear transportation corridor. Transportation Research, Part E: Logistics and Transportation Review, 2012, 48, 50-70.	3.7	80
53	Probabilistic Fusion of Vehicle Features for Reidentification and Travel Time Estimation Using Video Image Data. Transportation Research Record, 2012, 2308, 73-82.	1.0	13
54	Reliable shortest path finding in stochastic networks with spatial correlated link travel times. International Journal of Geographical Information Science, 2012, 26, 365-386.	2.2	99

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55	Dynamic marginal cost, access control, and pollution charge: a comparison of bottleneck and whole link models. Journal of Advanced Transportation, 2012, 46, 191-221.	0.9	38
56	First-best marginal cost toll for a traffic network with stochastic demand. Transportation Research Part B: Methodological, 2011, 45, 41-59.	2.8	48
57	A dynamic traffic assignment model for a continuum transportation system. Transportation Research Part B: Methodological, 2011, 45, 343-363.	2.8	52
58	Stochastic cell transmission model (SCTM): A stochastic dynamic traffic model for traffic state surveillance and assignment. Transportation Research Part B: Methodological, 2011, 45, 507-533.	2.8	188
59	Robust Wardrop's user equilibrium assignment under stochastic demand and supply: Expected residual minimization approach. Transportation Research Part B: Methodological, 2011, 45, 534-552.	2.8	68
60	Global optimization method for mixed transportation network design problem: A mixed-integer linear programming approach. Transportation Research Part B: Methodological, 2011, 45, 808-827.	2.8	173
61	Dynamic user equilibrium with side constraints for a traffic network: Theoretical development and numerical solution algorithm. Transportation Research Part B: Methodological, 2011, 45, 1035-1061.	2.8	36
62	Schedule-based transit assignment model with vehicle capacity and seat availability. Transportation Research Part B: Methodological, 2011, 45, 1805-1830.	2.8	99
63	A Cell-Based Model for Multi-class Doubly Stochastic Dynamic Traffic Assignment. Computer-Aided Civil and Infrastructure Engineering, 2011, 26, 595-611.	6.3	82
64	Design of a rail transit line for profit maximization in a linear transportation corridor. Procedia, Social and Behavioral Sciences, 2011, 17, 82-112.	0.5	7
65	Large-scale road network vulnerability analysis: a sensitivity analysis based approach. Transportation, 2011, 38, 799-817.	2.1	71
66	An efficient solution algorithm for solving multi-class reliability-based traffic assignment problem. Mathematical and Computer Modelling, 2011, 54, 1428-1439.	2.0	51
67	Stochastic multi-modal transport network under demand uncertainties and adverse weather condition. Transportation Research Part C: Emerging Technologies, 2011, 19, 338-350.	3.9	82
68	Policy Implications of Airline Performance Indicators. Transportation Research Record, 2010, 2177, 41-48.	1.0	16
69	The multi-class schedule-based transit assignment model under network uncertainties. Public Transport, 2010, 2, 69-86.	1.7	24
70	An activity-based approach for scheduling multimodal transit services. Transportation, 2010, 37, 751-774.	2.1	69
71	Adaptive Estimation of Noise Covariance Matrices in Unscented Kalman Filter for Multiclass Traffic Flow Model. Transportation Research Record, 2010, 2188, 119-130.	1.0	8
72	Network-Wide Road Travel Time Estimation with Inconsistent Sensor Data. , 2010, , .		0

