Tiit Kutser

List of Publications by Year
in descending order

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73 papers	7,846 citations	126907 33 h-index	102487 66 g-index
75 all docs	75 docs citations	75 times ranked	7711 citing authors

#	Article	IF	Citations
1	Lakes and reservoirs as regulators of carbon cycling and climate. Limnology and Oceanography, 2009, 54, 2298-2314.	3.1	1,977
2	A global inventory of lakes based on high-resolution satellite imagery. Geophysical Research Letters, 2014, 41, 6396-6402.	4.0	1,013
3	First Experiences in Mapping Lake Water Quality Parameters with Sentinel-2 MSI Imagery. Remote Sensing, 2016, 8, 640.	4.0	343
4	Quantitative detection of chlorophyll in cyanobacterial blooms by satellite remote sensing. Limnology and Oceanography, 2004, 49, 2179-2189.	3.1	306
5	Mapping lake CDOM by satellite remote sensing. Remote Sensing of Environment, 2005, 94, 535-540.	11.0	247
6	Monitoring cyanobacterial blooms by satellite remote sensing. Estuarine, Coastal and Shelf Science, 2006, 67, 303-312.	2.1	245
7	Optical types of inland and coastal waters. Limnology and Oceanography, 2018, 63, 846-870.	3.1	196
8	Retrieval of water quality from airborne imaging spectrometry of various lake types in different seasons. Science of the Total Environment, 2001, 268, 59-77.	8.0	176
9	Automated mapping of water bodies using Landsat multispectral data. Limnology and Oceanography: Methods, 2012, 10, 1037-1050.	2.0	168
10	Coral reef applications of Sentinel-2: Coverage, characteristics, bathymetry and benthic mapping with comparison to Landsat 8. Remote Sensing of Environment, 2018, 216, 598-614.	11.0	162
11	Passive optical remote sensing of cyanobacteria and other intense phytoplankton blooms in coastal and inland waters. International Journal of Remote Sensing, 2009, 30, 4401-4425.	2.9	161
12	Remote sensing of shallow waters â€“ A 50Âyear retrospective and future directions. Remote Sensing of Environment, 2020, 240, 111619.	11.0	158
13	Comparison of different satellite sensors in detecting cyanobacterial bloom events in the Baltic Sea. Remote Sensing of Environment, 2006, 102, 74-85.	11.0	148
14	Remote Sensing of Black Lakes and Using 810 nm Reflectance Peak for Retrieving Water Quality Parameters of Optically Complex Waters. Remote Sensing, 2016, 8, 497.	4.0	132
15	The possibility of using the Landsat image archive for monitoring long time trends in coloured dissolved organic matter concentration in lake waters. Remote Sensing of Environment, 2012, 123, 334-338.	11.0	128
16	Mapping coral reef benthic substrates using hyperspectral space-borne images and spectral libraries. Estuarine, Coastal and Shelf Science, 2006, 70, 449-460.	2.1	123
17	Modeling spectral discrimination of Great Barrier Reef benthic communities by remote sensing instruments. Limnology and Oceanography, 2003, 48, 497-510.	3.1	111
18	Using Satellite Remote Sensing to Estimate the Colored Dissolved Organic Matter Absorption Coefficient in Lakes. Ecosystems, 2005, 8, 709-720.	3.4	106

