Kai Cao

List of Publications by Year
in descending order

55 papers	**1,362** citations	361296 **20** h-index	360920 **35** g-index
55 all docs	**55** docs citations	**55** times ranked	**1523** citing authors

#	ARTICLE	IF	CITATIONS
1	Sustainable land use optimization using Boundary-based Fast Genetic Algorithm. Computers, Environment and Urban Systems, 2012, 36, 257-269.	3.3	201
2	Spatial multi-objective land use optimization: extensions to the non-dominated sorting genetic algorithm-II. International Journal of Geographical Information Science, 2011, 25, 1949-1969.	2.2	176
3	A multi-objective optimization approach for health-care facility location-allocation problems in highly developed cities such as Hong Kong. Computers, Environment and Urban Systems, 2016, 59, 220-230.	3.3	104
4	A generalization of spatial and temporal fusion methods for remotely sensed surface parameters. International Journal of Remote Sensing, 2015, 36, 4411-4445.	1.3	56
5	Municipal solid waste collection optimization in Singapore. Applied Geography, 2015, 62, 182-190.	1.7	53
6	Coarse-grained parallel genetic algorithm applied to a vector based land use allocation optimization problem: the case study of Tongzhou Newtown, Beijing, China. Stochastic Environmental Research and Risk Assessment, 2013, 27, 1133-1142.	1.9	51
7	Spatial and Temporal Image Fusion via Regularized Spatial Unmixing. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1362-1366.	1.4	45
8	Performance improvement techniques for geospatial web services in a cyberinfrastructure environment â€" A case study with a disaster management portal. Computers, Environment and Urban Systems, 2015, 54, 314-325.	3.3	42
9	Extracting building patterns with multilevel graph partition and building grouping. ISPRS Journal of Photogrammetry and Remote Sensing, 2016, 122, 81-96.	4.9	41
10	A Big Dataâ€"Based Geographically Weighted Regression Model for Public Housing Prices: A Case Study in Singapore. Annals of the American Association of Geographers, 2019, 109, 173-186.	1.5	39
11	Integrative assessment and management implications on ecosystem services loss of coastal wetlands due to reclamation. Journal of Cleaner Production, 2017, 163, S101-S112.	4.6	38
12	Calibrating a cellular automata model for understanding ruralâ€"urban land conversion: a Pareto front-based multi-objective optimization approach. International Journal of Geographical Information Science, 2014, 28, 1028-1046.	2.2	37
13	GIS-MCDA based cycling paths planning: a case study in Singapore. Applied Geography, 2018, 94, 107-118.	1.7	36
14	Improvements in Typhoon Intensity Change Classification by Incorporating an Ocean Coupling Potential Intensity Index into Decision Trees*,+. Weather and Forecasting, 2016, 31, 95-106.	0.5	28
15	Comparison of Approaches for Urban Functional Zones Classification Based on Multi-Source Geospatial Data: A Case Study in Yuzhong District, Chongqing, China. Sustainability, 2019, 11, 660.	1.6	27
16	The application of decision tree to intensity change classification of tropical cyclones in western North Pacific. Geophysical Research Letters, 2013, 40, 1883-1887.	1.5	26
17	Improving spatiotemporal reflectance fusion using image inpainting and steering kernel regression techniques. International Journal of Remote Sensing, 2017, 38, 706-727.	1.3	22
18	Pareto law-based regional inequality analysis of PM2.5 air pollution and economic development in China. Journal of Environmental Management, 2019, 252, 109635.	3.8	22

