Tomasz F Stepinski

List of Publications by Year
in descending order

51 papers	1,760 citations
331670 21 h-index	289244 40 g-index
52 all docs	52 docs citations
52 times ranked	1766 citing authors

#	Article	IF	Citations
1	Geomorphons â€" a pattern recognition approach to classification and mapping of landforms. Geomorphology, 2013, 182, 147-156.	2.6	460
2	Spatial association between dissection density and environmental factors over the entire conterminous United States. Geophysical Research Letters, 2016, 43, 692-700.	4.0	126
3	Automatic detection of sub-km craters in high resolution planetary images. Planetary and Space Science, 2009, 57, 880-887.	1.7	115
4	Machine Detection of Martian Impact Craters From Digital Topography Data. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 265-274.	6.3	86
5	Automated classification of landforms on Mars. Computers and Geosciences, 2006, 32, 604-614.	4.2	75
6	Machine cataloging of impact craters on Mars. Icarus, 2009, 203, 77-87.	2.5	68
7	Information theory as a consistent framework for quantification and classification of landscape patterns. Landscape Ecology, 2019, 34, 2091-2101.	4.2	60
8	On Using a Clustering Approach for Global Climate Classification. Journal of Climate, 2016, 29, 3387-3401.	3.2	57
9	Detection of sub-kilometer craters in high resolution planetary images using shape and texture features. Advances in Space Research, 2012, 49, 64-74.	2.6	56
10	Crime hotspot mapping using the crime related factorsâ€"a spatial data mining approach. Applied Intelligence, 2013, 39, 772-781.	5.3	54
11	Subkilometer crater discovery with boosting and transfer learning. ACM Transactions on Intelligent Systems and Technology, 2011, 2, 1-22.	4.5	50
12	Landscape similarity, retrieval, and machine mapping of physiographic units. Geomorphology, 2014, 221, 104-112.	2.6	45
13	Automatic extraction of road intersection points from USGS historical map series using deep convolutional neural networks. International Journal of Geographical Information Science, 2020, 34, 947-968.	4.8	40
14	A high resolution population grid for the conterminous United States: The 2010 edition. Computers, Environment and Urban Systems, 2017, 61, 13-23.	7.1	35
15	Spatial association between regionalizations using the information-theoretical V-measure. International Journal of Geographical Information Science, 2018, 32, 2386-2401.	4.8	35
16	High resolution dasymetric model of U.S demographics with application to spatial distribution of racial diversity. Applied Geography, 2014, 53, 417-426.	3.7	32
17	Global assessment and mapping of changes in mesoscale landscapes: 1992â€"2015. International Journal of Applied Earth Observation and Geoinformation, 2019, 78, 332-340.	2.8	29
18	On using landscape metrics for landscape similarity search. Ecological Indicators, 2016, 64, 20-30.	6.3	28

