Joseph P Messina

List of Publications by Year
in descending order

75 papers	2,010 citations	257101 24 h-index	276539 41 g-index
76 all docs	76 docs citations	76 times ranked	2774 citing authors

#	Article	IF	Citations
1	Measuring geographic access to health care: raster and network-based methods. International Journal of Health Geographics, 2012, 11, 15.	1.2	164
2	Spatial structure and landscape associations of SRTM error. Remote Sensing of Environment, 2011, 115, 1576-1587.	4.6	106
3	Do More Hospital Beds Lead to Higher Hospitalization Rates? A Spatial Examination of Roemerâ€™s Law. PLoS ONE, 2013, 8, e54900.	1.1	103
4	Land use change: complexity and comparisons. Journal of Land Use Science, 2008, 3, 1-10.	1.0	94
5	Understanding spatio-temporal variation of vegetation phenology and rainfall seasonality in the monsoon Southeast Asia. Environmental Research, 2016, 147, 621-629.	3.7	90
6	2.5D Morphogenesis: modeling landuse and landcover dynamics in the Ecuadorian Amazon. , 2001, 156, 75-88.		74
7	Evaluation of estimating daily maximum and minimum air temperature with MODIS data in east Africa. International Journal of Applied Earth Observation and Geoinformation, 2012, 18, 128-140.	1.4	74
8	Smallholder Farms and the Potential for Sustainable Intensification. Frontiers in Plant Science, 2016, 7, 1720.	1.7	66
9	Complexity theory, spatial simulation models, and land use dynamics in the Northern Ecuadorian Amazon. Geoforum, 2008, 39, 867-878.	1.4	64
10	Does hospital competition improve health care delivery in China?. China Economic Review, 2015, 33, 179-199.	2.1	61
11	Land tenure and deforestation patterns in the Ecuadorian Amazon: Conflicts in land conservation in frontier settings. Applied Geography, 2006, 26, 113-128.	1.7	55
12	Mapping Land Suitability for Agriculture in Malawi. Land Degradation and Development, 2017, 28, 2001-2016.	1.8	55
13	Complex systems models and the management of error and uncertainty. Journal of Land Use Science, 2008, 3, 11-25.	1.0	53
14	Mapping, modeling, and visualization of the influences of geomorphic processes on the alpine treeline ecotone, Glacier National Park, MT, USA. Geomorphology, 2003, 53, 129-145.	1.1	50
15	Assessing Alternatives for Modeling the Spatial Distribution of Multiple Land-cover Classes at Sub-pixel Scales. Photogrammetric Engineering and Remote Sensing, 2007, 73, 935-943.	0.3	48
16	Complexity Science, Complex Systems, and Land-Use Research. Environment and Planning B: Planning and Design, 2005, 32, 792-798.	1.7	40
17	The expansion of intensive agriculture and ranching in Brazilian Amazonia. Geophysical Monograph Series, 2009, , 61-81.	0.1	36
18	Re-evaluating the Malawian Farm Input Subsidy Programme. Nature Plants, 2017, 3, 17013.	4.7	35

