Kenneth Voss

List of Publications by Year
in descending order

100 papers	5,939 citations	109137 35 h-index	76769 74 g-index
100 all docs	100 docs citations	100 times ranked	4976 citing authors

#	Article	IF	Citations
1	An emerging ground-based aerosol climatology: Aerosol optical depth from AERONET. Journal of Geophysical Research, 2001, 106, 12067-12097.	3.3	1,737
2	The role of seawater constituents in light backscattering in the ocean. Progress in Oceanography, 2004, 61, 27-56.	1.5	368
3	Dominance of mineral dust in aerosol light-scattering in the North Atlantic trade winds. Nature, 1996, 380, 416-419.	13.7	338
4	Biological and optical properties of mesoscale coccolithophore blooms in the Gulf of Maine. Limnology and Oceanography, 1991, 36, 629-643.	1.6	275
5	An Ocean-Colour Time Series for Use in Climate Studies: The Experience of the Ocean-Colour Climate Change Initiative (OC-CCI). Sensors, 2019, 19, 4285.	2.1	239
6	Validation of atmospheric correction over the oceans. Journal of Geophysical Research, 1997, 102, 17209-17217.	3.3	206
7	Measurements of aerosol vertical profiles and optical properties during INDOEX 1999 using micropulse lidars. Journal of Geophysical Research, 2002, 107, INX2 18-1.	3.3	166
8	Maritime aerosol network as a component of AERONET â€“ first results and comparison with global aerosol models and satellite retrievals. Atmospheric Measurement Techniques, 2011, 4, 583-597.	1.2	152
9	Impacts of VIIRS SDR performance on ocean color products. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,347.	1.2	123
10	Spectral reflectance of whitecaps: Their contribution to water-leaving radiance. Journal of Geophysical Research, 2000, 105, 6493-6499.	3.3	97
11	Raman scattering by pure water and seawater. Applied Optics, 1998, 37, 3324.	2.1	94
12	Ground-based lidar measurements of aerosols during ACE-2: instrument description, results, and comparisons with other ground-based and airborne measurements. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 636-651.	0.8	84
13	Bidirectional reflectance of oceanic waters: A comparison of modeled and measured upward radiance fields. Journal of Geophysical Research, 1995, 100, 13143.	3.3	79
14	Dominant aerosol chemical components and their contribution to extinction during the Aerosols99 cruise across the Atlantic. Journal of Geophysical Research, 2001, 106, 20783-20809.	3.3	79
15	Estimating the altitude of aerosol plumes over the ocean from reflectance ratio measurements in the O2 A-band. Remote Sensing of Environment, 2009, 113, 1899-1911.	4.6	75
16	Polarized radiance distribution measurements of skylight I System description and characterization. Applied Optics, 1997, 36, 6083.	2.1	73
17	Scattering and attenuation properties of Emiliania huxleyi cells and their detached coccoliths. Limnology and Oceanography, 1998, 43, 870-876.	1.6	67
18	A spectral model of the beam attenuation coefficient in the ocean and coastal areas. Limnology and Oceanography, 1992, 37, 501-509.	1.6	62

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19	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.	1.8	61
20	Polarized radiance distribution measurement of skylight II Experiment and data. Applied Optics, 1997, 36, 8753.	2.1	59
21	Geometrical and spectral distribution of sky radiance: Comparison between simulations and field measurements. Remote Sensing of Environment, 1989, 27, 343-358.	4.6	53
22	Sediment properties influencing upwelling spectral reflectance signatures: The â€œbiofilm gel effectâ€• Limnology and Oceanography, 2003, 48, 431-443.	1.6	53
23	Instrument to measure the bidirectional reflectance distribution function of surfaces. Applied Optics, 2000, 39, 6197.	2.1	47
24	Effects of optically shallow bottoms on upwelling radiances: Bidirectional reflectance distribution function effects. Limnology and Oceanography, 2003, 48, 337-345.	1.6	46
25	Effects of point-spread function on calibration and radiometric accuracy of CCD camera. Applied Optics, 2004, 43, 665.	2.1	46
26	Spectra of particulate backscattering in natural waters. Optics Express, 2009, 17, 16192.	1.7	46
27	Electra-Optic Camera System For Measurement Of The Underwater Radiance Distribution. Optical Engineering, 1989, 28, 241.	0.5	45
28	Lidar measurements during Aerosols99. Journal of Geophysical Research, 2001, 106, 20821-20831.	3.3	45
29	Shedding new light on light in the ocean. Physics Today, 2011, 64, 44-49.	0.3	44
30	Clear-sky closure studies of lower tropospheric aerosol and water vapor during ACE-2 using airborne sunphotometer, airborne in-situ, space-borne, and ground-based measurements. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 568-593.	0.8	42
31	Upwelling radiance distribution camera system, NURADS. Optics Express, 2005, 13, 4250.	1.7	40
32	Detailed validation of the bidirectional effect in various Case 1 waters for application to ocean color imagery. Biogeosciences, 2007, 4, 781-789.	1.3	39
33	Measurement of the Mueller matrix for phytoplankton1. Limnology and Oceanography, 1985, 30, 1322-1326.	1.6	38
34	Spectral optimization for constituent retrieval in Case 2 waters II: Validation study in the Chesapeake Bay. Remote Sensing of Environment, 2009, 113, 610-621.	4.6	38
35	A Review of Protocols for Fiducial Reference Measurements of Downwelling Irradiance for the Validation of Satellite Remote Sensing Data over Water. Remote Sensing, 2019, 11, 1742.	1.8	37
36	Bidirectional reflectance function for oceanic waters with varying chlorophyll concentrations: Measurements versus predictions. Limnology and Oceanography, 2005, 50, 698-705.	1.6	36

