Marc P Armstrong

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5259638/publications.pdf

Version: 2024-02-01

63 papers	2,470 citations	257101 24 h-index	223531 46 g-index
70 all docs	70 docs citations	70 times ranked	1882 citing authors

#	Article	IF	Citations
1	U.S. Census Bureau Area Measurements for Sub-County Areas and Clarence Batscheletâ€™s U.S. Population Density Map of 1942. Imago Mundi, 2020, 72, 32-40.	0.1	0
2	Genetic Algorithms and Evolutionary Computing. Geographic Information Science & Technology Body of Knowledge, 2020, 2020, .	0.1	0
3	High Performance Computing for Geospatial Applications: A Retrospective View. Geotechnologies and the Environment, 2020, , 9-25.	0.3	1
4	The Internet of Things and fast data streams: prospects for geospatial data science in emerging information ecosystems. Cartography and Geographic Information Science, 2019, 46, 39-56.	1.4	21
5	Active symbolism: toward a new theoretical paradigm for statistical cartography. Cartography and Geographic Information Science, 2019, 46, 72-81.	1.4	4
6	On the Origins of Computing and GIST: Part I, A Computer Systems Perspective. Geographic Information Science & Technology Body of Knowledge, 2019, 2019, .	0.1	0
7	Origins of Computing and GIST: Part 2, Perspective on Role of Peripheral Devices. Geographic Information Science & Technology Body of Knowledge, 2019, 2019, .	0.1	0
8	How large is Aroostook County? Exploring the historical mutability of US county area measurements. Cartography and Geographic Information Science, 2018, 45, 438-455.	1.4	1
9	Retrospective Deconstruction of Statistical Maps: A Choropleth Case Study. Annals of the American Association of Geographers, 2018, 108, 179-203.	1.5	3
10	Geoprivacy. , 2018, , 415-430.		2
11	Distributed LiDAR data processing in a high-memory cloud-computing environment. Annals of GIS, 2014, 20, 255-264.	1.4	15
12	Towards a Multiobjective View of Cartographic Design. Cartography and Geographic Information Science, 2012, 39, 76-87.	1.4	10
13	GIS Fundamentals. , 2010, , 525-547.		1
14	A theoretical approach to the use of cyberinfrastructure in geographical analysis. International Journal of Geographical Information Science, 2009, 23, 169-193.	2.2	107
15	Grid computing of spatial statistics: using the TeraGrid for G(d) analysis. Concurrency Computation Practice and Experience, 2008, 20, 1697-1720.	1.4	31
16	Genetic Algorithms and the Corridor Location Problem: Multiple Objectives and Alternative Solutions. Environment and Planning B: Planning and Design, 2008, 35, 148-168.	1.7	33
17	Cartographic support for locational problemâ€solving by groups. International Journal of Geographical Information Science, 2008, 22, 721-749.	2.2	11
18	Assessing the effect of attribute uncertainty on the robustness of choropleth map classification. International Journal of Geographical Information Science, 2007, 21, 121-144.	2.2	25

#	Article	IF	Citations
19	Interactive evolutionary approaches to multiobjective spatial decision making: A synthetic review. Computers, Environment and Urban Systems, 2007, 31, 232-252.	3.3	62
20	Parallelizing MCMC for Bayesian spatiotemporal geostatistical models. Statistics and Computing, 2007, 17, 323-335.	0.8	42
21	MoGeo: A location-based educational service. , 2007, , 493-509.		3
22	Geocoding in Cancer Research. American Journal of Preventive Medicine, 2006, 30, S16-S24.	1.6	156
23	The Illinois Resource Information System: Early Innovations in Geographic Information System Design. Cartography and Geographic Information Science, 2006, 33, 97-114.	1.4	1
24	ChoroWare: A Software Toolkit for Choropleth Map Classification. Geographical Analysis, 2006, 38, 102-121.	1.9	17
25	Mobile Geographic Education: The MoGeo System. , 2006, , 447-464.		1
26	Geographic Information Technologies and Personal Privacy. Cartographica, 2005, 40, 63-73.	0.2	71
27	A Manifesto on Mobile Computing in Geographic Education*. Professional Geographer, 2005, 57, 506-515.	1.0	26
28	Using a Computational Grid for Geographic Information Analysis: A Reconnaissance. Professional Geographer, 2005, 57, 365-375.	1.0	32
29	Supporting the Comparison of Choropleth Maps Using an Evolutionary Algorithm. Cartography and Geographic Information Science, 2005, 32, 347-358.	1.4	7
30	A quadtree approach to domain decomposition for spatial interpolation in Grid computing environments. Parallel Computing, 2003, 29, 1481-1504.	1.3	121
31	Using Genetic Algorithms to Create Multicriteria Class Intervals for Choropleth Maps. Annals of the American Association of Geographers, 2003, 93, 595-623.	3.0	78
32	A Specialized Island Model and Its Application in Multiobjective Optimization. Lecture Notes in Computer Science, 2003, , 1530-1540.	1.0	23
33	Using Evolutionary Algorithms to Generate Alternatives for Multiobjective Site-Search Problems. Environment and Planning A, 2002, 34, 639-656.	2.1	107
34	Assessing the Impact of Airborne Toxic Releases on Populations with Special Needs. Professional Geographer, 2001, 53, 119-131.	1.0	24
35	Fundamentals of Geographic Information Systems (GIS). , 2001, , 411-430.		6
36	Geography and Computational Science. Annals of the American Association of Geographers, 2000, 90, 146-156.	3.0	91