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19	National Green GDP Assessment and Prediction for China Based on a CA-Markov Land Use Simulation Model. Sustainability, 2019, 11, 576.	1.6	22
20	Spatio–temporal land use multi–objective optimization: A case study in Central China. Transactions in GIS, 2019, 23, 726-744.	1.0	21
21	Evaluation of chlorophyll-a retrieval algorithms based on MERIS bands for optically varying eutrophic inland lakes. Science of the Total Environment, 2015, 530-531, 373-382.	3.9	20
22	Temporal-spatial analysis of crop residue burning in China and its impact on aerosol pollution. Environmental Pollution, 2019, 245, 616-626.	3.7	19
23	Disaster Image Classification by Fusing Multimodal Social Media Data. ISPRS International Journal of Geo-Information, 2021, 10, 636.	1.4	17
24	Optimal routing for waste collection: a case study in Singapore. International Journal of Geographical Information Science, 2016, 30, 554-572.	2.2	16
25	Spatial Multi-Objective Land Use Optimization toward Livability Based on Boundary-Based Genetic Algorithm: A Case Study in Singapore. ISPRS International Journal of Geo-Information, 2020, 9, 40.	1.4	16
26	Intelligent polar cyberinfrastructure: enabling semantic search in geospatial metadata catalogue to support polar data discovery. Earth Science Informatics, 2015, 8, 111-123.	1.6	15
27	Geographical Accessibility of Community Health Assist Scheme General Practitioners for the Elderly Population in Singapore: A Case Study on the Elderly Living in Housing Development Board Flats. International Journal of Environmental Research and Public Health, 2018, 15, 1988.	1.2	15
28	Spatial Analysis of Big Data Industrial Agglomeration and Development in China. Sustainability, 2019, 11, 1783.	1.6	14
29	An innovative GPS trajectory data based model for geographic recommendation service. Transactions in GIS, 2017, 21, 880-896.	1.0	13
30	Cyberinfrastructure, GIS, and spatial optimization: opportunities and challenges. International Journal of Geographical Information Science, 2016, 30, 427-431.	2.2	12
31	Geo-sensor(s) for potential prediction of earthquakes: can earthquake be predicted by abnormal animal phenomena?. Annals of GIS, 2018, 24, 125-138.	1.4	12
32	Ecological Conservation– and Economic Development–Based Multiobjective Land-Use Optimization: Case Study of a Rapidly Developing City in Central China. Journal of the Urban Planning and Development Division, ASCE, 2019, 145, .	0.8	12
33	The Spatial Optimization and Evaluation of the Economic, Ecological, and Social Value of Urban Green Space in Shenzhen. Sustainability, 2020, 12, 1844.	1.6	12
34	Assimilating multi-site measurements for semi-distributed hydrological model updating. Quaternary International, 2012, 282, 122-129.	0.7	11
35	Factor analysis for aerosol optical depth and its prediction from the perspective of land-use change. Ecological Indicators, 2018, 93, 458-469.	2.6	11
36	Geographically Weighted Regression model (GWR) based spatial analysis of house price in Shenzhen. , 2011, , .		10

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37	Semantic overlay network for large-scale spatial information indexing. Computers and Geosciences, 2013, 57, 208-217.	2.0	10
38	Study on selecting sensitive environmental variables in modelling species spatial distribution. Annals of GIS, 2016, 22, 57-69.	1.4	9
39	A practical approach to retrieving the finer areas of algal bloom in inland lakes from coarse spatial resolution satellite data. International Journal of Remote Sensing, 2017, 38, 4069-4085.	1.3	5
40	Spatial optimization for land use planning: Opportunities and challenges. Transactions in GIS, 2019, 23, 641-644.	1.0	5
41	An urban big data-based air quality index prediction: A case study of routes planning for outdoor activities in Beijing. Environment and Planning B: Urban Analytics and City Science, 2020, 47, 948-963.	1.0	5
42	Beijing temples and their social matrix â€" A GIS reconstruction of the 1912â€"1937 social scape. Annals of GIS, 2016, 22, 129-140.	1.4	4
43	GIS-Based Accessibility Analysis of Health-Care Facilities: A Case Study in Hong Kong. , 2018, , 402-410.		3
44	Spatial Optimization for Sustainable Land Use Planning. , 2018, , 244-252.		3
45	Variational model-based very high spatial resolution remote sensing image fusion. Journal of Applied Remote Sensing, 2014, 8, 083565.	0.6	2
46	Spatial-temporal analysis of land use and coverage change in Nanjing based on GIS/RS. , 2011, , .		1
47	Modeling conversion of rural-urban land use based on cellular automa and genetic algorithm. , 2011, , .		1
48	Big data, spatial optimization, and planning. Environment and Planning B: Urban Analytics and City Science, 2020, 47, 941-947.	1.0	1
49	Spatial analysis of public residential housing's electricity consumption in relation to urban landscape and building characteristics: A case study in Singapore. Energy and Environment, 0, , 0958305X2110560.	2.7	1
50	The Study of Automatically Extracting Water Information in City Zone Based On SPOT5 Image. , 2006, , .		0
51	Spatio-temporal data model based on dynamic correlation. , 2009, , .		0
52	Land use allocation optimization towards sustainable development based on genetic algorithm. , 2009, , .		0
53	User behavior in triple space: Working in a coordinated multiple view (CMV) environment. , 2011, , .		0
54	Spatial and temporal analysis of water quality trends in the Min River Basin. , 2012, , .		0

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55	The Study of the Effects of Built Form on Pedestrian Activities: A GIS-Based Integrated Approach. , 2018, , 330-344.		0