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19	Mapping Water Quality Parameters with Sentinel-3 Ocean and Land Colour Instrument imagery in the Baltic Sea. Remote Sensing, 2017, 9, 1070.	4.0	105
20	Feasibility of hyperspectral remote sensing for mapping benthic macroalgal cover in turbid coastal watersâ€"a Baltic Sea case study. Remote Sensing of Environment, 2006, 101, 342-351.	11.0	99
21	A sun glint correction method for hyperspectral imagery containing areas with non-negligible water leaving NIR signal. Remote Sensing of Environment, 2009, 113, 2267-2274.	11.0	92
22	Validation and Comparison of Water Quality Products in Baltic Lakes Using Sentinel-2 MSI and Sentinel-3 OLCI Data. Sensors, 2020, 20, 742.	3.8	82
23	A hyperspectral model for interpretation of passive optical remote sensing data from turbid lakes. Science of the Total Environment, 2001, 268, 47-58.	8.0	77
24	Removing glint effects from field radiometry data measured in optically complex coastal and inland waters. Remote Sensing of Environment, 2013, 133, 85-89.	11.0	72
25	Influence of the vertical distribution of cyanobacteria in the water column on the remote sensing signal. Estuarine, Coastal and Shelf Science, 2008, 78, 649-654.	2.1	69
26	Estimating lake carbon fractions from remote sensing data. Remote Sensing of Environment, 2015, 157, 138-146.	11.0	62
27	Assessing suitability of multispectral satellites for mapping benthic macroalgal cover in turbid coastal waters by means of model simulations. Estuarine, Coastal and Shelf Science, 2006, 67, 521-529.	2.1	56
28	Predicting lake dissolved organic carbon at a global scale. Scientific Reports, 2020, 10, 8471.	3.3	56
29	Remotely Sensed Empirical Modeling of Bathymetry in the Southeastern Caspian Sea. Remote Sensing, 2013, 5, 2746-2762.	4.0	55
30	Global divergent trends of algal blooms detected by satellite during 1982â€“2018. Global Change Biology, 2022, 28, 2327-2340.	9.5	51
31	Classifying the Baltic Sea Shallow Water Habitats Using Image-Based and Spectral Library Methods. Remote Sensing, 2013, 5, 2451-2474.	4.0	42
32	Testing the performance of empirical remote sensing algorithms in the Baltic Sea waters with modelled and in situ reflectance data. Oceanologia, 2017, 59, 57-68.	2.2	40
33	Mapping inland water carbon content with Landsat 8 data. International Journal of Remote Sensing, 2016, 37, 2950-2961.	2.9	34
34	Contrasting seasonality in optical-biogeochemical properties of the Baltic Sea. PLoS ONE, 2017, 12, e0173357.	2.5	31
35	Dissolved organic carbon and its potential predictors in eutrophic lakes. Water Research, 2016, 102, 32-40.	11.3	30
36	How much benthic information can be retrieved with hyperspectral sensor from the optically complex coastal waters?. Journal of Applied Remote Sensing, 2020, 14, 1.	1.3	28

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37	Predicting Species Cover of Marine Macrophyte and Invertebrate Species Combining Hyperspectral Remote Sensing, Machine Learning and Regression Techniques. PLoS ONE, 2013, 8, e63946.	2.5	25
38	In-air spectral signatures of the Baltic Sea macrophytes and their statistical separability. Journal of Applied Remote Sensing, 2014, 8, 083634.	1.3	25
39	Airborne mapping of shallow water bathymetry in the optically complex waters of the Baltic Sea. Journal of Applied Remote Sensing, 2016, 10, 025012.	1.3	25
40	Remote sensing of CDOM and DOC in alpine lakes across the Qinghai-Tibet Plateau using Sentinel-2A imagery data. Journal of Environmental Management, 2021, 286, 112231.	7.8	24
41	Relating Remotely Sensed Optical Variability to Marine Benthic Biodiversity. PLoS ONE, 2013, 8, e55624.	2.5	22
42	Large-Scale Retrieval of Coloured Dissolved Organic Matter in Northern Lakes Using Sentinel-2 Data. Remote Sensing, 2020, 12, 157.	4.0	22
43	Predicting macroalgal pigments (chlorophylla, chlorophyllb,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 512 Td (chlo high-resolution hyperspectral spectroradiometers. International Journal of Remote Sensing, 2018, 39, 5716-5738.	2.9	20
44	Toward Automated Machine Learning-Based Hyperspectral Image Analysis in Crop Yield and Biomass Estimation. Remote Sensing, 2022, 14, 1114.	4.0	20
45	Resolving biogeochemical processes in lakes using remote sensing. Aquatic Sciences, 2019, 81, 1.	1.5	18
46	Modelling primary production in shallow well mixed lakes based on MERIS satellite data. Remote Sensing of Environment, 2015, 163, 253-261.	11.0	17
47	Impact of iron associated to organic matter on remote sensing estimates of lake carbon content. Remote Sensing of Environment, 2015, 156, 109-116.	11.0	17
48	Photo-library method for mapping seagrass biomass. Estuarine, Coastal and Shelf Science, 2007, 75, 559-563.	2.1	16
49	Comparison of Lake Optical Water Types Derived from Sentinel-2 and Sentinel-3. Remote Sensing, 2019, 11, 2883.	4.0	16
50	Spatial and temporal changes of primary production in a deep peri-alpine lake. Inland Waters, 2019, 9, 49-60.	2.2	15
51	Developing a GIS-Based Decision Rule for Sustainable Marine Aquaculture Site Selection: An Application of the Ordered Weighted Average Procedure. Sustainability, 2021, 13, 2672.	3.2	14
52	Mapping Baltic Sea shallow water environments with airborne remote sensing. Oceanology, 2012, 52, 803-809.	1.2	13
53	Predicting the cover and richness of intertidal macroalgae in remote areas: a case study in the Antarctic Peninsula. Ecology and Evolution, 2018, 8, 9086-9094.	1.9	12
54	Performance and Applicability of Water Column Correction Models in Optically Complex Coastal Waters. Remote Sensing, 2020, 12, 1861.	4.0	9

