Hongtao Duan

List of Publications by Year
in descending order

129 papers	6,213 citations	61984 43 h-index	74163 75 g-index
133 all docs	133 docs citations	133 times ranked	4419 citing authors

#	Article	IF	Citations
1	Two-Decade Reconstruction of Algal Blooms in Chinaâ€™s Lake Taihu. Environmental Science & Technology, 2009, 43, 3522-3528.	10.0	473
2	Chinaâ€™s lakes at present: Number, area and spatial distribution. Science China Earth Sciences, 2011, 54, 283-289.	5.2	331
3	Spatial distribution of soil organic carbon and analysis of related factors in croplands of the black soil region, Northeast China. Agriculture, Ecosystems and Environment, 2006, 113, 73-81.	5.3	279
4	A halfâ€century of changes in China's lakes: Global warming or human influence?. Geophysical Research Letters, 2010, 37, .	4.0	258
5	Contributions of meteorology to the phenology of cyanobacterial blooms: Implications for future climate change. Water Research, 2012, 46, 442-452.	11.3	188
6	A machine learning approach to estimate chlorophyll-a from Landsat-8 measurements in inland lakes. Remote Sensing of Environment, 2020, 248, 111974.	11.0	184
7	Changes of Land Use and of Ecosystem Service Values in Sanjiang Plain, Northeast China. Environmental Monitoring and Assessment, 2006, 112, 69-91.	2.7	178
8	Fifteen-year monitoring of the turbidity dynamics in large lakes and reservoirs in the middle and lower basin of the Yangtze River, China. Remote Sensing of Environment, 2017, 190, 107-121.	11.0	166
9	Climate- and human-induced changes in suspended particulate matter over Lake Hongze on short and long timescales. Remote Sensing of Environment, 2017, 192, 98-113.	11.0	133
10	Evaluation of remote sensing algorithms for cyanobacterial pigment retrievals during spring bloom formation in several lakes of East China. Remote Sensing of Environment, 2012, 126, 126-135.	11.0	126
11	A novel MERIS algorithm to derive cyanobacterial phycocyanin pigment concentrations in a eutrophic lake: Theoretical basis and practical considerations. Remote Sensing of Environment, 2014, 154, 298-317.	11.0	110
12	Applying remote sensing techniques to monitoring seasonal and interannual changes of aquatic vegetation in Taihu Lake, China. Ecological Indicators, 2016, 60, 503-513.	6.3	110
13	MODIS observations of cyanobacterial risks in a eutrophic lake: Implications for long-term safety evaluation in drinking-water source. Water Research, 2017, 122, 455-470.	11.3	107
14	Assessment of Chlorophyll-a Concentration and Trophic State for Lake Chagan Using Landsat TM and Field Spectral Data. Environmental Monitoring and Assessment, 2007, 129, 295-308.	2.7	103
15	Monitoring lake changes of Qinghai-Tibetan Plateau over the past 30Âyears using satellite remote sensing data. Science Bulletin, 2014, 59, 1021-1035.	1.7	102
16	A lake data set for the Tibetan Plateau from the 1960s, 2005, and 2014. Scientific Data, 2016, 3, 160039.	5.3	100
17	Fourteen-Year Record (2000â€“2013) of the Spatial and Temporal Dynamics of Floating Algae Blooms in Lake Chaohu, Observed from Time Series of MODIS Images. Remote Sensing, 2015, 7, 10523-10542.	4.0	99
18	A convolutional neural network regression for quantifying cyanobacteria using hyperspectral imagery. Remote Sensing of Environment, 2019, 233, 111350.	11.0	98

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19	Reflections on the Catastrophic 2020 Yangtze River Basin Flooding in Southern China. Innovation(China), 2020, 1, 100038.	9.1	95
20	Detecting Aquatic Vegetation Changes in Taihu Lake, China Using Multi-temporal Satellite Imagery. Sensors, 2008, 8, 3988-4005.	3.8	92
21	Use of DGT and conventional methods to predict sediment metal bioavailability to a field inhabitant freshwater snail (Bellamya aeruginosa) from Chinese eutrophic lakes. Journal of Hazardous Materials, 2014, 264, 184-194.	12.4	90
