Kirk Knobelspiesse

List of Publications by Year
in descending order

45 papers	2,181 citations	218677 26 h-index	243625 44 g-index
61 all docs	61 docs citations	61 times ranked	1990 citing authors

#	Article	IF	Citations
1	Polarimetric remote sensing of atmospheric aerosols: Instruments, methodologies, results, and perspectives. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 224, 474-511.	2.3	224
2	Polarimetric remote sensing of aerosols over land. Journal of Geophysical Research, 2009, 114, .	3.3	155
3	Unique data repository facilitates ocean color satellite validation. Eos, 2003, 84, 377.	0.1	124
4	Study of the Sea-Viewing Wide Field-of-View Sensor (SeaWiFS) aerosol optical property data over ocean in combination with the ocean color products. Journal of Geophysical Research, 2005, 110, .	3.3	108
5	A multiparameter aerosol classification method and its application to retrievals from spaceborne polarimetry. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9838-9863.	3.3	105
6	Maritime aerosol optical thickness measured by handheld sun photometers. Remote Sensing of Environment, 2004, 93, 87-106.	11.0	104
7	Atmospheric Correction of Satellite Ocean-Color Imagery During the PACE Era. Frontiers in Earth Science, 2019, 7, .	1.8	98
8	An overview of the ORACLES (ObseRvations of Aerosols above CLouds and their intEractionS) project: aerosolâ€“cloudâ€“radiation interactions in the southeast Atlantic basin. Atmospheric Chemistry and Physics, 2021, 21, 1507-1563.	4.9	97
9	Analysis of fine-mode aerosol retrieval capabilities by different passive remote sensing instrument designs. Optics Express, 2012, 20, 21457.	3.4	96
10	Sensitivity of multiangle, multispectral polarimetric remote sensing over open oceans to water-leaving radiance: Analyses of RSP data acquired during the MILAGRO campaign. Remote Sensing of Environment, 2012, 118, 284-308.	11.0	83
11	Atmospheric correction for hyperspectral ocean color retrieval with application to the Hyperspectral Imager for the Coastal Ocean (HICO). Remote Sensing of Environment, 2018, 204, 60-75.	11.0	83
12	Going Beyond Standard Ocean Color Observations: Lidar and Polarimetry. Frontiers in Marine Science, 2019, 6, .	2.5	80
13	Simultaneous retrieval of aerosol and cloud properties during the MILAGRO field campaign. Atmospheric Chemistry and Physics, 2011, 11, 6245-6263.	4.9	65
14	Information content and sensitivity of the 3&lt;i&gt;β&lt;/i&gt;â€‰+â€"2&lt;i&gt;Î±&lt;/i&gt; lidar measurement system for aerosol microphysical retrievals. Atmospheric Measurement Techniques, 2016, 9, 5555-5574.	3.1	54
15	Evaluation of aerosol properties over ocean from Moderate Resolution Imaging Spectroradiometer (MODIS) during ACE-Asia. Journal of Geophysical Research, 2005, 110, .	3.3	48
16	Surface BRDF estimation from an aircraft compared to MODIS and ground estimates at the Southern Great Plains site. Journal of Geophysical Research, 2008, 113, .	3.3	46
17	Retrieval of aerosol properties and water-leaving reflectance from multi-angular polarimetric measurements over coastal waters. Optics Express, 2018, 26, 8968.	3.4	44
18	Combined retrievals of boreal forest fire aerosol properties with a polarimeter and lidar. Atmospheric Chemistry and Physics, 2011, 11, 7045-7067.	4.9	43

