Tom Bellemans

List of Publications by Year
in descending order

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114 papers	1,481 citations	331538 21 h-index	395590 33 g-index
115 all docs	115 docs citations	115 times ranked	1557 citing authors

#	Article	IF	Citations
1	Implementation Framework and Development Trajectory of FEATHERS Activity-Based Simulation Platform. Transportation Research Record, 2010, 2175, 111-119.	1.0	120
2	Street characteristics and traffic factors determining road users' exposure to black carbon. Science of the Total Environment, 2013, 447, 72-79.	3.9	77
3	UAV-Based Traffic Analysis: A Universal Guiding Framework Based on Literature Survey. Transportation Research Procedia, 2017, 22, 541-550.	0.8	70
4	Unmanned Aerial Vehicle-Based Traffic Analysis: A Case Study for Shockwave Identification and Flow Parameters Estimation at Signalized Intersections. Remote Sensing, 2018, 10, 458.	1.8	68
5	Application of Geographically Weighted Regression Technique in Spatial Analysis of Fatal and Injury Crashes. Journal of Transportation Engineering, 2014, 140, .	0.9	65
6	Health impact assessment of air pollution using a dynamic exposure profile: Implications for exposure and health impact estimates. Environmental Impact Assessment Review, 2012, 36, 42-51.	4.4	64
7	Unmanned Aerial Vehicleâ€“Based Traffic Analysis: Methodological Framework for Automated Multivehicle Trajectory Extraction. Transportation Research Record, 2017, 2626, 25-33.	1.0	49
8	Assessing the road safety impacts of a teleworking policy by means of geographically weighted regression method. Journal of Transport Geography, 2014, 39, 96-110.	2.3	38
9	Integrated health impact assessment of travel behaviour: Model exploration and application to a fuel price increase. Environment International, 2013, 51, 45-58.	4.8	37
10	Unmanned Aerial Vehicle-based Traffic Analysis: A Case Study to Analyze Traffic Streams at Urban Roundabouts. Procedia Computer Science, 2018, 130, 636-643.	1.2	31
11	Activity-Based Modeling to Predict Spatial and Temporal Power Demand of Electric Vehicles in Flanders, Belgium. Transportation Research Record, 2012, 2287, 146-154.	1.0	30
12	Evaluating the road safety effects of a fuel cost increase measure by means of zonal crash prediction modeling. Accident Analysis and Prevention, 2013, 50, 186-195.	3.0	28
13	A Conceptual Design of an Agent-based Interaction Model for the Carpooling Application. Procedia Computer Science, 2012, 10, 801-807.	1.2	27
14	Last-mile travel and bicycle sharing system in small/medium sized cities: userâ€™s preferences investigation using hybrid choice model. Journal of Ambient Intelligence and Humanized Computing, 2019, 10, 4721-4731.	3.3	27
15	Activity based models for countrywide electric vehicle power demand calculation. , 2011, , .		26
16	An Agent-Based Model to Evaluate Carpooling at Large Manufacturing Plants. Procedia Computer Science, 2012, 10, 1221-1227.	1.2	26
17	Integration of population mobility in the evaluation of air quality measures on local and regional scales. Atmospheric Environment, 2012, 59, 67-74.	1.9	25
18	Free public transport: A socio-cognitive analysis. Transportation Research, Part A: Policy and Practice, 2016, 86, 96-107.	2.0	25

