

# Michael Wurm

## List of Publications by Year in descending order

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Version: 2024-02-01

90  
papers

2,235  
citations

218592

26  
h-index

243529

44  
g-index

94  
all docs

94  
docs citations

94  
times ranked

2016  
citing authors

#	ARTICLE	IF	CITATIONS
1	Estimating housing vacancy rates at block level: The example of Guiyang, China. <i>Landscape and Urban Planning</i> , 2022, 224, 104431.	3.4	5
2	The “ghost neighborhood” phenomenon in China” geographic locations and intra-urban spatial patterns. <i>Environment and Planning B: Urban Analytics and City Science</i> , 2022, 49, 2363-2377.	1.0	2
3	To be, or not to be “urban”? A multi-modal method for the differentiated measurement of the degree of urbanization. <i>Computers, Environment and Urban Systems</i> , 2022, 95, 101830.	3.3	10
4	Estimating quality of life dimensions from urban spatial pattern metrics. <i>Computers, Environment and Urban Systems</i> , 2021, 85, 101549.	3.3	32
5	Inferring floor area ratio thresholds for the delineation of city centers based on cognitive perception. <i>Environment and Planning B: Urban Analytics and City Science</i> , 2021, 48, 265-279.	1.0	11
6	Deep Learning-Based Generation of Building Stock Data from Remote Sensing for Urban Heat Demand Modeling. <i>ISPRS International Journal of Geo-Information</i> , 2021, 10, 23.	1.4	29
7	Spatial parameters for transportation: A multi-modal approach for modelling the urban spatial structure using deep learning and remote sensing. <i>Journal of Transport and Land Use</i> , 2021, 14, .	0.7	5
8	Spatial factors influencing building age prediction and implications for urban residential energy modelling. <i>Computers, Environment and Urban Systems</i> , 2021, 88, 101637.	3.3	11
9	Which city is the greenest? A multi-dimensional deconstruction of city rankings. <i>Computers, Environment and Urban Systems</i> , 2021, 89, 101687.	3.3	15
10	The dynamics of poor urban areas - analyzing morphologic transformations across the globe using Earth observation data. <i>Cities</i> , 2020, 107, 102905.	2.7	27
11	Measuring the spatial hierarchical urban system in China in reference to the Central Place Theory. <i>Habitat International</i> , 2020, 105, 102264.	2.3	10
12	Misperceptions of Predominant Slum Locations? Spatial Analysis of Slum Locations in Terms of Topography Based on Earth Observation Data. <i>Remote Sensing</i> , 2020, 12, 2474.	1.8	18
13	Uncertainties of Human Perception in Visual Image Interpretation in Complex Urban Environments. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2020, 13, 4229-4241.	2.3	17
14	Satellite-Based Mapping of Urban Poverty With Transfer-Learned Slum Morphologies. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2020, 13, 5251-5263.	2.3	37
15	Mapping urban villages using fully convolutional neural networks. <i>Remote Sensing Letters</i> , 2020, 11, 630-639.	0.6	12
16	Spatial and semantic effects of LUCAS samples on fully automated land use/land cover classification in high-resolution Sentinel-2 data. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2020, 88, 102065.	1.4	59
17	Urbanization that hides in the dark “ Spotting China”s “ghost neighborhoods” from space. <i>Landscape and Urban Planning</i> , 2020, 200, 103822.	3.4	26
18	Deriving Urban Mass Concentrations Using TanDEM-X and Sentinel-2 Data for the Assessment of Morphological Polycentricity. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
19	Urbanization between compactness and dispersion: designing a spatial model for measuring 2D binary settlement landscape configurations. <i>International Journal of Digital Earth</i> , 2019, 12, 679-698.	1.6	24
20	A new ranking of the world's largest citiesâ€”Do administrative units obscure morphological realities?. <i>Remote Sensing of Environment</i> , 2019, 232, 111353.	4.6	96
21	Size distributions of slums across the globe using different data and classification methods. <i>European Journal of Remote Sensing</i> , 2019, 52, 99-111.	1.7	25
22	Large-Area Characterization of Urban Morphologyâ€”Mapping of Built-Up Height and Density Using TanDEM-X and Sentinel-2 Data. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2019, 12, 2912-2927.	2.3	39
23	Patterns of Eastern European urbanisation in the mirror of Western trends â€” Convergent, unique or hybrid?. <i>Environment and Planning B: Urban Analytics and City Science</i> , 2019, 46, 1206-1225.	1.0	28
24	Remote Sensing in Environmental Justice Researchâ€”A Review. <i>ISPRS International Journal of Geo-Information</i> , 2019, 8, 20.	1.4	38
25	Large-scale building extraction in very high-resolution aerial imagery using Mask R-CNN. , 2019, , .		11
26	Size Distributions for Morphological Slums in Asia and South America. , 2019, , .		0
27	Modelling the impact of the urban spatial structure on the choice of residential location using â€”big earth dataâ€”™ and machine learning. , 2019, , .		3
28	Sensitivity of slum size distributions as a function of spatial parameters for slum classification. , 2019, , .		3
29	Slum Mapping in Imbalanced Remote Sensing Datasets Using Transfer Learned Deep Features. , 2019, , .		9
30	How dynamic are slums? EO-based assessment of Kiberaâ€™s morphologic transformation. , 2019, , .		8
31	Semantic segmentation of slums in satellite images using transfer learning on fully convolutional neural networks. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2019, 150, 59-69.	4.9	233
32	Urbanization in China from the end of 1980s until 2010 â€” spatial dynamics and patterns of growth using EO-data. <i>International Journal of Digital Earth</i> , 2019, 12, 78-94.	1.6	38
33	Designing a Water Supply Network for Slums in Rio de Janeiro Using Mixed-Integer Programming. <i>Operations Research Proceedings: Papers of the Annual Meeting = VortrÄge Der Jahrestagung / DGOR</i> , 2019, , 347-354.	0.1	0
34	The morphology of the Arrival City - A global categorization based on literature surveys and remotely sensed data. <i>Applied Geography</i> , 2018, 92, 150-167.	1.7	116
35	Detecting social groups from space â€” Assessment of remote sensing-based mapped morphological slums using income data. <i>Remote Sensing Letters</i> , 2018, 9, 41-50.	0.6	78
36	Investigation on the separability of slums by multi-aspect TerraSAR-X dual-co-polarized high resolution spotlight images based on the multi-scale evaluation of local distributions. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2018, 64, 181-198.	1.4	14