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37	Use of the radiance distribution to measure the optical absorption coefficient in the ocean. Limnology and Oceanography, 1989, 34, 1614-1622.	1.6	35
38	Detailed validation of the bidirectional effect in various Case I and Case II waters. Optics Express, 2012, 20, 7630.	1.7	34
39	Spectral Reflectance of Whitecaps: Instrumentation, Calibration, and Performance in Coastal Waters. Journal of Atmospheric and Oceanic Technology, 1998, 15, 496-509.	0.5	33
40	Aerosol optical depth measurements during the Aerosols99 experiment. Journal of Geophysical Research, 2001, 106, 20811-20819.	3.3	33
41	POLRADS: polarization radiance distribution measurement system. Optics Express, 2010, 18, 19672.	1.7	32
42	Assessment of MERIS reflectance data as processed with SeaDAS over the European seas. Optics Express, 2011, 19, 25657.	1.7	31
43	Bidirectional reflectance study on dry, wet, and submerged particulate layers: effects of pore liquid refractive index and translucent particle concentrations. Applied Optics, 2006, 45, 8753.	2.1	30
44	In situ measurements of Raman scattering in clear ocean water. Applied Optics, 1997, 36, 6962.	2.1	28
45	Comparisons of bidirectional reflectance distribution function measurements on prepared particulate surfaces and radiative-transfer models. Applied Optics, 2005, 44, 597.	2.1	28
46	The spectral upwelling radiance distribution in optically shallow waters. Limnology and Oceanography, 2003, 48, 364-373.	1.6	26
47	Bidirectional reflectance measurements of sediments in the vicinity of Lee Stocking Island, Bahamas. Limnology and Oceanography, 2003, 48, 380-389.	1.6	26
48	Regional evaluation of an advanced very high resolution radiometer (AVHRR) two-channel aerosol retrieval algorithm. Journal of Geophysical Research, 2004, 109, .	3.3	26
49	Bidirectional reflectance of dry and submerged Labsphere Spectralon plaque. Applied Optics, 2006, 45, 7924.	2.1	25
50	Polarized light field under dynamic ocean surfaces: Numerical modeling compared with measurements. Journal of Geophysical Research, 2011, 116, .	3.3	25
51	Beam-Attenuation Measurement Error Due to Small-Angle Scattering Acceptance. Journal of Atmospheric and Oceanic Technology, 1993, 10, 113.	0.5	24
52	Patterns and statistics of inâ€water polarization under conditions of linear and nonlinear ocean surface waves. Journal of Geophysical Research, 2011, 116, .	3.3	24
53	An Example Crossover Experiment for Testing New Vicarious Calibration Techniques for Satellite Ocean Color Radiometry. Journal of Atmospheric and Oceanic Technology, 2010, 27, 1747-1759.	0.5	23
54	Quantitative estimation of the underwater radiance distribution. Journal of Geophysical Research, 2011, 116, .	3.3	19

