Steve Miller

List of Publications by Year
in descending order

79 papers	5,453 citations	147801 31 h-index	82547 72 g-index
81 all docs	81 docs citations	81 times ranked	4973 citing authors

#	Article	IF	Citations
1	Combined Dust Detection Algorithm for Asian Dust Events Over East Asia Using GK2A/AMI: a Case Study in October 2019. Asia-Pacific Journal of Atmospheric Sciences, 2022, 58, 45-64.	2.3	6
2	A Physical Basis for the Overstatement of Low Clouds at Night by Conventional Satellite Infraredâ€Based Imaging Radiometer Biâ€Spectral Techniques. Earth and Space Science, 2022, 9, .	2.6	0
3	The VIIRS Day/Night Band: A Flicker Meter in Space?. Remote Sensing, 2022, 14, 1316.	4.0	9
4	La Soufriere Volcanic Eruptions Launched Gravity Waves Into Space. Geophysical Research Letters, 2022, 49, .	4.0	11
5	Multiple Angle Observations Would Benefit Visible Band Remote Sensing Using Night Lights. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	15
6	Boat encounter with the 2019 Java bioluminescent milky sea: Views from on-deck confirm satellite detection. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	0
7	Satellite imagery and products of the 16â€"17 February 2020 Saharan Air Layer dust event over the eastern Atlantic: impacts of water vapor on dust detection and morphology. Atmospheric Measurement Techniques, 2021, 14, 1615-1634.	3.1	2
8	Honing in on bioluminescent milky seas from space. Scientific Reports, 2021, 11, 15443.	3.3	10
9	Quantifying uncertainties in nighttime light retrievals from Suomi-NPP and NOAA-20 VIIRS Day/Night Band data. Remote Sensing of Environment, 2021, 263, 112557.	11.0	51
10	Retired satellites: A chance to shed light. Science, 2021, 373, 1451-1452.	12.6	7
11	Examining the Economic and Environmental Impacts of COVID-19 Using Earth Observation Data. Remote Sensing, 2021, 13, 5.	4.0	33
12	Community Challenges and Prospects in the Operational Forecasting of Extreme Biomass Burning Smoke. , 2021, , .		0
13	Constraining Aerosol Phase Function Using Dualâ€View Geostationary Satellites. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035209.	3.3	3
14	Remote sensing of night lights: A review and an outlook for the future. Remote Sensing of Environment, 2020, 237, 111443.	11.0	442
15	Evaluating Geostationary Lightning Mapper Flash Rates Within Intense Convective Storms. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032827.	3.3	33
16	GeoColor: A Blending Technique for Satellite Imagery. Journal of Atmospheric and Oceanic Technology, 2020, 37, 429-448.	1.3	16
17	Development of a nighttime shortwave radiative transfer model for remote sensing of nocturnal aerosols and fires from VIIRS. Remote Sensing of Environment, 2020, 241, 111727.	11.0	18
18	Environmental Controls on Tropical Sea Breeze Convection and Resulting Aerosol Redistribution. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031699.	3.3	8