22	Human activities determine quantity and composition of dissolved organic matter in lakes along the Yangtze River. Water Research, 2020, 168, 115132.	11.3	88
23	Eutrophic Lake Taihu as a significant CO2 source during 2000â€“2015. Water Research, 2020, 170, 115331.	11.3	85
24	Sentinel-3 OLCI observations of water clarity in large lakes in eastern China: Implications for SDG 6.3.2 evaluation. Remote Sensing of Environment, 2020, 247, 111950.	11.0	85
25	Remote estimation of chlorophyll-a in turbid inland waters: Three-band model versus GA-PLS model. Remote Sensing of Environment, 2013, 136, 342-357.	11.0	83
26	Optical characterization of black water blooms in eutrophic waters. Science of the Total Environment, 2014, 482-483, 174-183.	8.0	83
27	Inversion of inherent optical properties in optically complex waters using sentinel-3A/OLCI images: A case study using China's three largest freshwater lakes. Remote Sensing of Environment, 2019, 225, 328-346.	11.0	68
28	Distribution and incidence of algal blooms in Lake Taihu. Aquatic Sciences, 2015, 77, 9-16.	1.5	63
29	From unusual suspect to serial killer: Cyanotoxins boosted by climate change may jeopardize megafauna. Innovation(China), 2021, 2, 100092.	9.1	62
30	An EOF-Based Algorithm to Estimate Chlorophyll a Concentrations in Taihu Lake from MODIS Land-Band Measurements: Implications for Near Real-Time Applications and Forecasting Models. Remote Sensing, 2014, 6, 10694-10715.	4.0	59
31	Detection of illicit sand mining and the associated environmental effects in China's fourth largest freshwater lake using daytime and nighttime satellite images. Science of the Total Environment, 2019, 647, 606-618.	8.0	58
32	Variability of particulate organic carbon in inland waters observed from MODIS Aqua imagery. Environmental Research Letters, 2014, 9, 084011.	5.2	56
33	Drone-based hyperspectral remote sensing of cyanobacteria using vertical cumulative pigment concentration in a deep reservoir. Remote Sensing of Environment, 2020, 236, 111517.	11.0	56
34	A Novel Algorithm to Estimate Algal Bloom Coverage to Subpixel Resolution in Lake Taihu. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3060-3068.	4.9	54
35	Coregulation of nitrous oxide emissions by nitrogen and temperature in China's third largest freshwater lake (Lake Taihu). Limnology and Oceanography, 2019, 64, 1070-1086.	3.1	54
36	A new three-band algorithm for estimating chlorophyll concentrations in turbid inland lakes. Environmental Research Letters, 2010, 5, 044009.	5.2	51

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37	Global divergent trends of algal blooms detected by satellite during 1982â€“2018. Global Change Biology, 2022, 28, 2327-2340.	9.5	51
38	Comparison of different semi-empirical algorithms to estimate chlorophyll-a concentration in inland lake water. Environmental Monitoring and Assessment, 2010, 170, 231-244.	2.7	49
39	A New Method for Modifying Thresholds in the Classification of Tree Models for Mapping Aquatic Vegetation in Taihu Lake with Satellite Images. Remote Sensing, 2014, 6, 7442-7462.	4.0	48
40	A Remote Sensing Approach to Estimate Vertical Profile Classes of Phytoplankton in a Eutrophic Lake. Remote Sensing, 2015, 7, 14403-14427.	4.0	48
41	Remote-sensing assessment of regional inland lake water clarity in northeast China. Limnology, 2009, 10, 135-141.	1.5	46
42	Effects of broad bandwidth on the remote sensing of inland waters: Implications for high spatial resolution satellite data applications. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 153, 110-122.	11.1	46