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73	Critical Link Identification for Traffic Incident Management Programme under Degradable Stochastic Network. HKIE Transactions, 2009, 16, 48-55.	1.9	0
74	On the existence and uniqueness of first best tolls in networks with multiple user classes and elastic demand. Transportmetrica, 2009, 5, 141-157.	1.8	20
75	Network Evaluation Based on Connectivity Vulnerability. , 2009, , 637-649.		35
76	Network Equilibrium under Cumulative Prospect Theory and Endogenous Stochastic Demand and Supply. , 2009, , 19-38.		30
77	Second best toll and capacity optimisation in networks: solution algorithm and policy implications. Transportation, 2009, 36, 147-165.	2.1	18
78	Road user charging design: dealing with multi-objectives and constraints. Transportation, 2009, 36, 167-186.	2.1	31
79	A network equilibrium model with travellers' perception of stochastic travel times. Transportation Research Part B: Methodological, 2009, 43, 614-624.	2.8	124
80	Dynamic stochastic transit assignment with explicit seat allocation model. Transportation Research Part B: Methodological, 2009, 43, 895-912.	2.8	87
81	Evaluation and Design of Transport Network Capacity under Demand Uncertainty. Transportation Research Record, 2009, 2090, 17-28.	1.0	26
82	Evaluation and enhancement of transport network reliability: Network equilibrium based approach. Journal of Advanced Transportation, 2008, 42, 209-212.	0.9	5
83	Partition-based algorithm for estimating transportation network reliability with dependent link failures. Journal of Advanced Transportation, 2008, 42, 213-238.	0.9	30
84	Robust Transport Network Capacity Planning with Demand Uncertainty. , 2008, , .		0
85	Modeling impacts of adverse weather conditions on a road network with uncertainties in demand and supply. Transportation Research Part B: Methodological, 2008, 42, 890-910.	2.8	231
86	Stochastic Cell Transmission Model: Traffic State Estimation under Uncertainties. , 2008, , .		5
87	Modeling Impact of Transit Operator Fleet Size under various Market Regimes with Uncertainty in Network. Transportation Research Record, 2008, 2063, 18-27.	1.0	23
88	Genetic Algorithm for Constraint Optimal Toll Ring Design. Studies in Computational Intelligence, 2008, , 45-61.	0.7	0
89	Dynamic Cell Transmission-Based Pedestrian Model with Multidirectional Flows and Strategic Route Choices. Transportation Research Record, 2007, 2039, 42-49.	1.0	52
90	Efficiency and equity comparison of cordon- and area-based road pricing schemes using a trip-chain equilibrium model. Transportation Research, Part A: Policy and Practice, 2007, 41, 655-671.	2.0	44

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91	Sensitivity analysis of the variable demand probit stochastic user equilibrium with multiple user-classes. Transportation Research Part B: Methodological, 2007, 41, 593-615.	2.8	40
92	MULTI-CONCENTRIC OPTIMAL CHARGING CORDON DESIGN. Transportmetrica, 2007, 3, 41-71.	1.8	34
93	A Genetic Algorithm Approach for Optimizing Traffic Control Signals Considering Routing. Computer-Aided Civil and Infrastructure Engineering, 2007, 22, 31-43.	6.3	145
94	A Study on Network Design Problems for Multi-modal Networks by Probit-based Stochastic User Equilibrium. Networks and Spatial Economics, 2007, 7, 213-240.	0.7	42
95	Reliable Network Design Problem. Transportation Research Record, 2006, 1964, 81-90.	1.0	43
96	Guest Editorial: Reliability and Emergency Issues in Transportation Network Analysis. Networks and Spatial Economics, 2006, 6, 169-172.	0.7	12
97	Network Capacity Reliability Analysis Considering Traffic Regulation after a Major Disaster. Networks and Spatial Economics, 2006, 6, 205-219.	0.7	73
98	An Optimal Toll Design Problem with Improved Behavioural Equilibrium Model: The Case of the Probit Model. , 2006, , 219-240.		9
99	Study on Optimal Frequency Design Problem for Multimodal Network Using Probit-Based User Equilibrium Assignment. Transportation Research Record, 2005, 1923, 236-245.	1.0	10
100	Comparison of judgmental and optimal road pricing cordons. Transport Policy, 2005, 12, 384-390.	3.4	34
101	Optimal Road User Charging Cordon Design: A Heuristic Optimization Approach. Computer-Aided Civil and Infrastructure Engineering, 2004, 19, 377-392.	6.3	75
102	A Genetic Algorithm Based Approach to Optimal Toll Level and Location Problems. Networks and Spatial Economics, 2004, 4, 161-179.	0.7	88
103	Optimal Locations and Charges for Cordon Schemes. Research in Transportation Economics, 2004, 9, 87-105.	2.2	3
104	The impact of cordon design on the performance of road pricing schemes. Transport Policy, 2002, 9, 209-220.	3.4	75
105	Specification of Optimal Cordon Pricing Locations and Charges. Transportation Research Record, 2002, 1812, 60-68.	1.0	21
106	Study on Optimal Frequency Design Problem for Multimodal Network Using Probit-Based User Equilibrium Assignment. , 0, .		16
107	Reliable Network Design Problem: Case with Uncertain Demand and Total Travel Time Reliability. , 0, .		71