Gerald G Mace

List of Publications by Year
in descending order

62 papers	5,509 citations	201674 27 h-index	118850 62 g-index
65 all docs	65 docs citations	65 times ranked	3489 citing authors

#	Article	IF	Citations
1	THE CLOUDSAT MISSION AND THE A-TRAIN. Bulletin of the American Meteorological Society, 2002, 83, 1771-1790.	3.3	1,845
2	CloudSat mission: Performance and early science after the first year of operation. Journal of Geophysical Research, 2008, 113, .	3.3	578
3	Hydrometeor Detection Using Cloudsatâ€"An Earth-Orbiting 94-GHz Cloud Radar. Journal of Atmospheric and Oceanic Technology, 2008, 25, 519-533.	1.3	416
4	A description of hydrometeor layer occurrence statistics derived from the first year of merged Cloudsat and CALIPSO data. Journal of Geophysical Research, 2009, 114, .	3.3	356
5	Global hydrometeor occurrence as observed by CloudSat: Initial observations from summer 2006. Geophysical Research Letters, 2007, 34, .	4.0	172
6	The CloudSat radarâ€lidar geometrical profile product (RLâ€GeoProf): Updates, improvements, and selected results. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9441-9462.	3.3	163
7	A new retrieval for cloud liquid water path using a ground-based microwave radiometer and measurements of cloud temperature. Journal of Geophysical Research, 2001, 106, 14485-14500.	3.3	149
8	Tropical Composition, Cloud and Climate Coupling Experiment validation for cirrus cloud profiling retrieval using CloudSat radar and CALIPSO lidar. Journal of Geophysical Research, 2010, 115, .	3.3	147
9	Effects of varying aerosol regimes on low-level Arctic stratus. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	130
10	Evaluation of Several A-Train Ice Cloud Retrieval Products with In Situ Measurements Collected during the SPARTICUS Campaign. Journal of Applied Meteorology and Climatology, 2013, 52, 1014-1030.	1.5	121
11	Planning, implementation, and first results of the Tropical Composition, Cloud and Climate Coupling Experiment (TC4). Journal of Geophysical Research, 2010, 115, .	3.3	120
12	Cloud-Layer Overlap Characteristics Derived from Long-Term Cloud Radar Data. Journal of Climate, 2002, 15, 2505-2515.	3.2	108
13	Arctic cloud macrophysical characteristics from CloudSat and CALIPSO. Remote Sensing of Environment, 2012, 124, 159-173.	11.0	83
14	Profiles of Low-Level Stratus Cloud Microphysics Deduced from Ground-Based Measurements. Journal of Atmospheric and Oceanic Technology, 2003, 20, 42-53.	1.3	75
15	Cloud properties and radiative effects of the Asian summer monsoon derived from Aâ€Train data. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9492-9508.	3.3	69
16	Cluster analysis of tropical clouds using CloudSat data. Geophysical Research Letters, 2007, 34, .	4.0	58
17	Cloud radiative forcing at the Atmospheric Radiation Measurement Program Climate Research Facility: 1. Technique, validation, and comparison to satellite-derived diagnostic quantities. Journal of Geophysical Research, 2006, 111, .	3.3	56
18	Cloud properties and radiative forcing over the maritime storm tracks of the Southern Ocean and North Atlantic derived from Aâ€Train. Journal of Geophysical Research, 2010, 115, .	3.3	56