#	Article	IF	Citations
19	Polarimetric retrievals of surface and cirrus clouds properties in the region affected by the Deepwater Horizon oil spill. Remote Sensing of Environment, 2012, 121, 389-403.	11.0	41
20	Retrieving Aerosol Characteristics From the PACE Mission, Part 2: Multi-Angle and Polarimetry. Frontiers in Environmental Science, 2019, 7, .	3.3	37
21	How should we aggregate data? Methods accounting for the numerical distributions, with an assessment of aerosol optical depth. Atmospheric Chemistry and Physics, 2019, 19, 15023-15048.	4.9	32
22	Retrieving Aerosol Characteristics From the PACE Mission, Part 1: Ocean Color Instrument. Frontiers in Earth Science, 2019, 7, .	1.8	31
23	Water-leaving contribution to polarized radiation field over ocean. Optics Express, 2017, 25, A689.	3.4	30
24	Sun-Pointing-Error Correction for Sea Deployment of the MICROTOPS II Handheld Sun Photometer. Journal of Atmospheric and Oceanic Technology, 2003, 20, 767-771.	1.3	28
25	Aerosol retrievals from different polarimeters during the ACEPOL campaign using a common retrieval algorithm. Atmospheric Measurement Techniques, 2020, 13, 553-573.	3.1	28
26	Intercomparison of airborne multi-angle polarimeter observations from the Polarimeter Definition Experiment. Applied Optics, 2019, 58, 650.	1.8	28
27	Liquid water cloud properties during the Polarimeter Definition Experiment (PODEX). Remote Sensing of Environment, 2015, 169, 20-36.	11.0	27
28	Efficient multi-angle polarimetric inversion of aerosols and ocean color powered by a deep neural network forward model. Atmospheric Measurement Techniques, 2021, 14, 4083-4110.	3.1	27
29	Cloud thermodynamic phase detection with polarimetrically sensitive passive sky radiometers. Atmospheric Measurement Techniques, 2015, 8, 1537-1554.	3.1	26
30	Information content of aerosol retrievals in the sunglint region. Geophysical Research Letters, 2013, 40, 631-634.	4.0	23
31	Comparisons of bispectral and polarimetric retrievals of marine boundary layer cloud microphysics: case studies using a LESâ€"satellite retrieval simulator. Atmospheric Measurement Techniques, 2018, 11, 3689-3715.	3.1	23
32	Inversion of multiangular polarimetric measurements over open and coastal ocean waters: a joint retrieval algorithm for aerosol and water-leaving radiance properties. Atmospheric Measurement Techniques, 2019, 12, 3921-3941.	3.1	18
33	Harnessing remote sensing to address critical science questions on ocean-atmosphere interactions. Elementa, 2018, 6, .	3.2	18
34	Inversion of multiangular polarimetric measurements from the ACEPOL campaign: an application of improving aerosol property and hyperspectral ocean color retrievals. Atmospheric Measurement Techniques, 2020, 13, 3939-3956.	3.1	17
35	Adaptive Data Screening for Multi-Angle Polarimetric Aerosol and Ocean Color Remote Sensing Accelerated by Deep Learning. Frontiers in Remote Sensing, 2021, 2, .	3.5	13
36	Development of neural network retrievals of liquid cloud properties from multi-angle polarimetric observations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 220, 39-51.	2.3	10

#	ARTICLE	IF	CITATIONS
37	Atmospheric correction over the ocean for hyperspectral radiometers using multi-angle polarimetric retrievals. Optics Express, 2021, 29, 4504.	3.4	10
38	The Aerosol Characterization from Polarimeter and Lidar (ACEPOL) airborne field campaign. Earth System Science Data, 2020, 12, 2183-2208.	9.9	10
39	Uncertainty and interpretation of aerosol remote sensing due to vertical inhomogeneity. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 114, 91-100.	2.3	9
40	Remote sensing of aerosols with small satellites in formation flight. Atmospheric Measurement Techniques, 2018, 11, 3935-3954.	3.1	9
41	Analysis of simultaneous aerosol and ocean glint retrieval using multi-angle observations. Atmospheric Measurement Techniques, 2021, 14, 3233-3252.	3.1	6
42	Low-level liquid cloud properties during ORACLES retrieved using airborne polarimetric measurements and a neural network algorithm. Atmospheric Measurement Techniques, 2020, 13, 3447-3470.	3.1	5
43	Optimal estimation framework for ocean color atmospheric correction and pixel-level uncertainty quantification. Applied Optics, 2022, 61, 6453.	1.8	5
44	Analysis of shipboard aerosol optical thickness measurements from multiple sunphotometers aboard the R/V Ronald H Brown during the Aerosol Characterization Experimentâ€"Asia. Applied Optics, 2005, 44, 3805.	2.1	2
45	Accurate monitoring of terrestrial aerosols and total solar irradiance: The NASA Glory mission. , 2010, , .		1