Nataliia Kussul

List of Publications by Year
in descending order

95 papers	4,288 citations	147566 31 h-index	168136 53 g-index
97 all docs	97 docs citations	97 times ranked	3886 citing authors

#	Article	IF	Citations
1	Essential earth observation variables for high-level multi-scale indicators and policies. Environmental Science and Policy, 2022, 131, 105-117.	2.4	16
2	Biophysical Impact of Sunflower Crop Rotation on Agricultural Fields. Sustainability, 2022, 14, 3965.	1.6	9
3	Discrete Atomic Transform-Based Lossy Compression of Three-Channel Remote Sensing Images with Quality Control. Remote Sensing, 2022, 14, 125.	1.8	10
4	A Comparison between Support Vector Machine and Water Cloud Model for Estimating Crop Leaf Area Index. Remote Sensing, 2021, 13, 1348.	1.8	23
5	Environmental and political implications of underestimated cropland burning in Ukraine. Environmental Research Letters, 2021, 16, 064019.	2.2	23
6	U-Net Model for Logging Detection Based on the Sentinel-1 and Sentinel-2 Data. , 2021, , .		4
7	Is Soil Bonitet an Adequate Indicator for Agricultural Land Appraisal in Ukraine?. Sustainability, 2021, 13, 12096.	1.6	4
8	Air Quality Estimation in Ukraine Using SDG 11.6.2 Indicator Assessment. Remote Sensing, 2021, 13, 4769.	1.8	11
9	Validation of the Global Human Settlement Layer and NASA Population Data for Ukraine. , 2021, , .		1
10	Automatic Deforestation Detection based on the Deep Learning in Ukraine. , 2021, , .		3
11	Developing food, water and energy nexus workflows. International Journal of Digital Earth, 2020, 13, 299-308.	1.6	21
12	Cloud Approach to Automated Crop Classification Using Sentinel-1 Imagery. IEEE Transactions on Big Data, 2020, 6, 572-582.	4.4	60
13	A workflow for Sustainable Development Goals indicators assessment based on high-resolution satellite data. International Journal of Digital Earth, 2020, 13, 309-321.	1.6	54
14	Local-scale agricultural drought monitoring with satellite-based multi-sensor time-series. GIScience and Remote Sensing, 2020, 57, 704-718.	2.4	25
15	Crop monitoring technology based on time series of satellite imagery. , 2020, , .		5
16	Deep Recurrent Neural Network for Crop Classification Task Based on Sentinel-1 and Sentinel-2 Imagery. , 2020, , .		10
17	Land Cover and Land Use Monitoring Based on Satellite Data within World Bank Project. , 2019, , .		7
18	Winter Wheat Yield Assessment from Landsat 8 and Sentinel-2 Data: Incorporating Surface Reflectance, Through Phenological Fitting, into Regression Yield Models. Remote Sensing, 2019, 11, 1768.	1.8	58

#	Article	IF	Citations
19	Sentinel-3 Urban Heat Island Monitoring and analysis for Kyiv Based on Vector Data. , 2019, , .		5
20	Rivne City Land Cover and Land Surface Temperature Analysis Using Remote Sensing Data. , 2019, , .		6
21	Prediction of Visual Quality for Lossy Compressed Images. , 2019, , .		3
22	Roadside collection of training data for cropland mapping is viable when environmental and management gradients are surveyed. International Journal of Applied Earth Observation and Geoinformation, 2019, 80, 82-93.	1.4	22
23	Transparent Land Governance in Ukraine within World Bank Program. , 2019, , .		5
24	Use of Modified BM3D Filter and CNN Classifier for SAR Data to Improve Crop Classification Accuracy. , 2019, , .		3
25	Satellite Data Reveal Cropland Losses in South-Eastern Ukraine Under Military Conflict. Frontiers in Earth Science, 2019, 7, .	0.8	18
26	Near real-time agriculture monitoring at national scale at parcel resolution: Performance assessment of the Sen2-Agri automated system in various cropping systems around the world. Remote Sensing of Environment, 2019, 221, 551-568.	4.6	216
27	Assessment of Sustainable Development Goals Achieving with Use of NEXUS Approach in the Framework of GEOEssential ERA-PLANET Project. Advances in Intelligent Systems and Computing, 2019, , 146-155.	0.5	2
28	Nexus Approach for Calculating SDG Indicator 2.4.1 Using Remote Sensing and Biophysical Modeling. , 2019, , .		3
29	Spatial distribution of arable and abandoned land across former Soviet Union countries. Scientific Data, 2018, 5, 180056.	2.4	81
30	Object-Based Postprocessing Method for Crop Classification MAPS. , 2018, , .		7
31	Deep Learning Crop Classification Approach Based on Sparse Coding of Time Series of Satellite Data. , 2018, , .		15
32	Deep Learning Crop Classification Approach Based on Coding Input Satellite Data Into the Unified Hyperspace. , 2018, , .		4
33	A rule-based approach for crop identification using multi-temporal and multi-sensor phenological metrics. European Journal of Remote Sensing, 2018, 51, 511-524.	1.7	58
34	Crop inventory at regional scale in Ukraine: developing in season and end of season crop maps with multi-temporal optical and SAR satellite imagery. European Journal of Remote Sensing, 2018, 51, 627-636.	1.7	58
35	Early season large-area winter crop mapping using MODIS NDVI data, growing degree days information and a Gaussian mixture model. Remote Sensing of Environment, 2017, 195, 244-258.	4.6	156
36	Deep Learning Classification of Land Cover and Crop Types Using Remote Sensing Data. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 778-782.	1.4	1,144