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19	The Vertical Structure of Cloud Occurrence and Radiative Forcing at the SGP ARM Site as Revealed by 8 Years of Continuous Data. Journal of Climate, 2008, 21, 2591-2610.	3.2	50
20	Reconciling Ground-Based and Space-Based Estimates of the Frequency of Occurrence and Radiative Effect of Clouds around Darwin, Australia. Journal of Applied Meteorology and Climatology, 2014, 53, 456-478.	1.5	44
21	CloudSat 2Câ€ICE product update with a new <i>Z_e</i> parameterization in lidarâ€only region. Journal of Geophysical Research D: Atmospheres, 2015, 120, 12198-12208.	3.3	42
22	Clouds over the Southern Ocean as Observed from the R/V Investigator during CAPRICORN. Part I: Cloud Occurrence and Phase Partitioning. Journal of Applied Meteorology and Climatology, 2018, 57, 1783-1803.	1.5	41
23	Evaluation of the Hydrometeor Layers in the East and West Pacific within ISCCP Cloud-Top Pressureâ€“Optical Depth Bins Using Merged CloudSat and CALIPSO Data. Journal of Climate, 2013, 26, 9429-9444.	3.2	39
24	Critical Evaluation of the ISCCP Simulator Using Ground-Based Remote Sensing Data. Journal of Climate, 2011, 24, 1598-1612.	3.2	31
25	Cloud vertical distribution from combined surface and space radarâ€“lidar observations at two Arctic atmospheric observatories. Atmospheric Chemistry and Physics, 2017, 17, 5973-5989.	4.9	31
26	The Occurrence of Particle Size Distribution Bimodality in Midlatitude Cirrus as Inferred from Ground-Based Remote Sensing Data. Journals of the Atmospheric Sciences, 2011, 68, 1162-1177.	1.7	30
27	Optimal Estimation Retrievals and Their Uncertainties: What Every Atmospheric Scientist Should Know. Bulletin of the American Meteorological Society, 2020, 101, E1512-E1523.	3.3	28
28	Retrieving coâ€occurring cloud and precipitation properties of warm marine boundary layer clouds with Aâ€Train data. Journal of Geophysical Research D: Atmospheres, 2016, 121, 4008-4033.	3.3	27
29	Midwinter Arctic leads form and dissipate low clouds. Nature Communications, 2020, 11, 206.	12.8	25
30	Southern Ocean Cloud Properties Derived From CAPRICORN and MARCUS Data. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033368.	3.3	25
31	MCMC-Based Assessment of the Error Characteristics of a Surface-Based Combined Radarâ€“Passive Microwave Cloud Property Retrieval. Journal of Applied Meteorology and Climatology, 2014, 53, 2034-2057.	1.5	24
32	Cloud occurrences and cloud radiative effects (CREs) from CERESâ€CALIPSOâ€CloudSatâ€MODIS (CCCM) and CloudSat radarâ€lidar (RL) products. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8852-8884.	3.3	24
33	Cloud Property Retrievals in the ARM Program. Meteorological Monographs, 2016, 57, 19.1-19.20.	5.0	22
34	Characteristics of Seaâ€Effect Clouds and Precipitation Over the Sea of Japan Region as Observed by Aâ€Train Satellites. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1322-1335.	3.3	20
35	The Latitudinal Variability of Oceanic Rainfall Properties and Its Implication for Satellite Retrievals: 1. Drop Size Distribution Properties. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13291-13311.	3.3	20
36	Southern Ocean latitudinal gradients of cloud condensation nuclei. Atmospheric Chemistry and Physics, 2021, 21, 12757-12782.	4.9	20

