Ariane Middel

List of Publications by Year
in descending order

72 papers	3,814 citations	126858 33 h-index	133188 59 g-index
78 all docs	78 docs citations	78 times ranked	3016 citing authors

#	Article	IF	Citations
1	Impact of urban form and design on mid-afternoon microclimate in Phoenix Local Climate Zones. Landscape and Urban Planning, 2014, 122, 16-28.	3.4	444
2	Impact of shade on outdoor thermal comfortâ€"a seasonal field study in Tempe, Arizona. International Journal of Biometeorology, 2016, 60, 1849-1861.	1.3	222
3	Remote sensing of the surface urban heat island and land architecture in Phoenix, Arizona: Combined effects of land composition and configuration and cadastralâ€"demographicâ€"economic factors. Remote Sensing of Environment, 2016, 174, 233-243.	4.6	185
4	Urban forestry and cool roofs: Assessment of heat mitigation strategies in Phoenix residential neighborhoods. Urban Forestry and Urban Greening, 2015, 14, 178-186.	2.3	182
5	Generating WUDAPT Level 0 data â€" Current status of production and evaluation. Urban Climate, 2019, 27, 24-45.	2.4	148
6	Urban form and composition of street canyons: A human-centric big data and deep learning approach. Landscape and Urban Planning, 2019, 183, 122-132.	3.4	129
7	Mapping Europe into local climate zones. PLoS ONE, 2019, 14, e0214474.	1.1	123
8	Micrometeorological determinants of pedestrian thermal exposure during record-breaking heat in Tempe, Arizona: Introducing the MaRTy observational platform. Science of the Total Environment, 2019, 687, 137-151.	3.9	120
9	Sky View Factor footprints for urban climate modeling. Urban Climate, 2018, 25, 120-134.	2.4	114
10	Opportunities and Challenges for Personal Heat Exposure Research. Environmental Health Perspectives, 2017, 125, 085001.	2.8	110
11	Assessing local climate zones in arid cities: The case of Phoenix, Arizona and Las Vegas, Nevada. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 141, 59-71.	4.9	97
12	Does the spatial arrangement of urban landscape matter? examples of urban warming and cooling in phoenix and las vegas. Ecosystem Health and Sustainability, 2015, 1, 1-15.	1.5	93
13	Energy saving potential of fragmented green spaces due to their temperature regulating ecosystem services in the summer. Applied Energy, 2016, 183, 1428-1440.	5.1	86
14	Cooling hot cities: a systematic and critical review of the numerical modelling literature. Environmental Research Letters, 2021, 16, 053007.	2.2	85
15	Impacts of green roofs on water, temperature, and air quality: A bibliometric review. Building and Environment, 2021, 196, 107794.	3.0	77
16	Sky View Factors from Synthetic Fisheye Photos for Thermal Comfort Routingâ€"A Case Study in Phoenix, Arizona. Urban Planning, 2017, 2, 19-30.	0.7	76
17	Hot playgrounds and children's health: A multiscale analysis of surface temperatures in Arizona, USA. Landscape and Urban Planning, 2016, 146, 29-42.	3.4	69
18	Quality of Crowdsourced Data on Urban Morphologyâ€"The Human Influence Experiment (HUMINEX). Urban Science, 2017, 1, 15.	1.1	67

