ZhongPing Lee

List of Publications by Year
in descending order

130 papers	10,332 citations	41344 49 h-index	33894 99 g-index
130 all docs	130 docs citations	130 times ranked	5425 citing authors

#	Article	IF	Citations
1	Deriving inherent optical properties from water color: a multiband quasi-analytical algorithm for optically deep waters. Applied Optics, 2002, 41, 5755.	2.1	1,301
2	Hyperspectral remote sensing for shallow waters: 2 Deriving bottom depths and water properties by optimization. Applied Optics, 1999, 38, 3831.	2.1	696
3	Chlorophyll aalgorithms for oligotrophic oceans: A novel approach based on threeâ€band reflectance difference. Journal of Geophysical Research, 2012, 117, .	3.3	649
4	Hyperspectral remote sensing for shallow waters I A semianalytical model. Applied Optics, 1998, 37, 6329.	2.1	474
5	Generalized ocean color inversion model for retrieving marine inherent optical properties. Applied Optics, 2013, 52, 2019.	1.8	366
6	Moderate Resolution Imaging Spectroradiometer (MODIS) observations of cyanobacteria blooms in Taihu Lake, China. Journal of Geophysical Research, 2010, 115, .	3.3	280
7	An overview of approaches and challenges for retrieving marine inherent optical properties from ocean color remote sensing. Progress in Oceanography, 2018, 160, 186-212.	3.2	257
8	Aquatic color radiometry remote sensing of coastal and inland waters: Challenges and recommendations for future satellite missions. Remote Sensing of Environment, 2015, 160, 15-30.	11.0	254
9	On-orbit radiometric characterization of OLI (Landsat-8) for applications in aquatic remote sensing. Remote Sensing of Environment, 2014, 154, 272-284.	11.0	229
10	Model for the interpretation of hyperspectral remote-sensing reflectance. Applied Optics, 1994, 33, 5721.	2.1	228
11	Secchi disk depth: A new theory and mechanistic model for underwater visibility. Remote Sensing of Environment, 2015, 169, 139-149.	11.0	224
12	Euphotic zone depth: Its derivation and implication to ocean-color remote sensing. Journal of Geophysical Research, 2007, 112, .	3.3	209
13	Penetration of UVâ€visible solar radiation in the global oceans: Insights from ocean color remote sensing. Journal of Geophysical Research: Oceans, 2013, 118, 4241-4255.	2.6	184
14	Dynamic range and sensitivity requirements of satellite ocean color sensors: learning from the past. Applied Optics, 2012, 51, 6045.	1.8	168
15	Global distribution of Case-1 waters: An analysis from SeaWiFS measurements. Remote Sensing of Environment, 2006, 101, 270-276.	11.0	163
16	The Ocean Colour Climate Change Initiative: III. A round-robin comparison on in-water bio-optical algorithms. Remote Sensing of Environment, 2015, 162, 271-294.	11.0	161
17	Removal of surface-reflected light for the measurement of remote-sensing reflectance from an above-surface platform. Optics Express, 2010, 18, 26313.	3.4	159
18	Global mapping reveals increase in lacustrine algal blooms over the past decade. Nature Geoscience, 2022, 15, 130-134.	12.9	158

