Alexander Marshak

List of Publications by Year
in descending order

80	3,362	159585 30	155660 55
papers	citations	h-index	g-index

86	86	86	2650
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Deep Space Observations of Cloud Glints: Spectral and Seasonal Dependence. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	5
2	Precipitable Water Vapor Variation in the Clear-Cloud Transition Zone From the ARM Shortwave Spectrometer. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	0
3	Cloud Height Daytime Variability From DSCOVR/EPIC and GOES-R/ABI Observations. Frontiers in Remote Sensing, 2022, 3, .	3.5	2
4	Unique NISTAR-Based Climate GCM Diagnostics of the Earthâ€™s Planetary Albedo and Spectral Absorption Through Longitudinal Data Slicing. Frontiers in Remote Sensing, 2022, 3, .	3.5	1
5	Reduction of Spectral Radiance Reflectance During the Annular Solar Eclipse of 21 June 2020 Observed by EPIC. Frontiers in Remote Sensing, 2022, 3, .	3.5	1
6	Deep Space Observations of Terrestrial Glitter. Earth and Space Science, 2021, 8, .	2.6	7
7	Global Daytime Variability of Clouds From DSCOVR/EPIC Observations. Geophysical Research Letters, 2021, 48, e2020GL091511.	4.0	4
8	Retrievals of Aerosol Optical Depth and Spectral Absorption From DSCOVR EPIC. Frontiers in Remote Sensing, 2021, 2, .	3.5	12
9	Analysis of Near-Cloud Changes in Atmospheric Aerosols Using Satellite Observations and Global Model Simulations. Remote Sensing, 2021, 13, 1151.	4.0	3
10	Calibration of the DSCOVR EPIC Visible and NIR Channels using Multiple LEO Radiometers. Frontiers in Remote Sensing, 2021, 2, .	3.5	5
11	Raw EPIC Data Calibration. Frontiers in Remote Sensing, 2021, 2, .	3.5	5
12	Aerosol Properties in Cloudy Environments from Remote Sensing Observations: A Review of the Current State of Knowledge. Bulletin of the American Meteorological Society, 2021, 102, E2177-E2197.	3.3	11
13	Effect of Scattering Angle on Earth Reflectance. Frontiers in Remote Sensing, 2021, 2, .	3.5	7
14	Earth Imaging From the Surface of the Moon With a DSCOVR/EPIC-Type Camera. Frontiers in Remote Sensing, 2021, 2, .	3.5	5
15	Lagrange Point Missions: The Key to next Generation Integrated Earth Observations. DSCOVR Innovation. Frontiers in Remote Sensing, 2021, 2, .	3.5	2
16	Operational Detection of Sun Glints in DSCOVR EPIC Images. Frontiers in Remote Sensing, 2021, 2, .	3.5	0
17	Deep Space Observations of Sun Glints from Marine Ice Clouds. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 735-739.	3.1	9
18	Daytime Variability of Cloud Fraction From DSCOVR/EPIC Observations. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031488.	3.3	9

#	Article	IF	Citations
19	Analyzing changes in the complexity of climate in the last four decades using MERRA-2 radiation data. Scientific Reports, 2020, 10, 922.	3.3	17
20	Spectral Signature of the Biosphere: NISTAR Finds It in Our Solar System From the Lagrangian Lâ€1 Point. Geophysical Research Letters, 2019, 46, 10679-10686.	4.0	10
21	Cloud Edge Properties Measured by the ARM Shortwave Spectrometer Over Ocean and Land. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8707-8721.	3.3	5
22	A Relationship Between Blue and Nearâ€IR Global Spectral Reflectance and the Response of Global Average Reflectance to Change in Cloud Cover Observed From EPIC. Earth and Space Science, 2019, 6, 1416-1429.	2.6	9
23	Cloud products from the Earth Polychromatic Imaging Camera (EPIC): algorithms and initial evaluation. Atmospheric Measurement Techniques, 2019, 12, 2019-2031.	3.1	27
24	Exploring Aerosols Near Clouds With Highâ€Spatialâ€Resolution Aircraft Remote Sensing During SEAC⁴RS. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2148-2173.	3.3	17
25	Remote Sensing of Droplet Number Concentration in Warm Clouds: A Review of the Current State of Knowledge and Perspectives. Reviews of Geophysics, 2018, 56, 409-453.	23.0	185
26	Implications of Whole-Disc DSCOVR EPIC Spectral Observations for Estimating Earthâ€™s Spectral Reflectivity Based on Low-Earth-Orbiting and Geostationary Observations. Remote Sensing, 2018, 10, 1594.	4.0	16
27	Satellite Observations of Cloud-Related Variations in Aerosol Properties. Atmosphere, 2018, 9, 430.	2.3	18
28	Earth Observations from DSCOVR EPIC Instrument. Bulletin of the American Meteorological Society, 2018, 99, 1829-1850.	3.3	108
29	Reduction in 317â€“780â€‰nm radiance reflected from the sunlit Earth during the eclipse of 21ÂAugust 2017. Atmospheric Measurement Techniques, 2018, 11, 4373-4388.	3.1	5
30	Cloud information content in EPIC/DSCOVRâ€™s oxygen A- and B-band channels: A physics-based approach. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 220, 84-96.	2.3	12
31	Calibration of the DSCOVR EPIC visible and NIR channels using MODIS Terra and Aqua data and EPIC lunar observations. Atmospheric Measurement Techniques, 2018, 11, 359-368.	3.1	37
32	Cloud information content in EPIC/DSCOVRâ€™s oxygen A- and B-band channels: An optimal estimation approach. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 216, 6-16.	2.3	14
33	EPIC Spectral Observations of Variability in Earthâ€™s Global Reflectance. Remote Sensing, 2018, 10, 254.	4.0	17
34	The spectral invariant approximation within canopy radiative transfer to support the use of the EPIC/DSCOVR oxygen B-band for monitoring vegetation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 191, 7-12.	2.3	24
35	Terrestrial glint seen from deep space: Oriented ice crystals detected from the Lagrangian point. Geophysical Research Letters, 2017, 44, 5197-5202.	4.0	46
36	A framework for quantifying the impacts of sub-pixel reflectance variance and covariance on cloud optical thickness and effective radius retrievals based on the bi-spectral method. AIP Conference Proceedings, 2017, , .	0.4	1