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55	Introduction to special section on Recent Advances in the Study of Optical Variability in the Nearâ€Surface and Upper Ocean. Journal of Geophysical Research, 2012, 117, .	3.3	19
56	Toward closure of the inherent optical properties of natural waters. Journal of Geophysical Research, 1995, 100, 13193.	3.3	17
57	The variation of the polarized downwelling radiance distribution with depth in the coastal and clear ocean. Journal of Geophysical Research, 2011, 116, .	3.3	17
58	In situ measurements of inelastic light scattering in Monterey Bay using solar Fraunhofer lines. Journal of Geophysical Research, 1995, 100, 13227.	3.3	16
59	Validation of a SeaWiFS dust-correction methodology in the Mediterranean Sea: Identification of an algorithm-switching criterion. Remote Sensing of Environment, 2009, 113, 2689-2700.	4.6	15
60	A new instrument for measuring the high dynamic range radiance distribution in near-surface sea water. Optics Express, 2012, 20, 27024.	1.7	14
61	Bidirectional reflectance and polarization measurements on packed surfaces of benthic sediments and spherical particles. Optics Express, 2009, 17, 5217.	1.7	13
62	An instrument to measure the downwelling polarized radiance distribution in the ocean. Optics Express, 2011, 19, 17609.	1.7	13
63	Measurement of solar-stimulated fluorescence in natural waters. Limnology and Oceanography, 1998, 43, 1198-1206.	1.6	12
64	Observation of non-principal plane neutral points in the in-water upwelling polarized light field. Optics Express, 2011, 19, 5942.	1.7	12
65	On Hapke photometric model predictions on reflectance of closely packed particulate surfaces. Icarus, 2011, 215, 27-33.	1.1	12
66	Flow climatology for physicochemical properties of dichotomous aerosol over the western North Atlantic Ocean at Bermuda. Atmospheric Chemistry and Physics, 2014, 14, 691-717.	1.9	12
67	Deriving consistent ocean biological and biogeochemical products from multiple satellite ocean color sensors. Optics Express, 2020, 28, 2661.	1.7	12
68	Characteristics of Optically Thin Coastal Florida Cumuli Derived From Surfaceâ€Based Lidar Measurements. Journal of Geophysical Research D: Atmospheres, 2018, 123, 10,591.	1.2	11
69	Laboratory measurements of optical beams in young sea ice. Limnology and Oceanography, 1989, 34, 1606-1613.	1.6	10
70	Determining the influential depth for surface reflectance of sediment by BRDF measurements. Optics Express, 2003, 11, 2654.	1.7	10
71	Ship shadowing: model and data comparisons. , 1990, , .		9
72	Angular distribution of fluorescence from phytoplankton. Limnology and Oceanography, 1993, 38, 1582-1586.	1.6	9

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73	European Radiometry Buoy and Infrastructure (EURYBIA): A Contribution to the Design of the European Copernicus Infrastructure for Ocean Colour System Vicarious Calibration. Remote Sensing, 2020, 12, 1178.	1.8	9
74	Field Radiometry and Ocean Color Remote Sensing. , 2010, , 307-334.		8
75	Polarized Light Scattering by Small Particles. Aerosol Science and Technology, 1982, 1, 317-327.	1.5	6
76	Radiance Distribution Measurements In Coastal Water. Proceedings of SPIE, 1988, , .	0.8	6
77	<title>Next-generation in-water radiance distribution camera system</title>. , 1992, , .		6
78	Comparison of Two Filter-Based Reflectance Methods to Measure the Light Absorption by Atmospheric Aerosols. Journal of Atmospheric and Oceanic Technology, 2014, 31, 923-929.	0.5	6
79	Measurement of the point-spread function in a layered system. Applied Optics, 1997, 36, 3335.	2.1	5
80	Measuring and Modeling the Polarized Upwelling Radiance Distribution in Clear and Coastal Waters. Applied Sciences (Switzerland), 2018, 8, 2683.	1.3	5
81	Bi-directional reflectance study on particulate layers: Effects of pore liquid absorption coefficient. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 105, 405-413.	1.1	4
82	Variation of the point spread function in the Sargasso Sea. , 1991, , .		3
83	A New Instrument for Measurement of the Solar Aureole Radiance Distribution from Unstable Platforms. Journal of Atmospheric and Oceanic Technology, 2000, 17, 1040-1047.	0.5	3
84	Improved Shadow correction for the Marine Optical BuoY, MOBY. Optics Express, 2021, 29, 34411-34426.	1.7	3
85	<title>Whitecaps: spectral reflectance in the open ocean and their contribution to water-leaving radiance</title>. , 1997, , .		2
86	Simultaneous measurement of up-welling spectral radiance using a fiber-coupled CCD spectrograph. Proceedings of SPIE, 2007, , .	0.8	2
87	Optoacoustic spectroscopy and its application to molecular and particle absorption. , 1990, , .		1
88	Variability of the point spread function in the water column. , 1990, 1302, 355.		1
89	Detector perturbation of ocean radiance measurements. , 1991, 1537, 104.		1
90	<title>Photometer for the continuous measurement of calcite-dependent light scatter in seawater</title>. , 1994, 2258, 512.		1

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91	Ocean Optics Revisited. Optics and Photonics News, 1996, 7, 31.	0.4	1
92	VIIRS ZEMAX and FORTRAN polarization models. , 2007, , .		1
93	New theoretical formulation for the determination of radiance transmittance at the water-air interface: comment. Optics Express, 2018, 26, 19137.	1.7	1
94	Submerged reflectance measurements as a function of visible wavelength. , 1991, 1537, 140.		0
95	<title>Measurement of oceanic inelastic scattering using solar Fraunhofer lines</title>. , 1992, 1750, 161.		0
96	<title>Estimate of the average cosine for the radiance distribution resulting from a point source in the ocean</title>. , 1994, 2258, 256.		0
97	<title>Solar-stimulated inelastic light scattering in clear seawater</title>. , 1997, 2963, 266.		0
98	<title>Aspects of the point spread function in the coastal zone</title>. , 1997, , .		0
99	A coupled oceanic and atmospheric spectral optimization algorithm for application to ocean color satellites: sensitivity to near-infrared error. , 2005, , .		0
100	Estimation of aerosol altitude from reflectance ratio measurements in the O2 A-band. , 2006, 6406, 25.		0