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19	Assessing the stability of surface lights for use in retrievals of nocturnal atmospheric parameters. Atmospheric Measurement Techniques, 2020, 13, 165-190.	3.1	7
20	Detecting Layer Height of Smoke and Dust Aerosols Over Vegetated Land and Water Surfaces via Oxygen Absorption Bands. , 2020, , .		0
21	Detecting layer height of smoke aerosols over vegetated land and water surfaces via oxygen absorption bands: hourly results from EPIC/DSCOVR in deep space. Atmospheric Measurement Techniques, 2019, 12, 3269-3288.	3.1	40
22	Geostationary Lightning Mapper and Earth Networks Lightning Detection Over the Contiguous United States and Dependence on Flash Characteristics. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11552-11567.	3.3	53
23	Preliminary Dual-Satellite Observations of Atmospheric Gravity Waves in Airglow. Atmosphere, 2019, 10, 650.	2.3	12
24	<i>A Tale of Two Dust Storms</i>: analysis of a complex dust event in the Middle East. Atmospheric Measurement Techniques, 2019, 12, 5101-5118.	3.1	14
25	Dynamical Coupling Between Hurricane Matthew and the Middle to Upper Atmosphere via Gravity Waves. Journal of Geophysical Research: Space Physics, 2019, 124, 3589-3608.	2.4	29
26	Satelliteâ€Based Detection of Daytime Supercooled Liquidâ€Topped Mixedâ€Phase Clouds Over the Southern Ocean Using the Advanced Himawari Imager. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2677-2701.	3.3	16
27	NASA's Black Marble nighttime lights product suite. Remote Sensing of Environment, 2018, 210, 113-143.	11.0	312
28	Short-term solar irradiance forecasting via satellite/model coupling. Solar Energy, 2018, 168, 102-117.	6.1	95
29	The Great Slave Lake PyroCb of 5 August 2014: Observations, Simulations, Comparisons With Regular Convection, and Impact on UTLS Water Vapor. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,332-12,352.	3.3	18
30	Observations of Lower Tropospheric Water Vapor Structures in GOESâ€16 ABI Imagery. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,625.	3.3	0
31	Mesospheric Bore Observations Using Suomi-NPP VIIRS DNB during 2013â€"2017. Remote Sensing, 2018, 10, 1935.	4.0	5
32	The Dark Side of Hurricane Matthew: Unique Perspectives from the VIIRS Day/Night Band. Bulletin of the American Meteorological Society, 2018, 99, 2561-2574.	3.3	19
33	Detection of Mixed-Phase Clouds From Shortwave and Thermal Infrared Satellite Observations. , 2018, , 43-67.		2
34	GHOST: A Satellite Mission Concept for Persistent Monitoring of Stratospheric Gravity Waves Induced by Severe Storms. Bulletin of the American Meteorological Society, 2018, 99, 1813-1828.	3.3	6
35	Solar Irradiance Nowcasting Case Studies near Sacramento. Journal of Applied Meteorology and Climatology, 2017, 56, 85-108.	1.5	33
36	Suomi NPP VIIRS/DNB imagery of nightglow gravity waves from various sources over China. Advances in Space Research, 2017, 59, 1951-1961.	2.6	9

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37	A Dynamic Enhancement With Background Reduction Algorithm: Overview and Application to Satelliteâ€Based Dust Storm Detection. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,938.	3.3	16
38	Cloud-Base Height Estimation from VIIRS. Part II: A Statistical Algorithm Based on A-Train Satellite Data. Journal of Atmospheric and Oceanic Technology, 2017, 34, 585-598.	1.3	37
39	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
40	Tropical Cyclone Characterization via Nocturnal Low-Light Visible Illumination. Bulletin of the American Meteorological Society, 2017, 98, 2351-2365.	3.3	5
41	VIIRS Day/Night Bandâ€"Correcting Striping and Nonuniformity over a Very Large Dynamic Range. Journal of Imaging, 2016, 2, 9.	3.0	19
42	User Validation of VIIRS Satellite Imagery. Remote Sensing, 2016, 8, 11.	4.0	10
43	A Sight for Sore Eyes: The Return of True Color to Geostationary Satellites. Bulletin of the American Meteorological Society, 2016, 97, 1803-1816.	3.3	40
44	Multisensor profiling of a concentric gravity wave event propagating from the troposphere to the ionosphere. Geophysical Research Letters, 2015, 42, 7874-7880.	4.0	99
45	Upper atmospheric gravity wave details revealed in nightglow satellite imagery. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6728-35.	7.1	86
46	Utilization of the Suomi National Polar-Orbiting Partnership (NPP) Visible Infrared Imaging Radiometer Suite (VIIRS) Day/Night Band for Arctic Ship Tracking and Fisheries Management. Remote Sensing, 2015, 7, 971-989.	4.0	57
47	Concentric gravity waves over northern China observed by an airglow imager network and satellites. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,058.	3.3	51
48	A dynamic scaling algorithm for the optimized digital display of VIIRS Day/Night Band imagery. International Journal of Remote Sensing, 2015, 36, 1839-1854.	2.9	8
49	Suomi NPP VIIRS Imagery evaluation. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6440-6455.	3.3	28
50	Improved VIIRS Day/Night Band Imagery With Near-Constant Contrast. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 6964-6971.	6.3	32
51	Estimating Three-Dimensional Cloud Structure via Statistically Blended Satellite Observations. Journal of Applied Meteorology and Climatology, 2014, 53, 437-455.	1.5	42
52	VIIRS Day-Night Band (DNB) calibration methods for improved uniformity. Proceedings of SPIE, 2014, , .	0.8	5
53	Liquid-top mixed-phase cloud detection from shortwave-infrared satellite radiometer observations: A physical basis. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8245-8267.	3.3	26
54	Stratospheric and mesospheric concentric gravity waves over tropical cyclone Mahasen: Joint AIRS and VIIRS satellite observations. Journal of Atmospheric and Solar-Terrestrial Physics, 2014, 119, 83-90.	1.6	54

