Gerald G Mace

List of Publications by Year
in descending order

62	5,509	201674 27	118850 62
papers	citations	h-index	g-index

65	65	65	3489
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	Southern Ocean Cloud Properties Derived From CAPRICORN and MARCUS Data. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033368.	3.3	25
5	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
6	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
7	Southern Ocean latitudinal gradients of cloud condensation nuclei. Atmospheric Chemistry and Physics, 2021, 21, 12757-12782.	4.9	20
8	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
9	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
10	Relationship Between Wintertime Leads and Low Clouds in the Panâ€Arctic. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032595.	3.3	6
11	Midwinter Arctic leads form and dissipate low clouds. Nature Communications, 2020, 11, 206.	12.8	25
12	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
13	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
14	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
15	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
16	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
17	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
18	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

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19	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
20	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
21	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
22	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
23	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
24	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
25	Bayesian Retrievals of Vertically Resolved Cloud Particle Size Distribution Properties. Journal of Applied Meteorology and Climatology, 2017, 56, 745-765.	1.5	8
26	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
27	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
28	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
29	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
30	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
31	The Mass-Dimensional Properties of Cirrus Clouds During TC4. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10,402-10,417.	3.3	6
32	Cloud Property Retrievals in the ARM Program. Meteorological Monographs, 2016, 57, 19.1-19.20.	5.0	22
33	Observational evidence for aerosol invigoration in shallow cumulus downstream of Mount Kilauea. Geophysical Research Letters, 2016, 43, 2981-2988.	4.0	14
34	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
35	Anvil Productivities of Tropical Deep Convective Clusters and Their Regional Differences. Journals of the Atmospheric Sciences, 2016, 73, 3467-3487.	1.7	13
36	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

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37	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
38	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
39	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
40	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
41	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
42	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
43	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
44	Arctic cloud macrophysical characteristics from CloudSat and CALIPSO. Remote Sensing of Environment, 2012, 124, 159-173.	11.0	83
45	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
46	Critical Evaluation of the ISCCP Simulator Using Ground-Based Remote Sensing Data. Journal of Climate, 2011, 24, 1598-1612.	3.2	31
47	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
48	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
49	Planning, implementation, and first results of the Tropical Composition, Cloud and Climate Coupling Experiment (TC4). Journal of Geophysical Research, 2010, 115, .	3.3	120
50	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
51	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
52	CloudSat mission: Performance and early science after the first year of operation. Journal of Geophysical Research, 2008, 113, .	3.3	578
53	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
54	Hydrometeor Detection Using Cloudsatâ€”An Earth-Orbiting 94-GHz Cloud Radar. Journal of Atmospheric and Oceanic Technology, 2008, 25, 519-533.	1.3	416

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55	Global hydrometeor occurrence as observed by CloudSat: Initial observations from summer 2006. Geophysical Research Letters, 2007, 34, .	4.0	172
56	Cluster analysis of tropical clouds using CloudSat data. Geophysical Research Letters, 2007, 34, .	4.0	58
57	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
58	Effects of varying aerosol regimes on low-level Arctic stratus. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	130
59	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
60	Cloud-Layer Overlap Characteristics Derived from Long-Term Cloud Radar Data. Journal of Climate, 2002, 15, 2505-2515.	3.2	108
61	THE CLOUDSAT MISSION AND THE A-TRAIN. Bulletin of the American Meteorological Society, 2002, 83, 1771-1790.	3.3	1,845
62	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