#	Article	IF	Citations
19	Uncertainties of optical parameters and their propagations in an analytical ocean color inversion algorithm. Applied Optics, 2010, 49, 369.	2.1	153
20	Evaluation of chlorophyll-a remote sensing algorithms for an optically complex estuary. Remote Sensing of Environment, 2013, 129, 75-89.	11.0	152
21	A semi-analytical scheme to estimate Secchi-disk depth from Landsat-8 measurements. Remote Sensing of Environment, 2016, 177, 101-106.	11.0	151
22	Properties of the water column and bottom derived from Airborne Visible Infrared Imaging Spectrometer (AVIRIS) data. Journal of Geophysical Research, 2001, 106, 11639-11651.	3.3	150
23	Absorption spectrum of phytoplankton pigments derived from hyperspectral remote-sensing reflectance. Remote Sensing of Environment, 2004, 89, 361-368.	11.0	133
24	Quantifying cyanobacterial phycocyanin concentration in turbid productive waters: A quasi-analytical approach. Remote Sensing of Environment, 2013, 133, 141-151.	11.0	115
25	Effect of spectral band numbers on the retrieval of water column and bottom properties from ocean color data. Applied Optics, 2002, 41, 2191.	2.1	110
26	Uncertainties of SeaWiFS and MODIS remote sensing reflectance: Implications from clear water measurements. Remote Sensing of Environment, 2013, 133, 168-182.	11.0	109
27	Changes of water clarity in large lakes and reservoirs across China observed from long-term MODIS. Remote Sensing of Environment, 2020, 247, 111949.	11.0	100
28	Estimating oceanic primary productivity from ocean color remote sensing: A strategic assessment. Journal of Marine Systems, 2015, 149, 50-59.	2.1	98
29	Hyperspectral absorption coefficient of â€œpureâ€•seawater in the range of 350â€“550â€‰â€‰nm inverted from remote sensing reflectance. Applied Optics, 2015, 54, 546.	1.8	98
30	An assessment of phytoplankton primary productivity in the Arctic Ocean from satellite ocean color/in situ chlorophyllâ€a based models. Journal of Geophysical Research: Oceans, 2015, 120, 6508-6541.	2.6	90
31	Penetration of solar radiation in the upper ocean: A numerical model for oceanic and coastal waters. Journal of Geophysical Research, 2005, 110, .	3.3	89
32	Use of hyperspectral remote sensing reflectance for detection and assessment of the harmful alga, Karenia brevis. Applied Optics, 2006, 45, 5414.	2.1	83
33	Effects of sea ice cover on satellite-detected primary production in the Arctic Ocean. Biology Letters, 2016, 12, 20160223.	2.3	83
34	Determination of Primary Spectral Bands for Remote Sensing of Aquatic Environments. Sensors, 2007, 7, 3428-3441.	3.8	80
35	A system to measure the data quality of spectral remote sensing reflectance of aquatic environments. Journal of Geophysical Research: Oceans, 2016, 121, 8189.	2.6	80
36	Effects of molecular and particle scatterings on the model parameter for remote-sensing reflectance. Applied Optics, 2004, 43, 4957.	2.1	79

#	Article	IF	Citations
37	Robust approach to directly measuring water-leaving radiance in the field. Applied Optics, 2013, 52, 1693.	1.8	78
38	Characterization of MODIS-derived euphotic zone depth: Results for the China Sea. Remote Sensing of Environment, 2011, 115, 180-186.	11.0	70
39	Changes in water clarity of the Bohai Sea: Observations from MODIS. Remote Sensing of Environment, 2016, 186, 22-31.	11.0	70
40	An assessment of Landsat-8 atmospheric correction schemes and remote sensing reflectance products in coral reefs and coastal turbid waters. Remote Sensing of Environment, 2018, 215, 18-32.	11.0	65
41	MODIS-derived spatiotemporal water clarity patterns in optically shallow Florida Keys waters: A new approach to remove bottom contamination. Remote Sensing of Environment, 2013, 134, 377-391.	11.0	64
42	Resolving the longâ€standing puzzles about the observed Secchi depth relationships. Limnology and Oceanography, 2018, 63, 2321-2336.	3.1	62
43	An empirical algorithm to seamlessly retrieve the concentration of suspended particulate matter from water color across ocean to turbid river mouths. Remote Sensing of Environment, 2019, 235, 111491.	11.0	62
44	Why does the Secchi disk disappear? An imaging perspective. Optics Express, 2007, 15, 2791.	3.4	61
45	A Review of Protocols for Fiducial Reference Measurements of WaterLeaving Radiance for Validation of Satellite Remote-Sensing Data over Water. Remote Sensing, 2019, 11, 2198.	4.0	61
46	Improving Satellite Global Chlorophyll a Data Products Through Algorithm Refinement and Data Recovery. Journal of Geophysical Research: Oceans, 2019, 124, 1524-1543.	2.6	58
47	An algorithm to retrieve absorption coefficient of chromophoric dissolved organic matter from ocean color. Remote Sensing of Environment, 2013, 128, 259-267.	11.0	55
48	Influence of Raman scattering on ocean color inversion models. Applied Optics, 2013, 52, 5552.	1.8	54
49	Sensing an intense phytoplankton bloom in the western Taiwan Strait from radiometric measurements on a UAV. Remote Sensing of Environment, 2017, 198, 85-94.	11.0	52
50	Ocean Color Reveals Phase Shift Between Marine Plants and Yellow Substance. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 262-266.	3.1	47
51	Requirement of minimal signalâ€toâ€noise ratios of ocean color sensors and uncertainties of ocean color products. Journal of Geophysical Research: Oceans, 2017, 122, 2595-2611.	2.6	47
52	Hyperspectral Shallow-Water Remote Sensing with an Enhanced Benthic Classifier. Remote Sensing, 2018, 10, 147.	4.0	46
53	Capturing coastal water clarity variability with Landsat 8. Marine Pollution Bulletin, 2019, 145, 96-104.	5.0	44
54	An assessment of optical properties and primary production derived from remote sensing in the Southern Ocean (SO GasEx). Journal of Geophysical Research, 2011, 116, .	3.3	43