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19	A coordinated Framework for Optimized Charging of EV Fleet in Smart Grid. Procedia Computer Science, 2016, 94, 332-339.	1.2	24
20	A data-driven approach for originâ€“destination matrix construction from cellular network signalling data: a case study of Lyon region (France). Transportation, 2021, 48, 1671-1702.	2.1	24
21	Application of Different Exposure Measures in Development of Planning-Level Zonal Crash Prediction Models. Transportation Research Record, 2012, 2280, 145-153.	1.0	23
22	Field Evaluation of Personal Digital Assistant Enabled by Global Positioning System. Transportation Research Record, 2008, 2049, 136-143.	1.0	22
23	Application of a Rule-Based Approach in Real-Time Crash Risk Prediction Model Development Using Loop Detector Data. Traffic Injury Prevention, 2015, 16, 786-791.	0.6	22
24	Exploiting graph-theoretic tools for matching in carpooling applications. Journal of Ambient Intelligence and Humanized Computing, 2014, 5, 393-407.	3.3	21
25	Likelihood-based offline map matching of GPS recordings using global trace information. Transportation Research Part C: Emerging Technologies, 2018, 93, 13-35.	3.9	21
26	Analysis of the Co-routing Problem in Agent-based Carpooling Simulation. Procedia Computer Science, 2012, 10, 821-826.	1.2	19
27	Assessing the impact of different policy decisions on the resource requirements of a Demand Responsive Transport system for persons with disabilities. Transport Policy, 2015, 44, 48-57.	3.4	19
28	Activity Travel Planning and Rescheduling Behavior. Transportation Research Record, 2009, 2134, 135-142.	1.0	18
29	Estimating Scalability Issues While Finding an Optimal Assignment for Carpooling. Procedia Computer Science, 2013, 19, 372-379.	1.2	17
30	Identification of the determinants of fare evasion. Case Studies on Transport Policy, 2018, 6, 348-352.	1.1	17
31	Optimal recharging framework and simulation for electric vehicle fleet. Future Generation Computer Systems, 2020, 107, 745-757.	4.9	16
32	Travel Time Evaluation of a U-Turn Facility. Transportation Research Record, 2011, 2223, 26-33.	1.0	15
33	Determining structural route components from GPS traces. Transportation Research Part B: Methodological, 2016, 90, 156-171.	2.8	15
34	Threshold settings for TRIP/STOP detection in GPS traces. Journal of Ambient Intelligence and Humanized Computing, 2016, 7, 395-413.	3.3	15
35	Activity-based model for medium-sized cities considering external activityâ€“travel: Enhancing FEATHERS framework. Future Generation Computer Systems, 2019, 96, 51-63.	4.9	15
36	Agent-based Simulation Model for Long-term Carpooling: Effect of Activity Planning Constraints. Procedia Computer Science, 2015, 52, 412-419.	1.2	14

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37	Organizational-based model and agent-based simulation for long-term carpooling. Future Generation Computer Systems, 2016, 64, 125-139.	4.9	14
38	Modeling Demand Responsive Transport using SARL and MATSim. Procedia Computer Science, 2017, 109, 1074-1079.	1.2	14
39	The usefulness of the Sequence Alignment Methods in validating rule-based activity-based forecasting models. Transportation, 2012, 39, 773-789.	2.1	13
40	Developing an optimised activity type annotation method based on classification accuracy and entropy indices. Transportmetrica A: Transport Science, 2017, 13, 742-766.	1.3	12
41	Within day rescheduling microsimulation combined with macrosimulated traffic. Transportation Research Part C: Emerging Technologies, 2014, 45, 99-118.	3.9	11
42	An Activity-based Carpooling Microsimulation Using Ontology. Procedia Computer Science, 2013, 19, 48-55.	1.2	10
43	Investigating micro-simulation error in activity-based travel demand forecasting: a case study of the FEATHERS framework. Transportation Planning and Technology, 2015, 38, 425-441.	0.9	10
44	Translating road safety into health outcomes using a quantitative impact assessment model. Injury Prevention, 2012, 18, 413-420.	1.2	9
45	Scalability issues in optimal assignment for carpooling. Journal of Computer and System Sciences, 2015, 81, 568-584.	0.9	9
46	Activity-Based Travel Demand Modeling Framework FEATHERS: Sensitivity Analysis with Decision Trees. Transportation Research Record, 2016, 2564, 89-99.	1.0	9
47	Viamigo. Transportation Research Record, 2017, 2650, 25-32.	1.0	8
48	Multi-stage trips: An exploration of factors affecting mode combination choice of travelers in England. Transport Policy, 2019, 81, 95-105.	3.4	8
49	Organizational and Agent-based Automated Negotiation Model for Carpooling. Procedia Computer Science, 2014, 37, 396-403.	1.2	7
50	Travel Demand Forecasting Using Activity-Based Modeling Framework FEATHERS: An Extension. International Journal of Intelligent Systems, 2015, 30, 948-962.	3.3	7
51	Knowledge of the concept Light Rail Transit: Exploring its relevance and identification of the determinants of various knowledge levels. Transportation Research, Part A: Policy and Practice, 2015, 74, 31-43.	2.0	7
52	Negotiation and Coordination in Carpooling: Agent-Based Simulation Model. Transportation Research Record, 2016, 2542, 92-101.	1.0	7
53	Tracking household routines using scheduling hypothesis embedded in skeletons. Transportmetrica, 2012, 8, 225-241.	1.8	6
54	Modeling Personal Exposure to Air Pollution with AB2C: Environmental Inequality. Procedia Computer Science, 2014, 32, 269-276.	1.2	6