#	Article	IF	Citations
37	Sentinel-2 for agriculture national demonstration in ukraine: Results and further steps. , 2017, , .		2
38	Large scale crop classification using Google earth engine platform. , 2017, , .		39
39	Speckle reducing for Sentinel-1 SAR data. , 2017, , .		8
40	Impact of SAR data filtering on crop classification accuracy. , 2017, , .		12
41	Land degradation estimation from global and national satellite based datasets within UN program. , 2017, , .		11
42	Exploring Google Earth Engine Platform for Big Data Processing: Classification of Multi-Temporal Satellite Imagery for Crop Mapping. Frontiers in Earth Science, 2017, 5, .	0.8	278
43	Cropland productivity assessment for Ukraine based on time series of optical satellite images. , 2017, , .		5
44	Analytical review of European projects LUCAS and CORINE for monitoring and validation of land cover and landuse on the basis of satellite and ground observations and experience of land cover mapping in Ukraine. Ukrainian Journal of Remote Sensing, 2017, , 10-36.	0.3	2
45	A Unified Cropland Layer at 250 m for Global Agriculture Monitoring. Data, 2016, 1, 3.	1.2	52
46	Towards an Improved Environmental Understanding of Land Surface Dynamics in Ukraine Based on Multi-Source Remote Sensing Time-Series Datasets from 1982 to 2013. Remote Sensing, 2016, 8, 617.	1.8	14
47	Parcel-Based Crop Classification in Ukraine Using Landsat-8 Data and Sentinel-1A Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2500-2508.	2.3	148
48	Towards a set of agrosystem-specific cropland mapping methods to address the global cropland diversity. International Journal of Remote Sensing, 2016, 37, 3196-3231.	1.3	92
49	Deep learning approach for large scale land cover mapping based on remote sensing data fusion. , 2016, , .		34
50	Validation methods for regional retrospective high resolution land cover for Ukraine. , 2016, , .		2
51	Along the season crop classification in Ukraine based on time series of optical and SAR images using ensemble of neural network classifiers. , 2016, , .		9
52	Efficiency Assessment of Multitemporal C-Band Radarsat-2 Intensity and Landsat-8 Surface Reflectance Satellite Imagery for Crop Classification in Ukraine. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 3712-3719.	2.3	130
53	The use of satellite data for agriculture drought risk quantification in Ukraine. Geomatics, Natural Hazards and Risk, 2016, 7, 901-917.	2.0	73
54	Land Cover Changes Analysis Based on Deep Machine Learning Technique. Journal of Automation and Information Sciences, 2016, 48, 42-54.	0.7	31

