

# Marthinus Johannes Booysen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8529972/publications.pdf>

Version: 2024-02-01

71  
papers

1,107  
citations

566801

15  
h-index

476904

29  
g-index

109  
all docs

109  
docs citations

109  
times ranked

1039  
citing authors

#	ARTICLE	IF	CITATIONS
1	Survey of media access control protocols for vehicular ad hoc networks. IET Communications, 2011, 5, 1619-1631.	1.5	143
2	Survey of smartphone-based sensing in vehicles for intelligent transportation system applications. IET Intelligent Transport Systems, 2015, 9, 924-935.	1.7	143
3	Temporal case study of household behavioural response to Cape Town's "Day Zero" using smart meter data. Water Research, 2019, 149, 414-420.	5.3	63
4	Performance comparison of media access control protocols for vehicular ad hoc networks. IET Networks, 2012, 1, 10-19.	1.1	38
5	Machine-to-Machine (M2M) Communications in Vehicular Networks. KSII Transactions on Internet and Information Systems, 2012, , .	0.7	37
6	How much energy can optimal control of domestic water heating save?. Energy for Sustainable Development, 2019, 51, 73-85.	2.0	35
7	Three shades of green: Perspectives on at-work charging of electric vehicles using photovoltaic carports. Energy for Sustainable Development, 2020, 57, 132-140.	2.0	32
8	A Computationally Inexpensive Energy Model for Horizontal Electric Water Heaters With Scheduling. IEEE Transactions on Smart Grid, 2018, 9, 48-56.	6.2	29
9	Walking on sunshine: Pairing electric vehicles with solar energy for sustainable informal public transport in Uganda. Energy Research and Social Science, 2022, 85, 102403.	3.0	27
10	Combining speed and acceleration to detect reckless driving in the informal public transport industry. , 2013, , .		25
11	Evaluation of next-generation low-power communication technology to replace GSM in IoT applications. IET Communications, 2019, 13, 2533-2540.	1.5	25
12	A probabilistic hot water usage model and simulator for use in residential energy management. Energy and Buildings, 2021, 235, 110727.	3.1	24
13	Comfort, peak load and energy: Centralised control of water heaters for demand-driven prioritisation. Energy for Sustainable Development, 2018, 44, 78-86.	2.0	23
14	Energy perceptions in South Africa: An analysis of behaviour and understanding of electric water heaters. Energy for Sustainable Development, 2016, 32, 62-70.	2.0	22
15	Ray of hope for sub-Saharan Africa's paratransit: Solar charging of urban electric minibus taxis in South Africa. Energy for Sustainable Development, 2021, 64, 118-127.	2.0	22
16	On the use of WiMAX and Wi-Fi to provide in-vehicle connectivity and media distribution. , 2013, , .		19
17	Minibus taxis in Kampala's paratransit system: Operations, economics and efficiency. Journal of Transport Geography, 2020, 88, 102853.	2.3	19
18	Characterizing the movement patterns of minibus taxis in Kampala's paratransit system. Journal of Transport Geography, 2021, 92, 103001.	2.3	18

#	ARTICLE	IF	CITATIONS
19	A Comparison of Low-Cost Monocular Vision Techniques for Pothole Distance Estimation. , 2015, , .		17
20	LED there be light: The impact of replacing lights at schools in South Africa. Energy and Buildings, 2021, 235, 110736.	3.1	17
21	Saving water at Cape Town schools by using smart metering and behavioral change. Water Resources and Economics, 2021, 34, 100175.	0.9	17
22	A potential source of undiagnosed Legionellosis: Legionella growth in domestic water heating systems in South Africa. Energy for Sustainable Development, 2019, 48, 130-138.	2.0	14
23	Sustainability matchmaking: Linking renewable sources to electric water heating through machine learning. Energy and Buildings, 2021, 246, 111085.	3.1	14
24	Capacitive seat sensors for multiple occupancy detection using a low-cost setup. , 2013, , .		13
25	Non-invasive estimation of domestic hot water usage with temperature and vibration sensors. Flow Measurement and Instrumentation, 2018, 63, 1-7.	1.0	13
26	Chalk, talk, and energy efficiency: Saving electricity at South African schools through staff training and smart meter data visualisation. Energy Research and Social Science, 2019, 56, 101212.	3.0	13
27	Optimal schedule and temperature control of stratified water heaters. Energy for Sustainable Development, 2021, 62, 67-81.	2.0	13
28	Sustainability through Intelligent Scheduling of Electric Water Heaters in a Smart Grid. , 2016, , .		12
29	Results from a water-saving maintenance campaign at Cape Town schools in the run-up to Day Zero. Sustainable Cities and Society, 2019, 50, 101639.	5.1	12
30	Combining grid-tied PV and intelligent water heater control to reduce the energy costs at schools in South Africa. Energy for Sustainable Development, 2019, 50, 117-125.	2.0	12
31	Informal public transport in Sub-Saharan Africa as a vessel for novel Intelligent Transport Systems. , 2013, , .		11
32	Correlating Sound and Flow Rate at a Tap. Procedia Engineering, 2015, 119, 864-873.	1.2	11
33	Towards Module-Level Performance and Health Monitoring of Solar PV Plants Using LoRa Wireless Sensor Networks. , 2018, , .		11
34	Performance Comparison of Dynamic Time Warping (DTW) and a Maximum Likelihood (ML) Classifier in Measuring Driver Behavior with Smartphones. , 2015, , .		10
35	Use of smart grid technology to compare regions and days of the week in household water heating. , 2017, , .		10
36	Fees and governance: Towards sustainability in water resources management at schools in post-apartheid South Africa. Sustainable Cities and Society, 2019, 51, 101694.	5.1	10