#	Article	IF	Citations
19	Evaluating the effect of 3D urban form on neighborhood land surface temperature using Google Street View and geographically weighted regression. Landscape Ecology, 2019, 34, 681-697.	1.9	65
20	The co-production of sustainable future scenarios. Landscape and Urban Planning, 2020, 197, 103744.	3.4	64
21	European Climate Change Perceptions: Public support for mitigation and adaptation policies. Environmental Policy and Governance, 2016, 26, 170-183.	2.1	62
22	Solar reflective pavementsâ€"A policy panacea to heat mitigation?. Environmental Research Letters, 2020, 15, 064016.	2.2	60
23	Validation of seasonal mean radiant temperature simulations in hot arid urban climates. Science of the Total Environment, 2020, 749, 141392.	3.9	58
24	Understanding the Impact of Urbanization on Surface Urban Heat Islandsâ€"A Longitudinal Analysis of the Oasis Effect in Subtropical Desert Cities. Remote Sensing, 2017, 9, 672.	1.8	56
25	Cooling effect of direct green faÃ§ades during hot summer days: An observational study in Nanjing, China using TIR and 3DPC data. Building and Environment, 2017, 116, 195-206.	3.0	55
26	Modelling the impact of increased street tree cover on mean radiant temperature across Vancouverâ€™s local climate zones. Urban Forestry and Urban Greening, 2019, 39, 9-17.	2.3	55
27	Planning for spectator thermal comfort and health in the face of extreme heat: The Tokyo 2020 Olympic marathons. Science of the Total Environment, 2019, 657, 904-917.	3.9	50
28	Urban tree planting to maintain outdoor thermal comfort under climate change: The case of Vancouver's local climate zones. Building and Environment, 2019, 158, 226-236.	3.0	48
29	50 Grades of Shade. Bulletin of the American Meteorological Society, 2021, 102, E1805-E1820.	1.7	44
30	Pathway using WUDAPT's Digital Synthetic City tool towards generating urban canopy parameters for multi-scale urban atmospheric modeling. Urban Climate, 2019, 28, 100459.	2.4	43
31	Exploring diurnal thermal variations in urban local climate zones with ECOSTRESS land surface temperature data. Remote Sensing of Environment, 2021, 263, 112544.	4.6	40
32	Cool Pavement Strategies for Urban Heat Island Mitigation in Suburban Phoenix, Arizona. Sustainability, 2019, 11, 4452.	1.6	39
33	Impacts of form and design policies on urban microclimate: Assessment of zoning and design guideline choices in urban redevelopment projects. Landscape and Urban Planning, 2020, 202, 103870.	3.4	38
34	Tradeoffs Between Water Conservation and Temperature Amelioration In Phoenix and Portland: Implications For Urban Sustainability. Urban Geography, 2012, 33, 1030-1054.	1.7	37
35	Outdoor thermal comfort in various microentrepreneurial settings in hot humid tropical Kolkata: Human biometeorological assessment of objective and subjective parameters. Science of the Total Environment, 2020, 721, 137741.	3.9	37
36	Land cover, climate, and the summer surface energy balance in Phoenix, AZ, and Portland, OR. International Journal of Climatology, 2012, 32, 2020-2032.	1.5	35

#	Article	IF	Citations
37	Improved methods for estimating mean radiant temperature in hot and sunny outdoor settings. International Journal of Biometeorology, 2021, 65, 967-983.	1.3	31
38	Biometeorology for cities. International Journal of Biometeorology, 2017, 61, 59-69.	1.3	28
39	Microclimate Variation and Estimated Heat Stress of Runners in the 2020 Tokyo Olympic Marathon. Atmosphere, 2018, 9, 192.	1.0	28
40	Investigation of extensive green roof outdoor spatio-temporal thermal performance during summer in a subtropical monsoon climate. Science of the Total Environment, 2019, 696, 133976.	3.9	27
41	Heat exposure during outdoor activities in the US varies significantly by city, demography, and activity. Health and Place, 2018, 54, 1-10.	1.5	26
42	Impact of 3-D urban landscape patterns on the outdoor thermal environment: A modelling study with SOLWEIG. Computers, Environment and Urban Systems, 2022, 94, 101773.	3.3	23
43	Sensor lag correction for mobile urban microclimate measurements. Urban Climate, 2015, 14, 622-635.	2.4	22
44	Daytime cooling efficiency and diurnal energy balance in Phoenix, Arizona, USA. Climate Research, 2012, 54, 21-34.	0.4	22
45	Piloting urban ecosystem accounting for the United States. Ecosystem Services, 2021, 48, 101226.	2.3	20
46	Evaporative misters for urban cooling and comfort: effectiveness and motivations for use. International Journal of Biometeorology, 2022, 66, 357-369.	1.3	19
47	Outdoor thermal performance of green roofs across multiple time scales: A case study in subtropical China. Sustainable Cities and Society, 2021, 70, 102909.	5.1	19
48	More than surface temperature: mitigating thermal exposure in hyper-local land system. Journal of Land Use Science, 2022, 17, 79-99.	1.0	18
49	Sky pixel detection in outdoor imagery using an adaptive algorithm and machine learning. Urban Climate, 2020, 31, 100572.	2.4	17
50	Mask wearing behavior in hot urban spaces of Novi Sad during the COVID-19 pandemic. Science of the Total Environment, 2022, 815, 152782.	3.9	16
51	Evaluating the impact of solar radiation on pediatric heat balance within enclosed, hot vehicles. Temperature, 2018, 5, 276-292.	1.6	15
52	A microscale three-dimensional model of urban outdoor thermal exposure (TUF-Pedestrian). International Journal of Biometeorology, 2022, 66, 833-848.	1.3	15
53	How are cities planning for heat? Analysis of United States municipal plans. Environmental Research Letters, 2022, 17, 064054.	2.2	15
54	Thermally resilient communities: creating a socio-technical collaborative response to extreme temperatures. Buildings and Cities, 2020, 1, 218-232.	1.1	14