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37	Global Urbanizationâ€™ Perspective from Space. , 2018, , 107-117.		2
38	Are the Poor Digitally Left Behind? Indications of Urban Divides Based on Remote Sensing and Twitter Data. ISPRS International Journal of Geo-Information, 2018, 7, 304.	1.4	25
39	The similar size of slums. Habitat International, 2018, 73, 79-88.	2.3	67
40	Measuring morphological polycentricity - A comparative analysis of urban mass concentrations using remote sensing data. Computers, Environment and Urban Systems, 2017, 64, 42-56.	3.3	90
41	Urban Morphology. An Introduction to the Study of the Physical Form of Cities. Raumforschung Und Raumordnung   Spatial Research and Planning, 2017, 75, 309-311.	1.5	1
42	Evaluation of clustering algorithms for unsupervised change detection in VHR remote sensing imagery. , 2017, , .		1
43	Exploitation of textural and morphological image features in Sentinel-2A data for slum mapping. , 2017, , .		10
44	Towards large-area morphologic characterization of urban environments using the TanDEM-X mission and Sentinel-2. , 2017, , .		4
45	Slum mapping in polarimetric SAR data using spatial features. Remote Sensing of Environment, 2017, 194, 190-204.	4.6	82
46	Land use modeling in North Rhine-Westphalia with interaction and scaling laws. , 2017, , .		2
47	Digital deserts on the ground and from space. , 2017, , .		4
48	Unsupervised change detection in VHR remote sensing imagery â€™ an object-based clustering approach in a dynamic urban environment. International Journal of Applied Earth Observation and Geoinformation, 2017, 54, 15-27.	1.4	106
49	A Comprehensive View on Urban Spatial Structure: Urban Density Patterns of German City Regions. ISPRS International Journal of Geo-Information, 2016, 5, 76.	1.4	57
50	The Physical Density of the Cityâ€™ Deconstruction of the Delusive Density Measure with Evidence from Two European Megacities. ISPRS International Journal of Geo-Information, 2016, 5, 206.	1.4	27
51	Building Typesâ€™ Classification Using Shape-Based Features and Linear Discriminant Functions. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1901-1912.	2.3	36
52	disP Service. Disp, 2015, 51, 78-89.	0.8	1
53	Normalization of TanDEM-X DSM Data in Urban Environments With Morphological Filters. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 4348-4362.	2.7	31
54	At the edge of the city center. , 2015, , .		0