#	Article	IF	Citations
37	Observationâ€Based Study on Aerosol Optical Depth and Particle Size in Partly Cloudy Regions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10013-10024.	3.3	11
38	Passive remote sensing of altitude and optical depth of dust plumes using the oxygen A and B bands: First results from EPIC/DSCOVR at Lagrangeâ€1 point. Geophysical Research Letters, 2017, 44, 7544-7554.	4.0	69
39	Observation of the spectrally invariant properties of clouds in cloudy-to-clear transition zones during the MAGIC field campaign. Atmospheric Research, 2016, 182, 294-301.	4.1	10
40	A framework based on 2â€D Taylor expansion for quantifying the impacts of subpixel reflectance variance and covariance on cloud optical thickness and effective radius retrievals based on the bispectral method. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7007-7025.	3.3	53
41	Testing the twoâ€layer model for correcting nearâ€cloud reflectance enhancement using LES/SHDOMâ€simulated radiances. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9661-9674.	3.3	6
42	Effect of Cloud Fraction on Near-Cloud Aerosol Behavior in the MODIS Atmospheric Correction Ocean Color Product. Remote Sensing, 2015, 7, 5283-5299.	4.0	19
43	Nearâ€cloud aerosol properties from the 1 km resolution MODIS ocean product. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1546-1554.	3.3	16
44	Extending 3D near-cloud corrections from shorter to longer wavelengths. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 147, 79-85.	2.3	19
45	CALIPSO observations of nearâ€cloud aerosol properties as a function of cloud fraction. Geophysical Research Letters, 2014, 41, 9150-9157.	4.0	10
46	Improvement of MODIS aerosol retrievals near clouds. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9168-9181.	3.3	19
47	A method of retrieving cloud top height and cloud geometrical thickness with oxygen A and B bands for the Deep Space Climate Observatory (DSCOVR) mission: Radiative transfer simulations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 122, 141-149.	2.3	47
48	3D radiative processes in satellite measurements of aerosol properties. , 2013, , .		0
49	Hyperspectral remote sensing of foliar nitrogen content. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E185-92.	7.1	389
50	Multi-satellite aerosol observations in the vicinity of clouds. Atmospheric Chemistry and Physics, 2013, 13, 3899-3908.	4.9	34
51	Racoro Extended-Term Aircraft Observations of Boundary Layer Clouds. Bulletin of the American Meteorological Society, 2012, 93, 861-878.	3.3	81
52	Analysis of co-located MODIS and CALIPSO observations near clouds. Atmospheric Measurement Techniques, 2012, 5, 389-396.	3.1	33
53	Cloud droplet size and liquid water path retrievals from zenith radiance measurements: examples from the Atmospheric Radiation Measurement Program and the Aerosol Robotic Network. Atmospheric Chemistry and Physics, 2012, 12, 10313-10329.	4.9	33
54	CALIPSO observations of transatlantic dust: vertical stratification and effect of clouds. Atmospheric Chemistry and Physics, 2012, 12, 11339-11354.	4.9	45