#	Article	IF	Citations
55	Urban Climate Informatics: An Emerging Research Field. Frontiers in Environmental Science, 2022, 10, .	1.5	14
56	Evaluating radiant heat in an outdoor urban environment: Resolving spatial and temporal variations with two sensing platforms and data-driven simulation. Urban Climate, 2021, 35, 100745.	2.4	13
57	Training Computers to See the Built Environment Related to Physical Activity: Detection of Microscale Walkability Features Using Computer Vision. International Journal of Environmental Research and Public Health, 2022, 19, 4548.	1.2	12
58	Transpirational cooling and physiological responses of trees to heat. Agricultural and Forest Meteorology, 2022, 320, 108940.	1.9	12
59	Desert New Urbanism: testing for comfort in downtown Tempe, Arizona. Journal of Urban Design, 2016, 21, 746-763.	0.6	10
60	Cities of the Southwest are testbeds for urban resilience. Frontiers in Ecology and the Environment, 2019, 17, 79-80.	1.9	10
61	Change of nutrients, microorganisms, and physical properties of exposed extensive green roof substrate. Science of the Total Environment, 2022, 805, 150344.	3.9	8
62	Land Cover Modification Scenarios and Their Effects on Daytime Heating in the Inner Core Residential Neighborhoods of Phoenix, Arizona. Journal of Urban Technology, 2011, 18, 61-79.	2.5	6
63	A regression-based three-phase approach to assess outdoor thermal comfort in informal micro-entrepreneurial settings in tropical Mumbai. International Journal of Biometeorology, 2022, 66, 313-329.	1.3	6
64	TraVis - A visualization framework for mobile transect data sets in an urban microclimate context. , 2015, , .		5
65	MaRTinyâ€"A Low-Cost Biometeorological Sensing Device With Embedded Computer Vision for Urban Climate Research. Frontiers in Environmental Science, 2022, 10, .	1.5	5
66	State of the art in flow visualization in the environmental sciences. Environmental Earth Sciences, 2020, 79, 1.	1.3	4
67	Anisotropic radiation source models for computational thermal manikin simulations based on common radiation field measurements. Building and Environment, 2022, 208, 108636.	3.0	4
68	Assessing the Microclimate Effects and Irrigation Water Requirements of Mesic, Oasis, and Xeric Landscapes. Hydrology, 2022, 9, 104.	1.3	4
69	Visualizing the temporal development of thermo-radiative features on ground-based thermographs. Environmental Earth Sciences, 2014, 72, 3781-3793.	1.3	3
70	Global Climate Change Risk and Mitigation Perceptions: A Comparison of Nine Countries. Journal of Sustainable Development, 2016, 9, 214.	0.1	3
71	Estimating Residential Building Types from Demographic Information at a Neighborhood Scale. X Media Publishing, 2009, , 187-202.	0.1	1
72	Urban Water Infrastructure for Cooling: Case Studies from Humid and Arid Cities. Regions, 2017, 306, 20-23.	0.1	0