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55	Detecting Long Time Changes in Benthic Macroalgal Cover Using Landsat Image Archive. Remote Sensing, 2020, 12, 1901.	4.0	9
56	Secchi Depth estimation for optically-complex waters based on spectral angle mapping - derived water classification using Sentinel-2 data. International Journal of Remote Sensing, 2021, 42, 3123-3145.	2.9	8
57	Landsat observations of chlorophyll-a variations in Lake Taihu from 1984 to 2019. International Journal of Applied Earth Observation and Geoinformation, 2022, 106, 102642.	2.8	7
58	Bio-optical Modeling of Colored Dissolved Organic Matter. , 2017, , 101-128.		5
59	Spatio-Temporal Variability of Phytoplankton Primary Production in Baltic Lakes Using Sentinel-3 OLCI Data. Remote Sensing, 2020, 12, 2415.	4.0	5
60	Mapping spatial distribution, percent cover and biomass of benthic vegetation in optically complex coastal waters using hyperspectral CASI and multispectral Sentinel-2 sensors. International Journal of Applied Earth Observation and Geoinformation, 2021, 102, 102444.	2.8	4
61	Integrating remote sensing of hydrological processes and dissolved organic carbon fluxes in long-term Lake Studies. Journal of Hydrology, 2022, 605, 127331.	5.4	4
62	Deploying a GIS-Based Multi-Criteria Evaluation (MCE) Decision Rule for Site Selection of Desalination Plants. Water (Switzerland), 2022, 14, 1669.	2.7	4
63	Influence of vertical distribution of phytoplankton on remote sensing signal of Case II waters: southern Caspian Sea case study. Journal of Applied Remote Sensing, 2013, 7, 073550.	1.3	3
64	A Model-Based Assessment of Canopy-Scale Primary Productivity for the Baltic Sea Benthic Vegetation Using Environmental Variables and Spectral Indices. Remote Sensing, 2022, 14, 158.	4.0	3
65	Sun glint correction of airborne AISA images for mapping shallow-water benthos. , 2008, , .		2
66	Monitoring long time trends in lake CDOM using Landsat image archive. , 2010, , .		2
67	Deriving Nutrient Concentrations from Sentinel-3 OLCI Data in North-Eastern Baltic Sea. Remote Sensing, 2022, 14, 1487.	4.0	2
68	Effects of different conditions on particle dynamics and properties in West-Estonian coastal areas. Oceanologia, 2022, 64, 694-716.	2.2	2
69	<title>Remote sensing reflectance model of optically active components of turbid waters</title>. , 1994, , .		1
70	<title>Optical inverse problem in turbid waters</title>. , 1997, , .		1
71	<title>Detecting coral reef substrate types by airborne and spaceborne hyperspectral sensors</title>. , 2002, 4544, 93.		1
72	Removing air/water interface effects from hyperspectral radiometry data. , 2012, , .		1

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73	Assessment of chlorophyll-a concentration in the Gulf of Riga using hyperspectral airborne and simulated Sentinel-3 OLCI data. Proceedings of SPIE, 2016, , .	0.8	0