43	Absorption and backscattering coefficients and their relations to water constituents of Poyang Lake, China. Applied Optics, 2011, 50, 6358.	2.1	45
44	Long-term distribution patterns of remotely sensed water quality parameters in Chesapeake Bay. Estuarine, Coastal and Shelf Science, 2013, 128, 93-103.	2.1	44
45	COVID-19 lockdown improved river water quality in China. Science of the Total Environment, 2022, 802, 149585.	8.0	44
46	An approach for developing Landsat-5 TM-based retrieval models of suspended particulate matter concentration with the assistance of MODIS. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 85, 84-92.	11.1	41
47	Satellite-Based Estimation of Column-Integrated Algal Biomass in Nonalgae Bloom Conditions: A Case Study of Lake Chaohu, China. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 450-462.	4.9	41
48	Observations of water transparency in Chinaâ€™s lakes from space. International Journal of Applied Earth Observation and Geoinformation, 2020, 92, 102187.	2.8	41
49	Environmental investments decreased partial pressure of CO2 in a small eutrophic urban lake: Evidence from long-term measurements. Environmental Pollution, 2020, 263, 114433.	7.5	41
50	Estimation of chlorophyllâ€aconcentration and trophic states for inland lakes in Northeast China from Landsat TM data and field spectral measurements. International Journal of Remote Sensing, 2008, 29, 767-786.	2.9	39
51	Comparison of MODIS-based models for retrieving suspended particulate matter concentrations in Poyang Lake, China. International Journal of Applied Earth Observation and Geoinformation, 2013, 24, 63-72.	2.8	39
52	Determination of the Downwelling Diffuse Attenuation Coefficient of Lake Water with the Sentinel-3A OLCI. Remote Sensing, 2017, 9, 1246.	4.0	38
53	Remote sensing of particulate organic carbon dynamics in a eutrophic lake (Taihu Lake, China). Science of the Total Environment, 2015, 532, 245-254.	8.0	37
54	Eutrophication and temperature drive large variability in carbon dioxide from China's Lake Taihu. Limnology and Oceanography, 2022, 67, 379-391.	3.1	36

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55	Absorption and scattering properties of water body in Taihu Lake, China: backscattering. International Journal of Remote Sensing, 2009, 30, 2321-2335.	2.9	34
56	Mapping species of submerged aquatic vegetation with multi-seasonal satellite images and considering life history information. International Journal of Applied Earth Observation and Geoinformation, 2017, 57, 154-165.	2.8	34
57	Variability of light absorption properties in optically complex inland waters of Lake Chaohu, China. Journal of Great Lakes Research, 2017, 43, 17-31.	1.9	33
58	Human-induced eutrophication dominates the bio-optical compositions of suspended particles in shallow lakes: Implications for remote sensing. Science of the Total Environment, 2019, 667, 112-123.	8.0	33
59	A novel MODIS algorithm to estimate chlorophyll a concentration in eutrophic turbid lakes. Ecological Indicators, 2016, 69, 138-151.	6.3	31
60	Are algal blooms occurring later in Lake Taihu? Climate local effects outcompete mitigation prevention. Journal of Plankton Research, 2014, 36, 866-871.	1.8	30
61	Lake Taihu, a large, shallow and eutrophic aquatic ecosystem in China serves as a sink for chromophoric dissolved organic matter. Journal of Great Lakes Research, 2015, 41, 597-606.	1.9	30
62	Variations of suspended particulate concentration and composition in Chinese lakes observed from Sentinel-3A OLCI images. Science of the Total Environment, 2020, 721, 137774.	8.0	29
63	An Assessment of Water Color for Inland Water in China Using a Landsat 8-Derived Forelâ€“Ule Index and the Google Earth Engine Platform. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 5773-5785.	4.9	27