#	Article	IF	Citations
55	Combined Effect of Reduced Band Number and Increased Bandwidth on Shallow Water Remote Sensing: The Case of WorldView 2. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2577-2586.	6.3	43
56	Spectral interdependence of remote-sensing reflectance and its implications on the design of ocean color satellite sensors. Applied Optics, 2014, 53, 3301.	1.8	42
57	Satellite-Derived Photic Depth on the Great Barrier Reef: Spatio-Temporal Patterns of Water Clarity. Remote Sensing, 2012, 4, 3781-3795.	4.0	38
58	Visibility: How Applicable is the Century-Old Koschmieder Model?. Journals of the Atmospheric Sciences, 2016, 73, 4573-4581.	1.7	38
59	Retrieving absorption coefficients of multiple phytoplankton pigments from hyperspectral remote sensing reflectance measured over cyanobacteria bloom waters. Limnology and Oceanography: Methods, 2016, 14, 432-447.	2.0	38
60	A new approach to discriminate dinoflagellate from diatom blooms from space in the East China Sea. Journal of Geophysical Research: Oceans, 2014, 119, 4653-4668.	2.6	36
61	Impact of sub-pixel variations on ocean color remote sensing products. Optics Express, 2012, 20, 20844.	3.4	34
62	On the modeling of hyperspectral remote-sensing reflectance of high-sediment-load waters in the visible to shortwave-infrared domain. Applied Optics, 2016, 55, 1738.	2.1	32
63	Multi-band spectral matching inversion algorithm to derive water column properties in optically shallow waters: An optimization of parameterization. Remote Sensing of Environment, 2018, 204, 424-438.	11.0	31
64	Shallow water bathymetry with multi-spectral satellite ocean color sensors: Leveraging temporal variation in image data. Remote Sensing of Environment, 2020, 250, 112035.	11.0	31
65	K_{PAR}: An optical property associated with ambiguous values. Hupo Kexue/Journal of Lake Sciences, 2009, 21, 159-164.	0.8	31
66	Remote Sensing of Secchi Depth in Highly Turbid Lake Waters and Its Application with MERIS Data. Remote Sensing, 2019, 11, 2226.	4.0	30
67	A Colorâ€Indexâ€Based Empirical Algorithm for Determining Particulate Organic Carbon Concentration in the Ocean From Satellite Observations. Journal of Geophysical Research: Oceans, 2018, 123, 7407-7419.	2.6	29
68	Global Shallowâ€"Water Bathymetry From Satellite Ocean Color Data. Eos, 2010, 91, 429-430.	0.1	28
69	Radiance transmittance measured at the ocean surface. Optics Express, 2015, 23, 11826.	3.4	26
70	Multi-Spectral Remote Sensing of Phytoplankton Pigment Absorption Properties in Cyanobacteria Bloom Waters: A Regional Example in the Western Basin of Lake Erie. Remote Sensing, 2017, 9, 1309.	4.0	25
71	Evaluation of GOCI sensitivity for At-Sensor radiance and GDPS-Retrieved chlorophyll-a products. Ocean Science Journal, 2012, 47, 279-285.	1.3	24
72	Impact of multiple satellite ocean color samplings in a day on assessing phytoplankton dynamics. Ocean Science Journal, 2012, 47, 323-329.	1.3	24