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55	TRIP/STOP Detection in GPS Traces to Feed Prompted Recall Survey. Procedia Computer Science, 2015, 52, 262-269.	1.2	6
56	Investigating pedestrian walkability using a multitude of Seoul data sources. Transportmetrica B, 2018, 6, 54-73.	1.4	6
57	GTFS bus stop mapping to the OSM network. Future Generation Computer Systems, 2020, 110, 393-406.	4.9	6
58	Estimation of travel time distributions for urban roads using GPS trajectories of vehicles: a case of Athens, Greece. Personal and Ubiquitous Computing, 2021, 25, 237-246.	1.9	6
59	Quality assessment of location data obtained by the GPS-enabled PARROTS survey tool. Journal of Location Based Services, 2010, 4, 93-104.	1.4	5
60	An Agent Based Simulated Goods Exchange Market; A Prerequisite For Freight Transport Modeling. Procedia Computer Science, 2015, 52, 622-629.	1.2	5
61	An examination of the accuracy of an activity-based travel simulation against smartcard and navigation device data. Travel Behaviour & Society, 2017, 7, 34-42.	2.4	5
62	Agent-based Dynamic Rescheduling of Daily Activities. Procedia Computer Science, 2018, 130, 979-984.	1.2	5
63	Potential of cellular signaling data for time-of-day estimation and spatial classification of travel demand: a large-scale comparative study with travel survey and land use data. Transportation Letters, 2022, 14, 787-805.	1.8	5
64	Measuring and Estimating Suppressed Travel with Enhanced Activityâ€“Travel Diaries. Transportation Research Record, 2009, 2105, 57-63.	1.0	4
65	Seoul activity-based Model: An Application of Feathers Solutions to Seoul Metropolitan Area. Procedia Computer Science, 2012, 10, 840-845.	1.2	4
66	Diary Survey Quality Assessment Using GPS Traces. Procedia Computer Science, 2015, 52, 600-605.	1.2	4
67	Data Preparation to Simulate Public Transport in Micro-Simulations Using OSM and GTFS. Procedia Computer Science, 2016, 83, 50-57.	1.2	4
68	A Generic Data-driven Sequential Clustering Algorithm Determining Activity Skeletons. Procedia Computer Science, 2016, 83, 34-41.	1.2	4
69	Towards an Agent-based Model for Demand-Responsive Transport Serving Thin Flows. Procedia Computer Science, 2016, 83, 952-957.	1.2	4
70	Applying FEATHERS for Travel Demand Analysis: Model Considerations. Applied Sciences (Switzerland), 2018, 8, 211.	1.3	4
71	Zipfâ€™s power law in activity schedules and the effect of aggregation. Future Generation Computer Systems, 2020, 107, 1014-1025.	4.9	4
72	Addressing the Challenges of Conservative Event Synchronization for the SARL Agent-Programming Language. Lecture Notes in Computer Science, 2017, , 31-42.	1.0	4

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73	Investigating the Minimum Size of Study Area for an Activity-Based Travel Demand Forecasting Model. Mathematical Problems in Engineering, 2015, 2015, 1-9.	0.6	3
74	Validation of Activity-based Travel Demand Model using Smart-card Data in Seoul, South Korea. Procedia Computer Science, 2015, 52, 707-712.	1.2	3
75	On a fair distribution of consumer's flexibility between market parties with conflicting interests. International Transactions on Electrical Energy Systems, 2016, 26, 1961-1982.	1.2	3
76	SOULMATE - Secure Old peopleâ€™s Ultimate Lifestyle Mobility by offering Augmented reality Training Experiences. Procedia Computer Science, 2018, 141, 335-342.	1.2	3
77	Exploratory analysis of Zipfâ€™s universal power law in activity schedules. Transportation, 2019, 46, 1689-1712.	2.1	3
78	Using path decomposition enumeration to enhance route choice models. Future Generation Computer Systems, 2020, 107, 1077-1088.	4.9	3
79	A Data Imputation Method with Support Vector Machines for Activity-Based Transportation Models. Advances in Intelligent and Soft Computing, 2011, , 249-257.	0.2	3
80	Synthetic Population Techniques in Activity-Based Research. Advances in Data Mining and Database Management Book Series, 2014, , 48-70.	0.4	3
81	Canonic Route Splitting. Procedia Computer Science, 2014, 32, 309-316.	1.2	2
82	Geographical Extension of the Activity-based Modeling Framework FEATHERS. Procedia Computer Science, 2014, 32, 774-779.	1.2	2
83	Investigating the predictive performance of computational process activity-based transportation models. Transportation Planning and Technology, 2016, 39, 551-573.	0.9	2
84	GTFS Bus Stop Mapping to the OSM Network. Procedia Computer Science, 2017, 109, 50-58.	1.2	2
85	Zipf's power law in activity schedules and the effect of aggregation. Procedia Computer Science, 2017, 109, 225-232.	1.2	2
86	Modeling External Trips: Review of Past Studies and Directions for Way Forward. Journal of Transportation Engineering Part A: Systems, 2018, 144, 04018051.	0.8	2
87	Modelling Distribution of Externalâ€“Internal Trips and Its Intra-region and Inter-region Transferability. Arabian Journal for Science and Engineering, 2019, 44, 4517-4532.	1.7	2
88	Exploring the Spatial Transferability of FEATHERS â€“ An Activity Based Travel Demand Model â€“ For Ho Chi Minh City, Vietnam. Procedia Computer Science, 2019, 151, 226-233.	1.2	2
89	An Activity Based integrated approach to model impacts of parking, hubs and new mobility concepts. Procedia Computer Science, 2021, 184, 428-437.	1.2	2
90	A Micro Simulated and Demand Driven Supply Chain Model To Calculate Regional Production and Consumption Matrices. Procedia Computer Science, 2013, 19, 404-411.	1.2	1

