David Paul Watling

List of Publications by Year
in descending order

66 papers	2,110 citations	257357 24 h-index	233338 45 g-index
67 all docs	67 docs citations	67 times ranked	1288 citing authors

#	ARTICLE	IF	CITATIONS
1	Modelling network travel time reliability under stochastic demand. Transportation Research Part B: Methodological, 2005, 39, 119-140.	2.8	281
2	User equilibrium traffic network assignment with stochastic travel times and late arrival penalty. European Journal of Operational Research, 2006, 175, 1539-1556.	3.5	173
3	Stability of the stochastic equilibrium assignment problem: a dynamical systems approach. Transportation Research Part B: Methodological, 1999, 33, 281-312.	2.8	145
4	A Genetic Algorithm Approach for Optimizing Traffic Control Signals Considering Routing. Computer-Aided Civil and Infrastructure Engineering, 2007, 22, 31-43.	6.3	145
5	The Dynamics and Equilibria of Day-to-Day Assignment Models. Networks and Spatial Economics, 2003, 3, 349-370.	0.7	130
6	Visions for a walking and cycling focussed urban transport system. Journal of Transport Geography, 2011, 19, 1580-1589.	2.3	85
7	Computation of Equilibrium Distributions of Markov Traffic-Assignment Models. Transportation Science, 2004, 38, 331-342.	2.6	69
8	Asymmetric problems and stochastic process models of traffic assignment. Transportation Research Part B: Methodological, 1996, 30, 339-357.	2.8	65
9	Big data and understanding change in the context of planning transport systems. Journal of Transport Geography, 2019, 76, 235-244.	2.3	64
10	A Second Order Stochastic Network Equilibrium Model, I: Theoretical Foundation. Transportation Science, 2002, 36, 149-166.	2.6	61
11	Sensitivity analysis of the probit-based stochastic user equilibrium assignment model. Transportation Research Part B: Methodological, 2002, 36, 617-635.	2.8	59
12	Model Representation & Decision-Making in an Ever-Changing World: The Role of Stochastic Process Models of Transportation Systems. Networks and Spatial Economics, 2015, 15, 843-882.	0.7	54
13	The modelling of dynamic route guidance systems. Transportation Research Part C: Emerging Technologies, 1993, 1, 159-182.	3.9	45
14	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
15	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
16	Maximum likelihood estimation of an origin-destination matrix from a partial registration plate survey. Transportation Research Part B: Methodological, 1994, 28, 289-314.	2.8	38
17	Imagineering Mobility: Constructing Utopias for Future Urban Transport. Environment and Planning A, 2014, 46, 78-93.	2.1	36
18	Dynamic traffic assignment approximating the kinematic wave model: System optimum, marginal costs, externalities and tolls. Transportation Research Part B: Methodological, 2012, 46, 634-648.	2.8	34

#	ARTICLE	IF	CITATIONS
19	Urban traffic network models and dynamic driver information systems. Transport Reviews, 1994, 14, 219-246.	4.7	33
20	Microsimulation models incorporating both demand and supply dynamics. Transportation Research, Part A: Policy and Practice, 2006, 40, 125-150.	2.0	33
21	Extending the Cell Transmission Model to Multiple Lanes and Lane-Changing. Networks and Spatial Economics, 2015, 15, 507-535.	0.7	33
22	Stochastic user equilibrium with a bounded choice model. Transportation Research Part B: Methodological, 2018, 114, 254-280.	2.8	30
23	Stochastic user equilibrium with equilibrated choice sets: Part I â€" Model formulations under alternative distributions and restrictions. Transportation Research Part B: Methodological, 2015, 77, 166-181.	2.8	28
24	Consistent formulation of network equilibrium with stochastic flows. Transportation Research Part B: Methodological, 2014, 66, 50-69.	2.8	25
25	Path Size Logit route choice models: Issues with current models, a new internally consistent approach, and parameter estimation on a large-scale network with GPS data. Transportation Research Part B: Methodological, 2020, 135, 1-40.	2.8	24
26	Implementing first-inâ€"first-out in the cell transmission model for networks. Transportation Research Part B: Methodological, 2014, 65, 105-118.	2.8	20
27	Stochastic user equilibrium with equilibrated choice sets: Part II â€" Solving the restricted SUE for the logit family. Transportation Research Part B: Methodological, 2015, 77, 146-165.	2.8	19
28	Dynamic wireless charging lanes location model in urban networks considering route choices. Transportation Research Part C: Emerging Technologies, 2022, 139, 103652.	3.9	19
29	A Second Order Stochastic Network Equilibrium Model, II: Solution Method and Numerical Experiments. Transportation Science, 2002, 36, 167-183.	2.6	18
30	Stochasticity and environmental cost inclusion for electric vehicles fast-charging facility deployment. Transportation Research, Part E: Logistics and Transportation Review, 2021, 154, 102460.	3.7	17
31	An Enhanced Predictive Cruise Control System Design With Data-Driven Traffic Prediction. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 8170-8183.	4.7	16
32	Study on Optimal Frequency Design Problem for Multimodal Network Using Probit-Based User Equilibrium Assignment. Transportation Research Record, 2005, 1923, 236-245.	1.0	16
33	A method to assess demand growth vulnerability of travel times on road network links. Transportation Research, Part A: Policy and Practice, 2012, 46, 772-789.	2.0	13
34	Modelling plannerâ€"carrier interactions in road freight transport: Optimisation of road maintenance costs via overloading control. Transportation Research, Part E: Logistics and Transportation Review, 2013, 50, 68-83.	3.7	13
35	Dynamic process model of mass effects on travel demand. Transportation, 2014, 41, 279-304.	2.1	13
36	A user equilibrium-based fast-charging location model considering heterogeneous vehicles in urban networks. Transportmetrica A: Transport Science, 2021, 17, 439-461.	1.3	13