#	Article	IF	Citations
19	GeoPAT: A toolbox for pattern-based information retrieval from large geospatial databases. Computers and Geosciences, 2015, 80, 62-73.	4.2	24
20	LandExâ€"A GeoWeb Tool for Query and Retrieval of Spatial Patterns in Land Cover Datasets. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 257-266.	4.9	23
21	Comprehensive framework for visualizing and analyzing spatio-temporal dynamics of racial diversity in the entire United States. PLoS ONE, 2017, 12, e0174993.	2.5	22
22	Regionalization of multi-categorical landscapes using machine vision methods. Applied Geography, 2013, 45, 250-258.	3.7	21
23	Example-Based Retrieval of Alike Land-Cover Scenes From NLCD2006 Database. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 155-159.	3.1	21
24	Unsupervised regionalization of the United States into landscape pattern types. International Journal of Geographical Information Science, 2016, 30, 1450-1468.	4.8	21
25	Pattern-Based Assessment of Land Cover Change on Continental Scale With Application to NLCD 2001â€"2006. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 1773-1781.	6.3	14
26	Global inventory of landscape patterns and latent variables of landscape spatial configuration. Ecological Indicators, 2018, 89, 159-167.	6.3	14
27	Pattern-based, multi-scale segmentation and regionalization of EOSD land cover. International Journal of Applied Earth Observation and Geoinformation, 2017, 62, 192-200.	2.8	13
28	Multi-scale segmentation algorithm for pattern-based partitioning of large categorical rasters. Computers and Geosciences, 2018, 118, 122-130.	4.2	12
29	Pattern-based identification and mapping of landscape types using multi-thematic data. International Journal of Geographical Information Science, 2021, 35, 1634-1649.	4.8	12
30	Stochastic, Empirically Informed Model of Landscape Dynamics and Its Application to Deforestation Scenarios. Geophysical Research Letters, 2019, 46, 13845-13852.	4.0	10
31	Orientation of valley networks on Mars: The role of impact cratering. Geophysical Research Letters, 2012, 39, .	4.0	9
32	Connected components labeling for giga-cell multi-categorical rasters. Computers and Geosciences, 2013, 59, 24-30.	4.2	9
33	Pattern-based Regionalization of Large Geospatial Datasets Using Complex Object-based Image Analysis. Procedia Computer Science, 2015, 51, 2168-2177.	2.0	9
34	Automatic, exploratory mineralogical mapping of CRISM imagery using summary product signatures. Icarus, 2017, 281, 151-161.	2.5	8
35	Imperfect melting pot â€" Analysis of changes in diversity and segregation of US urban census tracts in the period of 1990â€"2010. Computers, Environment and Urban Systems, 2019, 76, 101-109.	7.1	8
36	Mapping changes in spatial patterns of racial diversity across the entire United States with application to a 1990â€"2000 period. Applied Geography, 2016, 68, 1-8.	3.7	7

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37	Racial Dot Maps Based on Dasymetrically Modeled Gridded Population Data. Social Sciences, 2019, 8, 157.	1.4	7
38	Web Service for extracting stream networks from DEM data. Geo Journal, 2014, 79, 183-193.	3.1	6
39	Rényi's spectra of urban form for different modalities of input data. Chaos, Solitons and Fractals, 2020, 139, 109995.	5.1	6
40	Towards machine ecoregionalization of Earth's landmass using pattern segmentation method. International Journal of Applied Earth Observation and Geoinformation, 2018, 69, 110-118.	2.8	5
41	Spatial approach to analyzing dynamics of racial diversity in large U.S. cities: 1990–2000–2010. Computers, Environment and Urban Systems, 2018, 68, 89-96.	7.1	4
42	Racial landscapes – a pattern-based, zoneless method for analysis and visualization of racial topography. Applied Geography, 2020, 122, 102239.	3.7	4
43	Comparing semantically-blind and semantically-aware landscape similarity measures with application to query-by-content and regionalization. Ecological Informatics, 2014, 24, 69-77.	5.2	3
44	Global analysis of gully composition using manual and automated exploration of CRISM imagery. Icarus, 2018, 302, 319-329.	2.5	3
45	Complexity in patterns of racial segregation. Chaos, Solitons and Fractals, 2020, 140, 110207.	5.1	3
46	Machine-learning models for spatially-explicit forecasting of future racial segregation in US cities. Machine Learning With Applications, 2022, 9, 100359.	4.4	3
47	Improving assessment of urban racial segregation by partitioning a region into racial enclaves. Environment and Planning B: Urban Analytics and City Science, 2022, 49, 290-303.	2.0	2
48	Retrieval of pattern-based information from giga-cells categorical rasters — Concept and new software. , 2014, , .		1
49	Communicating racial segregation: Abstract versus concrete. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22435-22436.	7.1	1
50	Multiplicative random cascade models of multifractal urban structures. Physica A: Statistical Mechanics and Its Applications, 2021, 569, 125767.	2.6	1
51	Segmentation of global climate dataset into contiguous spatial units having quantitatively homogeneous climates. International Journal of Climatology, 0, , .	3.5	1