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37	A comparative evaluation of the impact of average speed enforcement (ASE) on passenger and minibus taxi vehicle drivers on the R61 in South Africa. Journal of the South African Institution of Civil Engineering, 2016, 58, 2-10.	0.3	10
38	A two-tier Content-Centric Architecture for Wireless Sensor Networks. , 2013, , .		9
39	Towards sustainable developing cities: A simplified forecasting model for sizing grid-tied PV using monthly electricity bills. Sustainable Cities and Society, 2020, 54, 101994.	5.1	9
40	Practically-Achievable Energy Savings with the Optimal Control of Stratified Water Heaters with Predicted Usage. Energies, 2021, 14, 1963.	1.6	9
41	Light-years apart: Energy usage by schools across the South African affluence divide. Energy Research and Social Science, 2020, 70, 101692.	3.0	8
42	Pandemic and bills: The impact of COVID-19 on energy usage of schools in South Africa. Energy for Sustainable Development, 2021, 65, 101-106.	2.0	8
43	Impact of neighbor awareness at the MAC layer in a Vehicular Ad-Hoc Network (VANET). , 2013, , .		6
44	Saving on household electric water heating: What works best and by how much?. , 2017, , .		6
45	Itsphone: an integrated platform for participatory its data collection and opportunistic transfer. , 2013, , .		5
46	Comparison of GPS and MEMS Support for Smartphone-Based Driver Behavior Monitoring. , 2015, , .		5
47	Optoelectronic and Environmental Factors Affecting the Accuracy of Crowd-Sourced Vehicle-Mounted License Plate Recognition. IEEE Open Journal of Intelligent Transportation Systems, 2020, 1, 15-28.	2.6	5
48	Time for mentally healthy engineering students. , 2021, , .		5
49	Remotely controllable wireless road stud network. , 2013, , .		4
50	Centrally Adapted Optimal Control of Multiple Electric Water Heaters. Energies, 2022, 15, 1521.	1.6	4
51	Thermal Stratification and Temperature Variation in Horizontal Electric Water Heaters: A Characterisation Platform. Energies, 2022, 15, 2840.	1.6	4
52	Auditory Intelligent Speed Adaptation for Long-Distance Informal Public Transport In South Africa. IEEE Intelligent Transportation Systems Magazine, 2016, 8, 53-64.	2.6	3
53	Home energy management systems: A qualitative analysis and overview. , 2017, , .		3
54	Fuel savings as an incentive for speed compliance in the informal public transport industry in South Africa. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
55	Water quality assessment using a portable UV optical absorbance nitrate sensor with a scintillator and smartphone camera. <i>Water S A</i> , 2021, 47, .	0.2	3
56	Detection of reckless driving in the Sub-Saharan informal public transportation system using acceleration-sensing telematics. , 2013, , .		2
57	The Effect of TDMA Frame Size and the Hidden Node Problem on the Performance of a Neighbor-Aware VANET MAC. , 2014, , .		2
58	An adaptive transportation prediction model for the informal public transport sector in Africa. , 2014, , .		2
59	Electrification of minibus taxis in the shadow of load shedding and energy scarcity. <i>South African Journal of Science</i> , 2022, 118, .	0.3	2
60	Performance evaluation of neighbor-awareness at the Media Access Control (MAC) layer for Vehicular Ad-Hoc Networks (VANETs). , 2013, , .		1
61	Electric Water Heater Energy Consumption Determination Using Outlet Temperature and Volumetric Estimation. , 2015, , .		1
62	Evaluation of the energy model of a horizontally-mounted electric water heater through internal temperature measurement. , 2017, , .		1
63	Smart electric water heaters. , 2017, , .		1
64	Inside and out: A Platform to Characterise Stratification in Horizontal Electric Water Heaters. , 2021, , .		1
65	The Impact of TDMA Frame Size on Latency in a Neighbor-Aware VANET MAC. , 2014, , .		0
66	Efficacy of Interventions and Incentives to Achieve Speed Compliance in the Informal Public Transport Sector. , 2015, , .		0
67	Real Time Identification of Heart Sounds Using Selectional Regional Correlation of the Time Frequency Domain. , 2015, , .		0
68	Canary in the coliform mine: Exploring the industrial application limits of a microbial respiration alarm system. <i>PLoS ONE</i> , 2021, 16, e0247910.	1.1	0
69	When usage matters: time-of-use analysis of Cape Town's Day Zero drought response. <i>Water Science and Technology</i> , 2021, 84, 3122-3131.	1.2	0
70	Which Strategy Saves the Most Energy for Stratified Water Heaters?. <i>Energies</i> , 2021, 14, 4859.	1.6	0
71	Water scarcity and poverty: The lasting impact of a maintenance campaign at South African schools across the affluence divide. <i>Water Science and Technology</i> , 2021, 84, 3246-3256.	1.2	0