#	Article	IF	Citations
73	Spectral slopes of the absorption coefficient of colored dissolved and detrital material inverted from UVâ€visible remote sensing reflectance. Journal of Geophysical Research: Oceans, 2016, 121, 1953-1969.	2.6	24
74	Improving low-quality satellite remote sensing reflectance at blue bands over coastal and inland waters. Remote Sensing of Environment, 2020, 250, 112029.	11.0	24
75	Improving satellite data products for open oceans with a scheme to correct the residual errors in remote sensing reflectance. Journal of Geophysical Research: Oceans, 2016, 121, 3866-3886.	2.6	23
76	An underwater light attenuation scheme for marine ecosystem models. Optics Express, 2008, 16, 16581.	3.4	22
77	Self-shading associated with a skylight-blocked approach system for the measurement of water-leaving radiance and its correction. Applied Optics, 2017, 56, 7033.	1.8	22
78	Deriving inherent optical properties from classical water color measurements: Forel-Ule index and Secchi disk depth. Optics Express, 2019, 27, 7642.	3.4	22
79	Extending satellite ocean color remote sensing to the near-blue ultraviolet bands. Remote Sensing of Environment, 2021, 253, 112228.	11.0	20
80	Time series of bioâ€optical properties in a subtropical gyre: Implications for the evaluation of interannual trends of biogeochemical properties. Journal of Geophysical Research, 2010, 115, .	3.3	19
81	Hyperspectral absorption and backscattering coefficients of bulk water retrieved from a combination of remote-sensing reflectance and attenuation coefficient. Optics Express, 2018, 26, A157.	3.4	19
82	Semianalytical Derivation of Phytoplankton, CDOM, and Detritus Absorption Coefficients From the Landsat 8/OLI Reflectance in Coastal Waters. Journal of Geophysical Research: Oceans, 2019, 124, 3682-3699.	2.6	19
83	Benthic classification and IOP retrievals in shallow water environments using MERIS imagery. Remote Sensing of Environment, 2020, 249, 112015.	11.0	19
84	Confidence Measure of the Shallow-Water Bathymetry Map Obtained through the Fusion of Lidar and Multiband Image Data. Journal of Remote Sensing, 2021, 2021, .	6.7	19
85	A Portable Algorithm to Retrieve Bottom Depth of Optically Shallow Waters from Top-Of-Atmosphere Measurements. Journal of Remote Sensing, 2022, 2022, .	6.7	19
86	Usable solar radiation and its attenuation in the upper water column. Journal of Geophysical Research: Oceans, 2014, 119, 1488-1497.	2.6	15
87	Retrieval of phytoplankton and colored detrital matter absorption coefficients with remote sensing reflectance in an ultraviolet band. Applied Optics, 2015, 54, 636.	1.8	15
88	VIIRS captures phytoplankton vertical migration in the NE Gulf of Mexico. Harmful Algae, 2017, 66, 40-46.	4.8	14
89	Evaluation of glint correction approaches for fine-scale ocean color measurements by lightweight hyperspectral imaging spectrometers. Applied Optics, 2020, 59, B18.	1.8	14
90	Diurnal remote sensing of coastal/oceanic waters: a radiometric analysis for Geostationary Coastal and Air Pollution Events. Applied Optics, 2014, 53, 648.	1.8	13

#	Article	IF	Citations
91	Concentrations of Multiple Phytoplankton Pigments in the Global Oceans Obtained from Satellite Ocean Color Measurements with MERIS. Applied Sciences (Switzerland), 2018, 8, 2678.	2.5	13
92	On the non-closure of particle backscattering coefficient in oligotrophic oceans. Optics Express, 2014, 22, 29223.	3.4	12
93	Reconciling Between Optical and Biological Determinants of the Euphotic Zone Depth. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016874.	2.6	12
94	Remote sensing of normalized diffuse attenuation coefficient of downwelling irradiance. Journal of Geophysical Research: Oceans, 2016, 121, 6717-6730.	2.6	11
95	Regionalization and Dynamic Parameterization of Quantum Yield of Photosynthesis to Improve the Ocean Primary Production Estimates From Remote Sensing. Frontiers in Marine Science, 2018, 5, .	2.5	11
96	Detection and Biomass Estimation of Phaeocystis globosa Blooms off Southern China From UAV-Based Hyperspectral Measurements. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	11
97	Model of the attenuation coefficient of daily photosynthetically available radiation in the upper ocean. Methods in Oceanography, 2013, 8, 56-74.	1.6	10
98	Experimental analysis of the measurement precision of spectral water-leaving radiance in different water types. Optics Express, 2021, 29, 2780.	3.4	10
99	A database of ocean primary productivity from the <scp>¹⁴C</scp> method. Limnology and Oceanography Letters, 2021, 6, 107-111.	3.9	9
100	Atmospheric correction over coastal waters with aerosol properties constrained by multi-pixel observations. Remote Sensing of Environment, 2021, 265, 112633.	11.0	9
101	Progressive scheme for blending empirical ocean color retrievals of absorption coefficient and chlorophyll concentration from open oceans to highly turbid waters. Applied Optics, 2019, 58, 3359.	1.8	9
102	Contemporaneous disequilibrium of bioâ€optical properties in the Southern Ocean. Geophysical Research Letters, 2017, 44, 2835-2842.	4.0	8
103	AOPs Are Not Additive: On the Biogeo-Optical Modeling of the Diffuse Attenuation Coefficient. Frontiers in Marine Science, 2018, 5, .	2.5	8
104	Performance of COCTS in Global Ocean Color Remote Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 1634-1644.	6.3	8
105	Impacts of pure seawater absorption coefficient on remotely sensed inherent optical properties in oligotrophic waters. Optics Express, 2019, 27, 34974.	3.4	8
106	Atmospheric correction in coastal region using same-day observations of different sun-sensor geometries with a revised POLYMER model. Optics Express, 2020, 28, 26953.	3.4	8
107	Secchi disk observation with spectral-selective glasses in blue and green waters. Optics Express, 2017, 25, 19878.	3.4	7
108	Enhance field water-color measurements with a Secchi disk and its implication for fusion of active and passive ocean-color remote sensing. Applied Optics, 2018, 57, 3463.	1.8	7