#	Article	IF	Citations
55	Effect of CALIPSO cloudâ€“aerosol discrimination (CAD) confidence levels on observations of aerosol properties near clouds. Atmospheric Research, 2012, 116, 134-141.	4.1	25
56	On spectral invariance of single scattering albedo for water droplets and ice crystals at weakly absorbing wavelengths. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 715-720.	2.3	0
57	Global CALIPSO Observations of Aerosol Changes Near Clouds. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 19-23.	3.1	52
58	Spectrally Invariant Approximation within Atmospheric Radiative Transfer. Journals of the Atmospheric Sciences, 2011, 68, 3094-3111.	1.7	11
59	Spectrally-invariant behavior of zenith radiance around cloud edges simulated by radiative transfer. Atmospheric Chemistry and Physics, 2010, 10, 11295-11303.	4.9	14
60	Solar radiation transport in the cloudy atmosphere: a 3D perspective on observations and climate impacts. Reports on Progress in Physics, 2010, 73, 026801.	20.1	70
61	A Simple Stochastic Model for Generating Broken Cloud Optical Depth and Cloud-Top Height Fields. Journals of the Atmospheric Sciences, 2009, 66, 92-104.	1.7	19
62	Spectral invariant behavior of zenith radiance around cloud edges observed by ARM SWS. Geophysical Research Letters, 2009, 36, .	4.0	15
63	Solar zenith and viewing geometryâ€dependent errors in satellite retrieved cloud optical thickness: Marine stratocumulus case. Journal of Geophysical Research, 2009, 114, .	3.3	52
64	MODIS observations of enhanced clear sky reflectance near clouds. Geophysical Research Letters, 2009, 36, .	4.0	130
65	Physical interpretation of the spectral radiative signature in the transition zone between cloud-free and cloudy regions. Atmospheric Chemistry and Physics, 2009, 9, 1419-1430.	4.9	35
66	A simple model for the cloud adjacency effect and the apparent bluing of aerosols near clouds. Journal of Geophysical Research, 2008, 113, .	3.3	141
67	Importance of molecular Rayleigh scattering in the enhancement of clear sky reflectance in the vicinity of boundary layer cumulus clouds. Journal of Geophysical Research, 2008, 113, .	3.3	31
68	View angle dependence of cloud optical thicknesses retrieved by Moderate Resolution Imaging Spectroradiometer (MODIS). Journal of Geophysical Research, 2007, 112, .	3.3	54
69	3â€D aerosolâ€cloud radiative interaction observed in collocated MODIS and ASTER images of cumulus cloud fields. Journal of Geophysical Research, 2007, 112, .	3.3	150
70	The Effects of Scattering Angle and Cumulus Cloud Geometry on Satellite Retrievals of Cloud Droplet Effective Radius. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1039-1045.	6.3	36
71	Impact of three-dimensional radiative effects on satellite retrievals of cloud droplet sizes. Journal of Geophysical Research, 2006, 111, .	3.3	182
72	Impact of 3-D Clouds on Clear-Sky Reflectance and Aerosol Retrieval in a Biomass Burning Region of Brazil. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 169-172.	3.1	61

#	Article	IF	Citations
73	THE I3RC: Bringing Together the Most Advanced Radiative Transfer Tools for Cloudy Atmospheres. Bulletin of the American Meteorological Society, 2005, 86, 1275-1294.	3.3	192
74	Observations of Three-Dimensional Radiative Effects that Influence MODIS Cloud Optical Thickness Retrievals. Journals of the Atmospheric Sciences, 2002, 59, 1607-1618.	1.7	89
75	Statistical Analysis of the Uncertainties in Cloud Optical Depth Retrievals Caused by Three-Dimensional Radiative Effects. Journals of the Atmospheric Sciences, 2001, 58, 1540-1548.	1.7	67
76	Multiple Scattering in Clouds: Insights from Three-Dimensional Diffusion/P₁ Theory. Nuclear Science and Engineering, 2001, 137, 251-280.	1.1	35
77	Cloud characterization and clear-sky correction from Landsat-7. Remote Sensing of Environment, 2001, 78, 83-98.	11.0	51
78	Cloud three-dimensional effects evidenced in Landsat spatial power spectra and autocorrelation functions. Journal of Geophysical Research, 2000, 105, 14777-14788.	3.3	37
79	The Landsat Scale Break in Stratocumulus as a Three-Dimensional Radiative Transfer Effect: Implications for Cloud Remote Sensing. Journals of the Atmospheric Sciences, 1997, 54, 241-260.	1.7	180
80	The verisimilitude of the independent pixel approximation used in cloud remote sensing. Remote Sensing of Environment, 1995, 52, 71-78.	11.0	76