#	Article	IF	Citations
19	A Landscape and Climate Data Logistic Model of Tsetse Distribution in Kenya. PLoS ONE, 2010, 5, e11809.	1.1	33
20	From meta-studies to modeling: Using synthesis knowledge to build broadly applicable process-based land change models. Environmental Modelling and Software, 2015, 72, 10-20.	1.9	33
21	Space, Place, and Complexity Science. Environment and Planning A, 2006, 38, 611-617.	2.1	30
22	The Influence of Land Cover on Shuttle Radar Topography Mission (SRTM) Elevations in Lowâ€relief Areas. Transactions in GIS, 2010, 14, 461-479.	1.0	29
23	Nature-based agricultural solutions: Scaling perennial grains across Africa. Environmental Research, 2017, 159, 283-290.	3.7	28
24	Multi-Sensor Data Fusion for Modeling African Palm in the Ecuadorian Amazon. Photogrammetric Engineering and Remote Sensing, 2008, 74, 711-723.	0.3	27
25	Dynamic Spatial Simulation Modeling of the Population â€" Environment Matrix in the Ecuadorian Amazon. Environment and Planning B: Planning and Design, 2005, 32, 835-856.	1.7	26
26	Modeling larval malaria vector habitat locations using landscape features and cumulative precipitation measures. International Journal of Health Geographics, 2014, 13, 17.	1.2	26
27	Crop climate suitability mapping on the cloud: a geovisualization application for sustainable agriculture. Scientific Reports, 2020, 10, 15487.	1.6	25
28	Evaluating Michigan's community hospital access: spatial methods for decision support. International Journal of Health Geographics, 2006, 5, 42.	1.2	24
29	A dynamic species distribution model of Glossina subgenus Morsitans: The identification of tsetse reservoirs and refugia. Ecosphere, 2010, 1, 1-21.	1.0	24
30	An agent-based model to simulate tsetse fly distribution and control techniques: A case study in Nguruman, Kenya. Ecological Modelling, 2015, 314, 80-89.	1.2	24
31	Modeling the complexity of different, recently deglaciated soil landscapes as a function of map scale. Geoderma, 2004, 123, 115-130.	2.3	23
32	Urban Built Environments, Accessibility, and Travel Behavior in a Declining Urban Core: The Extreme Conditions of Disinvestment and Suburbanization in the Detroit Region. Journal of Urban Affairs, 2014, 36, 225-255.	1.0	23
33	The Burdens of Place: A Socio-economic and Ethnic/Racial Exploration into Urban Form, Accessibility and Travel Behaviour in the Lansing Capital Region, Michigan. Journal of Urban Design, 2013, 18, 1-35.	0.6	22
34	Regional health care planning: a methodology to cluster facilities using community utilization patterns. BMC Health Services Research, 2013, 13, 333.	0.9	21
35	PERENNIAL GRAINS FOR AFRICA: POSSIBILITY OR PIPEDREAM?. Experimental Agriculture, 2019, 55, 251-272.	0.4	19
36	Climate Change and Risk Projection: Dynamic Spatial Models of Tsetse and African Trypanosomiasis in Kenya. Annals of the American Association of Geographers, 2012, 102, 1038-1048.	3.0	18

#	Article	IF	Citations
37	The spatial restructuring and determinants of industrial landscape in a mega city under rapid urbanization. Habitat International, 2020, 95, 102099.	2.3	18
38	A hybrid visual estimation method for the collection of ground truth fractional coverage data in a humid tropical environment. International Journal of Applied Earth Observation and Geoinformation, 2012, 18, 504-514.	1.4	17
39	Multiscale Assessment of the Impacts of Climate Change on Water Resources in Tanzania. Journal of Hydrologic Engineering - ASCE, 2017, 22, .	0.8	16
40	Distances in Residential Space: Implications from Estimated Metric Functions for Minimum Path Distances. GIScience and Remote Sensing, 2012, 49, 1-30.	2.4	15
41	MODIS land cover uncertainty in regional climate simulations. Climate Dynamics, 2017, 49, 4047-4059.	1.7	15
42	Population Vulnerability and Disability in Kenya's Tsetse Fly Habitats. PLoS Neglected Tropical Diseases, 2011, 5, e957.	1.3	14
43	Multi-Spatial Resolution Satellite and sUAS Imagery for Precision Agriculture on Smallholder Farms in Malawi. Photogrammetric Engineering and Remote Sensing, 2020, 86, 107-119.	0.3	14
44	Explaining variation in adult Anopheles indoor resting abundance: the relative effects of larval habitat proximity and insecticide-treated bed net use. Malaria Journal, 2017, 16, 288.	0.8	13
45	Different ontologies: land change science and health research. Current Opinion in Environmental Sustainability, 2013, 5, 515-521.	3.1	12
46	Using meta-quality to assess the utility of volunteered geographic information for science. International Journal of Health Geographics, 2017, 16, 40.	1.2	12
47	Source regions of lower-tropospheric airflow trajectories for the lower peninsula of Michigan: A 40-year air mass climatology. Journal of Geophysical Research, 2006, 111, .	3.3	11
48	Tsetse fly control in Kenyaâ€™s spatially and temporally dynamic control reservoirs: A cost analysis. Applied Geography, 2012, 34, 189-204.	1.7	11
49	Leveraging big data for public health: Mapping malaria vector suitability in Malawi with Google Earth Engine. PLoS ONE, 2020, 15, e0235697.	1.1	11
50	Optimum land cover products for use in a Glossina-morsitans habitat model of Kenya. International Journal of Health Geographics, 2009, 8, 39.	1.2	9
51	Spatial Pattern of Agricultural Productivity Trends in Malawi. Sustainability, 2020, 12, 1313.	1.6	8
52	A methodology for projecting hospital bed need: a Michigan case study. Source Code for Biology and Medicine, 2010, 5, 4.	1.7	6
53	Exploration of sensor comparability: a case study of composite MODIS Aqua and Terra data. Remote Sensing Letters, 2013, 4, 599-608.	0.6	6
54	Evaluation of MODIS surrogates for meteorological humidity data in east Africa. International Journal of Remote Sensing, 2013, 34, 4669-4679.	1.3	6