64	Using VIIRS/NPP and MODIS/Aqua data to provide a continuous record of suspended particulate matter in a highly turbid inland lake. International Journal of Applied Earth Observation and Geoinformation, 2018, 64, 256-265.	2.8	26
65	Remote sensing of total suspended matter concentration in lakes across China using Landsat images and Google Earth Engine. ISPRS Journal of Photogrammetry and Remote Sensing, 2022, 187, 61-78.	11.1	26
66	An approach to correct the effects of phytoplankton vertical nonuniform distribution on remote sensing reflectance of cyanobacterial bloom waters. Limnology and Oceanography: Methods, 2017, 15, 302-319.	2.0	25
67	Satellite Estimation of Dissolved Carbon Dioxide Concentrations in Chinaâ€™s Lake Taihu. Environmental Science & Technology, 2020, 54, 13709-13718.	10.0	24
68	A Validation Study of an Improved SWIR Iterative Atmospheric Correction Algorithm for MODIS-Aqua Measurements in Lake Taihu, China. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4686-4695.	6.3	23
69	A Spectral Decomposition Algorithm for Estimating Chlorophyll-a Concentrations in Lake Taihu, China. Remote Sensing, 2014, 6, 5090-5106.	4.0	22
70	Optical approaches to examining the dynamics of dissolved organic carbon in optically complex inland waters. Environmental Research Letters, 2012, 7, 034014.	5.2	21
71	Production and transformation of organic matter driven by algal blooms in a shallow lake: Role of sediments. Water Research, 2022, 219, 118560.	11.3	21
72	Approximate bottom contribution to remote sensing reflectance in Taihu Lake, China. Journal of Great Lakes Research, 2011, 37, 18-25.	1.9	20

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73	Using Partial Least Squares-Artificial Neural Network for Inversion of Inland Water Chlorophyll-a. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 1502-1517.	6.3	20
74	Satellite analysis to identify changes and drivers of CyanoHABs dynamics in Lake Taihu. Water Science and Technology: Water Supply, 2016, 16, 1451-1466.	2.1	19
75	A Hybrid EOF Algorithm to Improve MODIS Cyanobacteria Phycocyanin Data Quality in a Highly Turbid Lake: Bloom and Nonbloom Condition. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4430-4444.	4.9	19
76	Evaluating the influences of harvesting activity and eutrophication on loss of aquatic vegetations in Taihu Lake, China. International Journal of Applied Earth Observation and Geoinformation, 2020, 87, 102038.	2.8	18
77	Phosphorus alleviation of nitrogenâ€suppressed methane sink in global grasslands. Ecology Letters, 2020, 23, 821-830.	6.4	18
78	Atmospheric correction of HJ-1 CCD imagery over turbid lake waters. Optics Express, 2014, 22, 7906.	3.4	17
79	An absorption-specific approach to examining dynamics of particulate organic carbon from VIIRS observations in inland and coastal waters. Remote Sensing of Environment, 2019, 224, 29-43.	11.0	17
80	Satellite estimation of dissolved organic carbon in eutrophic Lake Taihu, China. Remote Sensing of Environment, 2021, 264, 112572.	11.0	17
81	Temporal and spatial distribution of algal blooms in Lake Chaohu, 2000-2015. Hupo Kexue/Journal of Lake Sciences, 2017, 29, 276-284.	0.8	17
82	Monitoring the vertical distribution of HABs using hyperspectral imagery and deep learning models. Science of the Total Environment, 2021, 794, 148592.	8.0	15
83	Effective upwelling irradiance depths in turbid waters: a spectral analysis of origins and fate. Optics Express, 2011, 19, 7127.	3.4	14
84	Spatial and seasonal variability of nitrous oxide in a large freshwater lake in the lower reaches of the Yangtze River, China. Science of the Total Environment, 2020, 721, 137716.	8.0	14
85	Validation of MERIS Case-2 Water Products in Lake Taihu, China. GIScience and Remote Sensing, 2012, 49, 873-894.	5.9	13