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55	VIIRS Captures Aurora Motions. Bulletin of the American Meteorological Society, 2013, 94, 1491-1493.	3.3	9
56	VIIRS constant spatial-resolution advantages. International Journal of Remote Sensing, 2013, 34, 5761-5777.	2.9	56
57	The expected performance of cloud optical and microphysical properties derived from Suomi NPP VIIRS day/night band lunar reflectance. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,230.	3.3	27
58	Illuminating the Capabilities of the Suomi National Polar-Orbiting Partnership (NPP) Visible Infrared Imaging Radiometer Suite (VIIRS) Day/Night Band. Remote Sensing, 2013, 5, 6717-6766.	4.0	260
59	Physically Based Satellite Methods. , 2013, , 49-79.		8
60	Assessing Moonlight Availability for Nighttime Environmental Applications by Low-Light Visible Polar-Orbiting Satellite Sensors. Journal of Atmospheric and Oceanic Technology, 2012, 29, 538-557.	1.3	25
61	The GOES-R Proving Ground: Accelerating User Readiness for the Next-Generation Geostationary Environmental Satellite System. Bulletin of the American Meteorological Society, 2012, 93, 1029-1040.	3.3	70
62	Suomi satellite brings to light a unique frontier of nighttime environmental sensing capabilities. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15706-15711.	7.1	217
63	Automated Lightning Flash Detection in Nighttime Visible Satellite Data. Weather and Forecasting, 2011, 26, 399-408.	1.4	19
64	The Impacts of the 9 April 2009 Dust and Smoke on Convection. Bulletin of the American Meteorological Society, 2010, 91, 991-996.	3.3	5
65	NPOESS. Bulletin of the American Meteorological Society, 2010, 91, 727-740.	3.3	42
66	A Dynamic Lunar Spectral Irradiance Data Set for NPOESS/VIIRS Day/Night Band Nighttime Environmental Applications. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2316-2329.	6.3	110
67	Development of a dust source database for mesoscale forecasting in southwest Asia. Journal of Geophysical Research, 2009, 114, .	3.3	68
68	Haboob dust storms of the southern Arabian Peninsula. Journal of Geophysical Research, 2008, 113, .	3.3	129
69	MODIS provides a satellite focus on Operation Iraqi Freedom. International Journal of Remote Sensing, 2006, 27, 1285-1296.	2.9	17
70	The NPOESS VIIRS Day/Night Visible Sensor. Bulletin of the American Meteorological Society, 2006, 87, 191-200.	3.3	147
71	Twenty thousand leaguesoverthe seas: the first satellite perspective on bioluminescent â€˜milky seasâ€™. International Journal of Remote Sensing, 2006, 27, 5131-5143.	2.9	8
72	Detection of a bioluminescent milky sea from space. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14181-14184.	7.1	128

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73	A consolidated technique for enhancing desert dust storms with MODIS. Geophysical Research Letters, 2003, 30, .	4.0	122
74	THE CLOUDSAT MISSION AND THE A-TRAIN. Bulletin of the American Meteorological Society, 2002, 83, 1771-1790.	3.3	1,845
75	GOES 10 cloud optical property retrievals in the context of vertically varying microphysics. Journal of Geophysical Research, 2001, 106, 17981-17995.	3.3	10
76	CloudSat instrument requirements as determined from ECMWF forecasts of global cloudiness. Journal of Geophysical Research, 2001, 106, 17713-17733.	3.3	20
77	Physical decoupling of the GOES daytime 3.9 Âµ m channel thermal emission and solar reflection components using total solar eclipse data. International Journal of Remote Sensing, 2001, 22, 9-34.	2.9	18
78	A multisensor diagnostic satellite cloud property retrieval scheme. Journal of Geophysical Research, 2000, 105, 19955-19971.	3.3	45
79	A validation survey of the ECMWF prognostic cloud scheme using LITE. Geophysical Research Letters, 1999, 26, 1417-1420.	4.0	26