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37	On the Frequency of Occurrence of the Ice Phase in Supercooled Southern Ocean Low Clouds Derived From CALIPSO and CloudSat. Geophysical Research Letters, 2020, 47, e2020GL087554.	4.0	19
38	Mixedâ€Phase Clouds Over the Southern Ocean as Observed From Satellite and Surface Based Lidar and Radar. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034569.	3.3	19
39	Diagnosing Cloud Microphysical Process Information from Remote Sensing Measurementsâ€"A Feasibility Study Using Aircraft Data. Part I: Tropical Anvils Measured during TC4. Journal of Applied Meteorology and Climatology, 2017, 56, 633-649.	1.5	18
40	Mixedâ€Phase Clouds and Precipitation in Southern Ocean Cyclones and Cloud Systems Observed Poleward of 64Â°S by Shipâ€Based Cloud Radar and Lidar. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033626.	3.3	18
41	Clouds over the Southern Ocean as Observed from the R/V Investigator during CAPRICORN. Part II: The Properties of Nonprecipitating Stratocumulus. Journal of Applied Meteorology and Climatology, 2018, 57, 1805-1823.	1.5	17
42	Characterizing the Radar Backscatter-Cross-Section Sensitivities of Ice-Phase Hydrometeor Size Distributions via a Simple Scaling of the Clausiusâ€"Mossotti Factor. Journal of Applied Meteorology and Climatology, 2014, 53, 2761-2774.	1.5	16
43	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
44	Coâ€occurrence statistics of tropical tropopause layer cirrus with lower cloud layers as derived from CloudSat and CALIPSO data. Journal of Geophysical Research, 2010, 115, .	3.3	14
45	Observational evidence for aerosol invigoration in shallow cumulus downstream of Mount Kilauea. Geophysical Research Letters, 2016, 43, 2981-2988.	4.0	14
46	Anvil Productivities of Tropical Deep Convective Clusters and Their Regional Differences. Journals of the Atmospheric Sciences, 2016, 73, 3467-3487.	1.7	13
47	Using A-Train Observations to Evaluate Cloud Occurrence and Radiative Effects in the Community Atmosphere Model during the Southeast Asia Summer Monsoon. Journal of Climate, 2019, 32, 4145-4165.	3.2	13
48	The Latitudinal Variability of Oceanic Rainfall Properties and Its Implication for Satellite Retrievals: 2. The Relationships Between Radar Observables and Drop Size Distribution Parameters. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13312-13324.	3.3	12
49	Seasonal variability of warm boundary layer cloud and precipitation properties in the Southern Ocean as diagnosed from Aâ€Train data. Journal of Geophysical Research D: Atmospheres, 2017, 122, 1015-1032.	3.3	11
50	Bayesian Retrievals of Vertically Resolved Cloud Particle Size Distribution Properties. Journal of Applied Meteorology and Climatology, 2017, 56, 745-765.	1.5	8
51	Using Active Remote Sensing to Evaluate Cloud-Climate Feedbacks: a Review and a Look to the Future. Current Climate Change Reports, 2017, 3, 185-192.	8.6	7
52	Ice Particle Massâ€"Dimensional Relationship Retrieval and Uncertainty Evaluation Using the Optimal Estimation Methodology Applied to the MACPEX Data. Journal of Applied Meteorology and Climatology, 2017, 56, 767-788.	1.5	7
53	Quantifying uncertainties in radar forward models through a comparison between CloudSat and SPartICus reflectivity factors. Journal of Geophysical Research D: Atmospheres, 2017, 122, 1665-1684.	3.3	7
54	The Mass-Dimensional Properties of Cirrus Clouds During TC4. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10,402-10,417.	3.3	6

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55	Relationship Between Wintertime Leads and Low Clouds in the Panâ€Arctic. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032595.	3.3	6
56	Using A-Train Observations to Evaluate East Pacific Cloud Occurrence and Radiative Effects in the Community Atmosphere Model. Journal of Climate, 2020, 33, 6187-6203.	3.2	6
57	Assessing the accuracy of MISR and MISRâ€simulated cloud top heights using CloudSatâ€and CALIPSOâ€retrieved hydrometeor profiles. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2878-2897.	3.3	5
58	A Method for Assessing Relative Skill in Retrieving Cloud and Precipitation Properties in Next-Generation Cloud Radar and Radiometer Orbiting Observatories. Journal of Atmospheric and Oceanic Technology, 2019, 36, 2283-2306.	1.3	4
59	Assessing synergistic radar and radiometer capability in retrieving ice cloud microphysics based on hybrid Bayesian algorithms. Atmospheric Measurement Techniques, 2022, 15, 927-944.	3.1	3
60	Synthesizing the Vertical Structure of Tropical Cirrus by Combining CloudSat Radar Reflectivity With In Situ Microphysical Measurements Using Bayesian Monte Carlo Integration. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031882.	3.3	2
61	How Accurately Can Warm Rain Realistically Be Retrieved with Satellite Sensors? Part I: DSD Uncertainties. Journal of Applied Meteorology and Climatology, 2022, 61, 1087-1105.	1.5	2
62	Assessing Synergistic Radar and Radiometer Retrievals of Ice Cloud Microphysics for the Atmosphere Observing System (AOS) Architecture. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	1