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55	Classification of urban structural types with multisource data and structured models. , 2015, , .		15
56	Evaluating the use of uncertainty visualization for exploratory analysis of land cover change: A qualitative expert user study. Computers and Geosciences, 2015, 84, 46-53.	2.0	14
57	Urbane Strukturen der Macht. , 2015, , 93-105.		1
58	Zu Stein gewordene Philosophien â€“ die Morphologie geplanter Wohnviertel. , 2015, , 135-147.		1
59	Ich weiÃŸ, dass ich nichts weiÃŸ â€“ BevÃ¶lkerungsschÃtzung in der Megacity Mumbai. , 2015, , 171-178.		14
60	Am Ende der Kernstadt â€“ ein Versuch der Abgrenzung des Physischen durch das Subjektive. , 2015, , 179-189.		2
61	Globale Urbanisierung â€“ Markenzeichen des 21. Jahrhunderts. , 2015, , 5-10.		4
62	Der Werkzeugkasten der urbanen Fernerkundung â€“ Daten und Produkte. , 2015, , 29-38.		1
63	Die globale Vielfalt urbaner Siedlungsmuster. , 2015, , 41-48.		2
64	Die Morphologie deutscher GroÃŸstÃdte: Was die Dichte Ã¼ber die Struktur der StÃdte verrÃt. , 2015, , 127-133.		0
65	Globale Urbanisierung â€“ Perspektive aus dem All: Der Versuch eines ResÃ¼mees. , 2015, , 289-291.		1
66	Motivation zu diesem Buch. , 2015, , 1-2.		0
67	The global urban footprint &#x2014; Processing status and cross comparison to existing human settlement products. , 2014, , .		7
68	Investigating the Applicability of Cartosat-1 DEMs and Topographic Maps to Localize Large-Area Urban Mass Concentrations. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 4138-4152.	2.3	38
69	Dichter dran! Neue MÃglichkeiten der Vernetzung von Geobasis-, Statistik- und Erdbeobachtungsdaten zur rÃumlichen Analyse und Visualisierung von Stadtstrukturen mit DichteoberflÃchen und -profilen. Raumforschung Und Raumordnung   Spatial Research and Planning, 2014, 72, 179-194.	1.5	15
70	Delineation of Central Business Districts in mega city regions using remotely sensed data. Remote Sensing of Environment, 2013, 136, 386-401.	4.6	134
71	Analysis of Surface Thermal Patterns in Relation to Urban Structure Types: A Case Study for the City of Munich. Remote Sensing and Digital Image Processing, 2013, , 475-493.	0.7	11
72	The changing face of urban growth: An analysis using earth observation data. , 2013, , .		1

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73	Remote Sensing-Based Characterization of Settlement Structures for Assessing Local Potential of District Heat. <i>Remote Sensing</i> , 2011, 3, 1447-1471.	1.8	39
74	Flood risks in urbanized areas – multi-sensoral approaches using remotely sensed data for risk assessment. <i>Natural Hazards and Earth System Sciences</i> , 2011, 11, 431-444.	1.5	69
75	Comparison of selected impervious surface products derived from remote sensing data – A case study for the city of Munich. , 2011, , .		0
76	Object-based image information fusion using multisensor earth observation data over urban areas. <i>International Journal of Image and Data Fusion</i> , 2011, 2, 121-147.	0.8	61
77	Object-based feature extraction using high spatial resolution satellite data of urban areas. <i>Journal of Spatial Science</i> , 2010, 55, 117-132.	1.0	76
78	The global trend of urbanization: spatiotemporal analysis of megacities using multi-temporal remote sensing, landscape metrics, and gradient analysis. , 2010, , .		2
79	Quantification of urban structure on building block level utilizing multisensoral remote sensing data. , 2010, , .		11
80	Integrating remote sensing and social science. , 2009, , .		19
81	Derivation of population distribution for vulnerability assessment in flood-prone German cities using multisensoral remote sensing data. , 2009, , .		5
82	Urban structuring using multisensoral remote sensing data: By the example of the German cities Cologne and Dresden. , 2009, , .		26
83	Changing urbanity in Istanbul. , 2009, , .		1
84	Vulnerability assessment towards tsunami threats using multisensoral remote sensing data. <i>Proceedings of SPIE</i> , 2009, , .	0.8	2
85	Urban structure analysis of mega city Mexico City using multisensoral remote sensing data. , 2008, , .		18
86	Identification of built-up areas using SAR data: a comparison of TerraSAR-X and ALOS-PALSAR imagery. <i>Proceedings of SPIE</i> , 2008, , .	0.8	1
87	Generation and webgis representation of landslide susceptibility maps using VHR satellite data. , 2007, , .		2
88	Using Geographically Referenced Data on Environmental Exposures for Public Health Research: A Feasibility Study Based on the German Socio-Economic Panel Study (SOEP). <i>SSRN Electronic Journal</i> , 0, , .	0.4	2
89	Exploring the Linkage of Spatial Indicators from Remote Sensing Data with Survey Data – The Case of the Socio-Economic Panel (SOEP) and 3D City Models. <i>SSRN Electronic Journal</i> , 0, , .	0.4	2
90	Is it Possible to Count the Earth’s Population from Outer Space? (Menschen Zählen Aus Dem All) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	0