#	Article	IF	Citations
37	Perturbation stability of the asymmetric stochastic equilibrium assignment model. Transportation Research Part B: Methodological, 1998, 32, 155-171.	2.8	12
38	Real-Time Dynamic Traffic Control Based on Traffic-State Estimation. Transportation Research Record, 2019, 2673, 584-595.	1.0	11
39	Optimal Path Planning with Clothoid Curves for Passenger Comfort. , 2019, , .		11
40	The level and determinants of multimodal travel behavior: Does trip purpose make a difference?. International Journal of Sustainable Transportation, 2023, 17, 103-117.	2.1	11
41	Prediction of traveller information and route choice based on real-time estimated traffic state. Transportmetrica B, 2016, 4, 23-47.	1.4	10
42	When you are born matters: An age-period-cohort analysis of multimodality. Travel Behaviour & Society, 2021, 22, 129-145.	2.4	10
43	Optimal Smooth Paths Based on Clothoids for Car-like Vehicles in the Presence of Obstacles. International Journal of Control, Automation and Systems, 2021, 19, 2163-2182.	1.6	10
44	Influence of Experience on Users' Behaviour: A Day-to-Day Model for Route Choice Updating. Procedia, Social and Behavioral Sciences, 2013, 87, 60-74.	0.5	9
45	Estimating individual physical capability (IPC) to make journeys by bicycle. International Journal of Sustainable Transportation, 2018, 12, 324-340.	2.1	9
46	Network impacts of a road capacity reduction: Empirical analysis and model predictions. Transportation Research, Part A: Policy and Practice, 2012, 46, 167-189.	2.0	8
47	A Fine Grained Hybrid Spatial Microsimulation Technique for Generating Detailed Synthetic Individuals from Multiple Data Sources: An Application to Walking and Cycling. , 2016, 10, 167-200.		7
48	Significance of Sensor Location in Real-time Traffic State Estimation. Procedia Engineering, 2014, 77, 114-122.	1.2	6
49	Dynamic Bayesian Belief Network to Model the Development of Walking and Cycling Schemes. International Journal of Sustainable Transportation, 2013, 7, 366-388.	2.1	5
50	Preference heterogeneity and congestion pricing: The two route case revisited. Transportation Research Part B: Methodological, 2018, 117, 137-157.	2.8	5
51	Properties of equilibria in transport problems with complex interactions between users. Transportation Research Part B: Methodological, 2019, 126, 87-114.	2.8	4
52	Stabilisation strategy for unstable transport systems under general evolutionary dynamics. Transportation Research Part B: Methodological, 2020, 132, 136-151.	2.8	4
53	A bounded path size route choice model excluding unrealistic routes: formulation and estimation from a large-scale GPS study. Transportmetrica A: Transport Science, 2022, 18, 435-493.	1.3	4
54	Modeling Evacuation Risk Using a Stochastic Process Formulation of Mesoscopic Dynamic Network Loading. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 3613-3625.	4.7	4

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55	Zero-queue traffic control, using green-times and prices together. Transportation Research Part C: Emerging Technologies, 2022, 138, 103630.	3.9	4
56	Stochastic Network Equilibrium under Stochastic Demand. , 2002, , 33-51.		3
57	Stabilisation strategy for unstable transport systems under general evolutionary dynamics. Transportation Research Procedia, 2019, 38, 421-440.	0.8	3
58	Fair weather forecasting? The shortcomings of big data for sustainable development, a case study from <scp>Hubballiâ€Dharwad</scp>, India. Sustainable Development, 2021, 29, 1237-1248.	6.9	3
59	Model for Integrating Homeâ€"Work Tour Scheduling with Time-Varying Network Congestion and Marginal Utility Profiles for Home and Work Activities. Transportation Research Record, 2009, 2134, 21-30.	1.0	2
60	Sensitivity analysis of optimal routes, departure times and speeds for fuel-efficient truck journeys. , 2019, , .		2
61	Dynamic system optimal traffic assignment with atomic users: Convergence and stability. Transportation Research Part B: Methodological, 2022, 155, 188-209.	2.8	1
62	Choice set robustness and internal consistency in correlation-based logit stochastic user equilibrium models. Transportmetrica A: Transport Science, 2023, 19, .	1.3	1
63	Moment Approximation to a Markov Model of Binary Route Choice. , 1998, , 99-108.		0
64	Moment Approximation to a Markov Model of Binary Route Choice. , 1998, , 99-108.		0
65	Simulating Decentralized Platooning for Coordinated Conflict-Free Motion of Mobile Robot Fleets. , 2020, , .		0
66	Systematic Method for Developing Reference Driving Cycles Appropriate to Electric L-Category Vehicles. Energies, 2022, 15, 3466.	1.6	0