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91	Integrating GIS and FEATHERS: A Conceptual Design. Procedia Computer Science, 2014, 32, 405-412.	1.2	1
92	Enumerating minimum path decompositions to support route choice set generation. Procedia Computer Science, 2017, 109, 196-203.	1.2	1
93	First steps towards a state-of-the-art parking simulator. Procedia Computer Science, 2018, 130, 779-784.	1.2	1
94	Optimizing copious activity type classes based on classification accuracy and entropy retention. Future Generation Computer Systems, 2020, 110, 338-349.	4.9	1
95	A Matching Framework for Employees to Support Carpooling in the Context of Large Companies. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 1159-1170.	4.7	1
96	Decision-Making under Time Pressure when Rescheduling Daily Activities. Procedia Computer Science, 2020, 170, 281-288.	1.2	1
97	A Study on Data Preprocessing for the Activity-Travel Simulator: A Case of FEATHERS Seoul. Journal of Korean Society of Transportation, 2014, 32, 531-543.	0.1	1
98	Is Driving 1 km to Work Worse for the Environment Than Driving 1 km for Shopping?. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 79-83.	0.1	1
99	Activity-Based Travel Demand Forecasting Using Micro-Simulation. Advances in Data Mining and Database Management Book Series, 2014, , 167-181.	0.4	1
100	Agent-Based Modeling for Carpooling. , 2015, , 662-688.		1
101	Traffic Safety Implications of Travel Demand Management Policies. , 2015, , 1082-1107.		1
102	Modeling and Structuring of Activity Scheduling Choices with Consideration of Intrazonal Tours: A Case Study of Motorcycle-Based Cities. Sustainability, 2022, 14, 6367.	1.6	1
103	Exploiting Graph-theoretic Tools for Matching and Partitioning of Agent Population in an Agent-based Model for Traffic and Transportation Applications. Procedia Computer Science, 2012, 10, 833-839.	1.2	0
104	Research on Restrained Study Areas for Effective Activity-Based Travel Demand Forecasting. , 2014, , .		0
105	A Bottom up Approach to Estimate Production-consumption Matrices from a Synthetic Firm Population Generated by Iterative Proportional Updating. Transportation Research Procedia, 2014, 1, 49-56.	0.8	0
106	Relationship Between Spatio-temporal Electricity Cost Variability and E-mobility. Procedia Computer Science, 2015, 52, 772-779.	1.2	0
107	Estimating Incoming Cross-border Trips Through Land Use data Resources â€“ A Case of Karachi City. Procedia Computer Science, 2016, 83, 270-277.	1.2	0
108	Modelling Value of Time for Trip Chains in Daily Schedules. Procedia Computer Science, 2016, 83, 615-620.	1.2	0

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109	Modeling value of time for trip chains using sigmoid utility. Personal and Ubiquitous Computing, 2017, 21, 1041-1053.	1.9	0
110	Special issue of the international journal of urban sciences on â€˜activity-based modeling in urban sciencesâ€™. International Journal of Urban Sciences, 2018, 22, 145-146.	1.3	0
111	Comprehensive Modeling Framework to Integrate External Trips in a Travel Demand Model. Journal of Computing in Civil Engineering, 2019, 33, 04019011.	2.5	0
112	Agent-Based Modeling for Carpooling. Advances in Data Mining and Database Management Book Series, 2014, , 232-258.	0.4	0
113	Traffic Safety Implications of Travel Demand Management Policies. Advances in Data Mining and Database Management Book Series, 2014, , 115-140.	0.4	0
114	Activity Sequence Generation Using Universal Mobility Patterns. Transportation Research Record, 0, , 036119812110624.	1.0	0