#	Article	IF	Citations
109	Estimating the Transmittance of Visible Solar Radiation in the Upper Ocean Using Secchi Disk Observations. Journal of Geophysical Research: Oceans, 2019, 124, 1434-1444.	2.6	7
110	Experimental evaluation of the self-shadow and its correction for on-water measurements of water-leaving radiance. Applied Optics, 2020, 59, 5325.	1.8	7
111	Estimation of Transmittance of Solar Radiation in the Visible Domain Based on Remote Sensing: Evaluation of Models Using In Situ Data. Journal of Geophysical Research: Oceans, 2017, 122, 9176-9188.	2.6	6
112	Nature of optical products inverted semianalytically from remote sensing reflectance of stratified waters. Limnology and Oceanography, 2020, 65, 387-400.	3.1	6
113	Impact of Temporal Variation of Chlorophyllâ€Specific Absorption on Phytoplankton Phenology Observed From Ocean Color Satellite: A Numerical Experiment. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016382.	2.6	6
114	A simple and robust shade correction scheme for remote sensing reflectance obtained by the skylight-blocked approach. Optics Express, 2021, 29, 470.	3.4	6
115	Estimating the water-leaving albedo from ocean color. Remote Sensing of Environment, 2022, 269, 112807.	11.0	6
116	Evaluation of forward reflectance models and empirical algorithms for chlorophyll concentration of stratified waters. Applied Optics, 2020, 59, 9340.	1.8	5
117	Impact of ship on radiometric measurements in the field: a reappraisal via Monte Carlo simulations. Optics Express, 2020, 28, 1439.	3.4	5
118	The Use of VGPM to Estimate Oceanic Primary Production: A â€œTangoâ€•Difficult to Dance. Journal of Remote Sensing, 2022, 2022, .	6.7	5
119	Atmospheric correction of hyperspectral airborne GCAS measurements over the Louisiana Shelf using a cloud shadow approach. International Journal of Remote Sensing, 2017, 38, 1162-1179.	2.9	4
120	Three-Dimensional Variation in Light Quality in the Upper Water Column Revealed With a Single Parameter. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-10.	6.3	4
121	Impact of Temperature on Absorption Coefficient of Pure Seawater in the Blue Wavelengths Inferred from Satellite and In Situ Measurements. Journal of Remote Sensing, 2021, 2021, .	6.7	4
122	Attenuation coefficient of usable solar radiation of the global oceans. Journal of Geophysical Research: Oceans, 2016, 121, 3228-3236.	2.6	3
123	Impact of Transmission Scheme of Visible Solar Radiation on Temperature and Mixing in the Upper Water Column With Inputs for Transmission Derived From Ocean Color Remote Sensing. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016080.	2.6	3
124	Effects of Ocean Optical Properties and Solar Attenuation on the Northwestern Atlantic Ocean Heat Content and Hurricane Intensity. Geophysical Research Letters, 2021, 48, e2021GL094171.	4.0	2
125	An evaluation of remote sensing algorithms for the estimation of diffuse attenuation coefficients in the ultraviolet bands. Optics Express, 2022, 30, 6640.	3.4	2
126	The Two Faces of â€œCase-1â€•Water. Journal of Remote Sensing, 2022, 2022, .	6.7	2

#	Article	IF	Citations
127	Transmittance of upwelling radiance at the sea surface measured in the field. Proceedings of SPIE, 2014, , .	0.8	1
128	Comparison between Photosynthetically Available Radiation (PAR) estimated from MODIS and GOES over the Gulf of Mexico. , 2016, , .		1
129	Experimental analysis of the measurement precision of spectral water-leaving radiance in different water types: reply. Optics Express, 2021, 29, 19218.	3.4	1
130	Direct measurement system of water-leaving albedo in the field by the skylight-blocked approach: Monte Carlo simulations. Optics Express, 2022, 30, 23852.	3.4	1