#	Article	IF	Citations
55	Utilizing Volunteered Information for Infectious Disease Surveillance. International Journal of Applied Geospatial Research, 2013, 4, 54-70.	0.2	6
56	Toward a Common Ontology of Scaling Up in Development. Sustainability, 2018, 10, 835.	1.6	6
57	Using Volunteered Geographic Information to Assess the Spatial Distribution of West Nile Virus in Detroit, Michigan. International Journal of Applied Geospatial Research, 2011, 2, 72-85.	0.2	6
58	Population and Urban Dynamics in Drylands of China. Landscape Series, 2020, , 107-124.	0.1	6
59	‹title›Change detection in the Florida Bay using remote sensing‹/title›. , 1997, , .		5
60	A Multiscalar Approach to Mapping Marginal Agricultural Land: Smallholder Agriculture in Malawi. Annals of the American Association of Geographers, 2018, 108, 989-1005.	1.5	5
61	Errors in Time-Series Remote Sensing and an Open Access Application for Detecting and Visualizing Spatial Data Outliers Using Google Earth Engine. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 1165-1174.	2.3	5
62	Exploring the Impacts of Pseudo-Random Number Generators on Sub-pixel Classification. GIScience and Remote Sensing, 2008, 45, 471-489.	2.4	4
63	A Complex Systems Approach to the Spatial and Temporal Simulation of Florida Bay Algal Communities. GIScience and Remote Sensing, 2004, 41, 228-243.	2.4	3
64	Embracing the Open-Source Movement for Managing Spatial Data: A Case Study of African Trypanosomiasis in Kenya. Journal of Map and Geography Libraries, 2011, 7, 87-113.	0.1	3
65	A case for green-based vegetation indices: plot-scale sUAS imagery related to crop chlorophyll content on smallholder maize farms in Malawi. Remote Sensing Letters, 2021, 12, 778-787.	0.6	3
66	The Evaluation of the Subtle Effects of Image Preâ€Processing Levels and View Angles for Image Classification. Geocarto International, 2004, 19, 33-40.	1.7	2
67	Neutral models and the deviation from neutral pattern metric. Ecological Informatics, 2007, 2, 43-47.	2.3	2
68	Scenarios of future Amazonian landscapes: Econometric and dynamic simulation models. Geophysical Monograph Series, 2009, , 83-100.	0.1	2
69	Towards an Ontologically-driven GIS to Characterize Spatial Data Uncertainty. , 2006, , 465-476.		2
70	Moving beyond the Specialization: the Development of a Bachelor of Science Program in Geographic Information Science at Michigan State University. Geocarto International, 2006, 21, 67-73.	1.7	1
71	Food System Resilience and Sustainability in Cambodia. International Journal of Applied Geospatial Research, 2017, 8, 53-75.	0.2	1
72	Scaling Agricultural Innovations: Pigeonpea in Malawi. Professional Geographer, 2018, 70, 239-250.	1.0	1

#	Article	IF	Citations
73	Deforestation of the Ecuadorian Amazon: Characterizing Patterns and Associated Drivers of Change. , 2004, , 299-304.		1
74	Costâ€“Benefit Analysis of Tsetse Fly Control in Tanzania. Papers in Applied Geography, 2017, 3, 182-195.	0.8	0
75	Unintended Consequences: The War on Drugs and Land Use and Cover Change in the Ecuadorian Amazon. , 2004, , 357-362.		0