#	Article	IF	Citations
55	Building a Data Set over 12 Globally Distributed Sites to Support the Development of Agriculture Monitoring Applications with Sentinel-2. Remote Sensing, 2015, 7, 16062-16090.	1.8	47
56	Parcel based classification for agricultural mapping and monitoring using multi-temporal satellite image sequences. , 2015, , .		23
57	Regional retrospective high resolution land cover for Ukraine: Methodology and results. , 2015, , .		25
58	Service-oriented infrastructure for flood mapping using optical and SAR satellite data. International Journal of Digital Earth, 2014, 7, 829-845.	1.6	10
59	Flood Hazard and Flood Risk Assessment Using a Time Series of Satellite Images: A Case Study in Namibia. Risk Analysis, 2014, 34, 1521-1537.	1.5	88
60	Quantitative estimation of drought risk in Ukraine using satellite data. , 2014, , .		7
61	Orthorectification of Sich-2 satellite images using elastic models. , 2014, , .		0
62	The use of satellite SAR imagery to crop classification in Ukraine within JECAM project. , 2014, , .		33
63	Efficiency estimation of different satellite data usage for winter wheat yield forecasting in Ukraine. , 2014, , .		7
64	Resilience Aspects in the Sensor Web Infrastructure for Natural Disaster Monitoring and Risk Assessment Based on Earth Observation Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3826-3832.	2.3	16
65	Efficiency assessment of using satellite data for crop area estimation in Ukraine. International Journal of Applied Earth Observation and Geoinformation, 2014, 29, 22-30.	1.4	85
66	Winter wheat yield forecasting in Ukraine based on Earth observation, meteorological data and biophysical models. International Journal of Applied Earth Observation and Geoinformation, 2013, 23, 192-203.	1.4	143
67	Assessing security threat scenarios for utility-based reputation model in grids. Computers and Security, 2013, 34, 1-15.	4.0	9
68	Geospatial information system for agricultural monitoring. Cybernetics and Systems Analysis, 2013, 49, 124-132.	0.4	41
69	Use of the Earth Observing One (EO-1) Satellite for the Namibia SensorWeb Flood Early Warning Pilot. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 298-308.	2.3	29
70	Sensor Web approach to flood monitoring and risk assessment. , 2013, , .		1
71	Assessment of relative efficiency of using MODIS data to winter wheat yield forecasting in Ukraine. , 2013, , .		8
72	Winter Wheat Yield Forecasting: a Comparative Analysis of Results of Regression and Biophysical Models. Journal of Automation and Information Sciences, 2013, 45, 68-81.	0.7	39

#	Article	IF	Citations
73	Crop area estimation in Ukraine using satellite data within the MARS project. , 2012, , .		22
74	The Wide Area Grid Testbed for Flood Monitoring Using Earth Observation Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 1746-1751.	2.3	33
75	Interoperable Infrastructure for Flood Monitoring: SensorWeb, Grid and Cloud. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 1740-1745.	2.3	35
76	Efficiency Assessment of Different Approaches to Crop Classification Based on Satellite and Ground Observations. Journal of Automation and Information Sciences, 2012, 44, 67-80.	0.7	37
77	Grid computing technology for hydrological applications. Journal of Hydrology, 2011, 403, 186-199.	2.3	44
78	Flood Monitoring from SAR Data. NATO Science for Peace and Security Series C: Environmental Security, 2011, , 19-29.	0.1	42
79	Disaster Risk Assessment Based on Heterogeneous Geospatial Information. Journal of Automation and Information Sciences, 2010, 42, 32-45.	0.7	35
80	Grid and sensor web technologies for environmental monitoring. Earth Science Informatics, 2009, 2, 37-51.	1.6	44
81	Water resource quality monitoring using heterogeneous data and high-performance computations. Cybernetics and Systems Analysis, 2008, 44, 616-624.	0.4	35
82	Using the fuzzy-ellipsoid method for robust estimation of the state of a grid system node. Cybernetics and Systems Analysis, 2008, 44, 847-854.	0.4	28
83	Grid system for flood extent extraction from satellite images. Earth Science Informatics, 2008, 1, 105.	1.6	58
84	Web service for biodiversity estimation using remote sensing data. International Journal of Digital Earth, 2008, 1, 367-376.	1.6	5
85	Determination of Inundated Territories on the Basis of Integration of Heterogeneous Data. Journal of Automation and Information Sciences, 2007, 39, 42-51.	0.7	8
86	An Agent Approach for Providing Security in Distributed Systems. , 2006, , .		5
87	Intelligent System for Users' Activity Monitoring in Computer Networks. , 2005, , .		6
88	Cloud Mask Extracting from Meteosat Data with Use of Parallel Markovian Segmentation Algorithm. , 2005, , .		2
89	Neural Networks Learning Using Method of Fuzzy Ellipsoidal Estimates. Journal of Automation and Information Sciences, 2001, 33, 6.	0.7	8
90	Reduced ellipsoidal state observer of multidimensional discrete dynamic systems. Cybernetics and Systems Analysis, 2000, 36, 238-243.	0.4	0

#	Article	IF	Citations
91	On possible ACD application for optimization of cutting and assembly in mechanical engineering. , 0, , .		0
92	Intelligent multi-agent information security system. , 0, , .		7
93	Neural network approach for user activity monitoring in computer networks. , 0, , .		2
94	Comparison of biophysical and satellite predictors for wheat yield forecasting in Ukraine. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-7/W3, 39-44.	0.2	52
95	Regional scale crop mapping using multi-temporal satellite imagery. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-7/W3, 45-52.	0.2	58