#	Article	IF	Citations
37	An Evaluation of Domain Decomposition Strategies for Parallel Spatial Interpolation of Surfaces. Geographical Analysis, 1999, 31, 148-168.	1.9	16
38	Exploring the Solution Space of Semiâ€structured Geographical Problems Using Genetic Algorithms. Transactions in GIS, 1999, 3, 51-71.	1.0	31
39	An Experimental Comparison of Ordinary and Universal Kriging and Inverse Distance Weighting. Mathematical Geosciences, 1999, 31, 375-390.	0.9	386
40	Geographically masking health data to preserve confidentiality. , 1999, 18, 497-525.		221
41	An Evaluation of Domain Decomposition Strategies for Parallel Spatial Interpolation of Surfaces. Geographical Analysis, 1999, 31, 148-168.	1.9	17
42	Toward a Conceptual Framework for the Cartographic Visualization of Network Information. Cartographica, 1997, 34, 33-48.	0.2	9
43	Massively parallel strategies for local spatial interpolation. Computers and Geosciences, 1997, 23, 859-867.	2.0	30
44	An Inductive Knowledge-based Approach to Terrain Feature Extraction. Cartography and Geographic Information Science, 1996, 23, 3-19.	1.1	12
45	Local interpolation using a distributed parallel supercomputer. International Journal of Geographical Information Science, 1996, 10, 713-729.	2.2	33
46	Dispersal probability and forest diversity in a fragmented landscape. Ecological Modelling, 1996, 87, 91-102.	1.2	72
47	Using Geographic Plume Analysis to assess community vulnerability to hazardous accidents. Computers, Environment and Urban Systems, 1995, 19, 341-356.	3.3	35
48	Small area student enrollment projections based on a modifiable spatial filter. Socio-Economic Planning Sciences, 1995, 29, 169-185.	2.5	9
49	Massively parallel processing of spatial statistics. International Journal of Geographical Information Science, 1995, 9, 169-189.	2.2	23
50	A Conceptual Framework for Improving Human-Computer Interaction in Locational Decision-Making. , 1995, , 343-354.		4
51	Requirements for the development of GIS-based group decision-support systems. Journal of the Association for Information Science and Technology, 1994, 45, 669-677.	1.2	84
52	Parallel processing of spatial statistics. Computers and Geosciences, 1994, 20, 91-104.	2.0	24
53	Location-allocation models as decision aids in delineating administrative regions. Computers, Environment and Urban Systems, 1993, 17, 153-174.	3.3	10
54	On Automated Geography!. Professional Geographer, 1993, 45, 440-442.	1.0	6

#	Article	IF	Citations
55	Database Integration for Knowledge-Based Groundwater Quality Assessment. , 1993, , 145-161.		0
56	Cartographic Displays to Support Locational Decision Making. Cartography and Geographic Information Science, 1992, 19, 154-164.	1.1	46
57	Domain decomposition for parallel processing of spatial problems. Computers, Environment and Urban Systems, 1992, 16, 497-513.	3.3	39
58	Decision support for regionalization: A spatial decision support system for regionalizing service delivery systems. Computers, Environment and Urban Systems, 1991, 15, 37-53.	3.3	40
59	Database organization strategies for spatial decision support systems. International Journal of Geographical Information Science, 1990, 4, 3-20.	2.2	87
60	A bit-mapped classifier for groundwater quality assessment. Computers and Geosciences, 1990, 16, 811-832.	2.0	7
61	Database integration for knowledge based groundwater quality assessment. Computers, Environment and Urban Systems, 1990, 14, 187-201.	3.3	2
62	Landscape fragmentation and dispersal in a model of riparian forest dynamics. Ecological Modelling, 1990, 49, 277-296.	1.2	86
63	Connecting Geospatial Information to Society Through Cyberinfrastructure. , 0, , 108-122.		2