86	An Integrative Remote Sensing Application of Stacked Autoencoder for Atmospheric Correction and Cyanobacteria Estimation Using Hyperspectral Imagery. Remote Sensing, 2020, 12, 1073.	4.0	13
87	Transport and fate of antibiotics in a typical aqua-agricultural catchment explained by rainfall events: Implications for catchment management. Journal of Environmental Management, 2021, 293, 112953.	7.8	13
88	Remote Quantification of Total Suspended Matter through Empirical Approaches for Inland Waters. Journal of Environmental Informatics, 2014, 23, 23-36.	6.0	13
89	Remote determination of chromophoric dissolved organic matter in lakes, China. International Journal of Digital Earth, 2014, 7, 897-915.	3.9	12
90	A new insight into black blooms: Synergies between optical and chemical factors. Estuarine, Coastal and Shelf Science, 2016, 175, 118-125.	2.1	11

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91	Chlorophyll-a Estimation in Turbid Waters Using Combined SAR Data With Hyperspectral Reflectance Data: A Case Study in Lake Taihu, China. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 1325-1336.	4.9	11
92	A Landsat-derived annual inland water clarity dataset of China between 1984 and 2018. Earth System Science Data, 2022, 14, 79-94.	9.9	11
93	Effects of Sensor Noise in Spectral Measurements on Chlorophyll-a Retrieval in Nanhu Lake of Changchun, China. Journal of Electromagnetic Waves and Applications, 2006, 20, 547-557.	1.6	10
94	Evaluation of the sensitivity of Chinaâ€™s next-generation ocean satellite sensor MWI onboard the Tiangong-2 space lab over inland waters. International Journal of Applied Earth Observation and Geoinformation, 2018, 71, 109-120.	2.8	10
95	Rich-information reversible watermarking scheme of vector maps. Multimedia Tools and Applications, 2019, 78, 24955-24977.	3.9	10
96	Effect of Satellite Temporal Resolution on Long-Term Suspended Particulate Matter in Inland Lakes. Remote Sensing, 2019, 11, 2785.	4.0	10
97	Notable changes of carbon dioxide in a eutrophic lake caused by water diversion. Journal of Hydrology, 2021, 603, 127064.	5.4	10
98	Design and development of a webâ€based interactive twin platform for watershed management. Transactions in GIS, 0, , .	2.3	10
99	Specific absorption and backscattering coefficients of the main water constituents in Poyang Lake, China. Environmental Monitoring and Assessment, 2013, 185, 4191-4206.	2.7	9
100	Influence of Particle Composition on Remote Sensing Reflectance and MERIS Maximum Chlorophyll Index Algorithm: Examples From Taihu Lake and Chaohu Lake. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1170-1174.	3.1	9
101	Lake Phenology of Freeze-Thaw Cycles Using Random Forest: A Case Study of Qinghai Lake. Remote Sensing, 2020, 12, 4098.	4.0	9
102	Process-oriented estimation of column-integrated algal biomass in eutrophic lakes by MODIS/Aqua. International Journal of Applied Earth Observation and Geoinformation, 2021, 99, 102321.	2.8	9
103	ESTIMATION OF CHLOROPHYLL-a CONCENTRATION IN LAKE XINMIAO BASED ON A SEMI-ANALYTICAL MODEL. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2008, 27, 197-201.	0.2	9
104	Catchment-based imperviousness metrics impacts on floods in Niushou River basin, Nanjing City, East China. Chinese Geographical Science, 2017, 27, 229-238.	3.0	8
105	A Novel Spatiotemporal Data Model for River Water Quality Visualization and Analysis. IEEE Access, 2019, 7, 155455-155461.	4.2	8
106	Temporal and spatial variation of carbon dioxide concentration and its exchange fluxes in Lake Chaohu. Hupo Kexue/Journal of Lake Sciences, 2019, 31, 766-778.	0.8	8
107	A Robust Model for MODIS and Landsat Image Fusion Considering Input Noise. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	8
108	Spatiotemporal pattern of gypsum blooms in the Salton Sea, California, during 2000-2018. International Journal of Applied Earth Observation and Geoinformation, 2020, 89, 102090.	2.8	7

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109	A novel multi-stage watermarking scheme of vector maps. Multimedia Tools and Applications, 2021, 80, 877-897.	3.9	7
110	Different storm responses of organic carbon transported to Lake Taihu by the eutrophic Tiaoxi River, China. Science of the Total Environment, 2021, 782, 146874.	8.0	7
111	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
112	Remote Estimation of Water Clarity and Suspended Particulate Matter in Qinghai Lake from 2001 to 2020 Using MODIS Images. Remote Sensing, 2022, 14, 3094.	4.0	7
113	An Improved Inherent Optical Properties Data Processing System for Residual Error Correction in Turbid Natural Waters. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 6596-6607.	4.9	6
114	Unusual links between inherent and apparent optical properties in shallow lakes, the case of Taihu Lake. Hydrobiologia, 2011, 667, 149-158.	2.0	5
115	The Optical Properties of the Eutrophic Water: A Case Study of Nanhu Lake in Changchun, China. Journal of Electromagnetic Waves and Applications, 2005, 19, 389-400.	1.6	4
116	Inverse Data Modelling for the Optical Properties of the Eutrophic Lake from Reflectance Spectra in Nanhu Lake of Changchun, China. Journal of Electromagnetic Waves and Applications, 2007, 21, 889-898.	1.6	4
117	Remote monitoring of cyanobacterial blooms using multi-source satellite data: A case of Yuqiao Reservoir, Tianjin. Hupo Kexue/Journal of Lake Sciences, 2018, 30, 967-978.	0.8	4
118	SOIL SALINEî€'ALKALIZATION EVALUATION BASING ON SPECTRAL REFLECTANCE CHARACTERISTICS. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2008, 27, 138-142.	0.2	4
119	Remote sensing retrieval for chlorophyll-a concentration in turbid case II waters (II): application onMERISimage. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2013, 32, 372.	0.2	4
120	Spatial and seasonal variability of chlorophyll a in different-sized lakes across eastern China. Inland Waters, 2022, 12, 205-214.	2.2	4
121	Rich-information watermarking scheme for 3D models of oblique photography. Multimedia Tools and Applications, 2019, 78, 31365-31386.	3.9	3
122	Determination of chlorophyll-a concentration using inverse continuum removal analysis of fluorescence peak in Lake Chagan, China. , 2007, , .		2
123	Using Remote Sensing to Assess the Impact of Human Activities on Water Quality: Case Study of Lake Taihu, China. Handbook of Environmental Chemistry, 2015, , 85-110.	0.4	2
124	Remote estimation of phytoplankton pigments in inland lake waters with algae. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2012, 31, 132-136.	0.2	2
125	A novel algorithm to monitor cyanobacterial blooms in Lake Taihu from HJ-CCD imagery. Hupo Kexue/Journal of Lake Sciences, 2016, 28, 624-634.	0.8	1
126	Corn chlorophyll estimation with in situ collected hyperspectral reflectance data. , 0, , .		0

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127	Evaluation of the Influence of Aquatic Plants and Lake Bottom on the Remote-Sensing Reflectance of Optically Shallow Waters. Atmosphere - Ocean, 2018, 56, 277-288.	1.6	0
128	Remote sensing-based estimation for Gaussian distribution parameters of vertical structure of algal biomass in Lake Chaohu. Hupo Kexue/Journal of Lake Sciences, 2017, 29, 546-557.	0.8	0
129	Remote sensing estimation algorithm of diffuse attenuation coefficient applicable to different satellite data in Lake Taihu, China. Hupo Kexue/Journal of Lake Sciences, 2017, 29, 1473-1484.	0.8	0