Hirohiko Masunaga

List of Publications by Year
in descending order

70 papers	2,704 citations	172457 29 h-index	182427 51 g-index
75 all docs	75 docs citations	75 times ranked	2443 citing authors

#	Article	IF	Citations
1	Processâ€Level Assessment of the Iris Effect Over Tropical Oceans. Geophysical Research Letters, 2022, 49, .	4.0	4
2	Refinement of Surface Precipitation Estimates for the Dual-frequency Precipitation Radar on the GPM Core Observatory Using Near-Nadir Measurements. Journal of the Meteorological Society of Japan, 2021, 99, 1231-1252.	1.8	6
3	A Satelliteâ€Based Estimate of Convective Vertical Velocity and Convective Mass Flux: Global Survey and Comparison With Radar Wind Profiler Observations. Geophysical Research Letters, 2021, 48, .	4.0	10
4	Transient Aggregation of Convection: Observed Behavior and Underlying Processes. Journal of Climate, 2021, 34, 1685-1700.	3.2	3
5	Detection and Tracking of Tropical Convective Storms Based on Globally Gridded Precipitation Measurements: Algorithm and Survey over the Tropics. Journal of Applied Meteorology and Climatology, 2021, 60, 403-421.	1.5	6
6	Characterizing Ice-Scattering Homogeneity in TRMM Microwave Imagers and Its Influence on Oceanic Rain-Rate Estimation Bias of TRMM Precipitation Radar. Atmosphere, 2021, 12, 1377.	2.3	1
7	Vertical Modes and Effective Stability of Quasi-2-Day Waves. Journals of the Atmospheric Sciences, 2019, 76, 2005-2022.	1.7	1
8	A Mechanism for the Maintenance of Sharp Tropical Margins. Journals of the Atmospheric Sciences, 2019, 77, 1181-1197.	1.7	5
9	Inter-product biases in global precipitation extremes. Environmental Research Letters, 2019, 14, 125016.	5.2	40
10	Origins of Heavy Precipitation Biases in the TRMM PR and TMI Products Assessed with CloudSat and Reanalysis Data. Journal of Applied Meteorology and Climatology, 2019, 58, 37-54.	1.5	18
11	The Meandering Margin of the Meteorological Moist Tropics. Geophysical Research Letters, 2018, 45, 1177-1184.	4.0	29
12	Radiative Invigoration of Tropical Convection by Preceding Cirrus Clouds. Journals of the Atmospheric Sciences, 2018, 75, 1327-1342.	1.7	10
13	New Observational Metrics of Convective Self-Aggregation: Methodology and a Case Study. Journal of the Meteorological Society of Japan, 2018, 96, 535-548.	1.8	12
14	Global precipitation measurements for validating climate models. Atmospheric Research, 2017, 197, 1-20.	4.1	111
15	Comparison of TRMM-Derived Rainfall Products for General and Extreme Rains over the Maritime Continent. Journal of Applied Meteorology and Climatology, 2017, 56, 1867-1881.	1.5	18
16	Revisiting the iris effect of tropical cirrus clouds with TRMM and Aâ€Train satellite data. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5917-5931.	3.3	17
17	Relationship between the direction of diurnal rainfall migration and the ambient wind over the Southern Sumatra Island. Earth and Space Science, 2017, 4, 117-127.	2.6	22
18	Observing Convective Aggregation. Surveys in Geophysics, 2017, 38, 1199-1236.	4.6	102

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19	Implications of Warm Rain in Shallow Cumulus and Congestus Clouds for Large-Scale Circulations. Surveys in Geophysics, 2017, 38, 1257-1282.	4.6	17
20	A toy model of tropical convection with a moisture storage closure. Journal of Advances in Modeling Earth Systems, 2017, 9, 647-667.	3.8	4
21	Observing Convective Aggregation. Space Sciences Series of ISSI, 2017, , 27-64.	0.0	5
22	Implications of Warm Rain in Shallow Cumulus and Congestus Clouds for Large-Scale Circulations. Space Sciences Series of ISSI, 2017, , 85-110.	0.0	2
23	Convective and largeâ€scale mass flux profiles over tropical oceans determined from synergistic analysis of a suite of satellite observations. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7958-7974.	3.3	33
24	A Moist Static Energy Budget Analysis of Quasi-2-Day Waves Using Satellite and Reanalysis Data. Journals of the Atmospheric Sciences, 2016, 73, 743-759.	1.7	10
25	Assessment of a Satellite-Based Atmospheric Budget Analysis Method Using CINDY2011/DYNAMO/AMIE and TOGA COARE Sounding Array Data. Journal of the Meteorological Society of Japan, 2015, 93A, 21-40.	1.8	2
26	Early Evaluation of Ku- and Ka-Band Sensitivities for the Global Precipitation Measurement (GPM) Dual-Frequency Precipitation Radar (DPR). Scientific Online Letters on the Atmosphere, 2015, 11, 14-17.	1.4	62
27	Assessment of the consistency among global microwave land surface emissivity products. Atmospheric Measurement Techniques, 2015, 8, 1197-1205.	3.1	33
28	The Potential Roles of Background Surface Wind in the SST Variability Associated with Intraseasonal Oscillations. Journal of Climate, 2014, 27, 7053-7068.	3.2	4
29	Quantifying Uncertainties in Land-Surface Microwave Emissivity Retrievals. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 829-840.	6.3	32
30	A Mechanism of Tropical Convection Inferred from Observed Variability in the Moist Static Energy Budget. Journals of the Atmospheric Sciences, 2014, 71, 3747-3766.	1.7	36
31	Freeâ€tropospheric moisture convergence and tropical convective regimes. Geophysical Research Letters, 2014, 41, 8611-8618.	4.0	12
32	An Evaluation of Microwave Land Surface Emissivities Over the Continental United States to Benefit GPM-Era Precipitation Algorithms. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 378-398.	6.3	95
33	A Satellite Study of Tropical Moist Convection and Environmental Variability: A Moisture and Thermal Budget Analysis. Journals of the Atmospheric Sciences, 2013, 70, 2443-2466.	1.7	37
34	A Satellite Study of the Relationship between Sea Surface Temperature and Column Water Vapor over Tropical and Subtropical Oceans. Journal of Climate, 2013, 26, 4204-4218.	3.2	14
35	Aerosol Effects on Cumulus Congestus Population over the Tropical Pacific: A Cloud-Resolving Modeling Study. Journal of the Meteorological Society of Japan, 2013, 91, 817-833.	1.8	13
36	A Satellite Study of the Atmospheric Forcing and Response to Moist Convection over Tropical and Subtropical Oceans. Journals of the Atmospheric Sciences, 2012, 69, 150-167.	1.7	38

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37	Reproducibility by Climate Models of Cloud Radiative Forcing Associated with Tropical Convection. Journal of Climate, 2012, 25, 1247-1262.	3.2	12
38	Short-Term versus Climatological Relationship between Precipitation and Tropospheric Humidity. Journal of Climate, 2012, 25, 7983-7990.	3.2	36
39	Development of a land surface emissivity algorithm for use by microwave rain retrieval algorithms. Proceedings of SPIE, 2012, , .	0.8	11
40	Analysis of Cloud Properties Associated with Tropical Convection in Climate Models and Satellite Data. Journal of the Meteorological Society of Japan, 2012, 90, 629-646.	1.8	1
41	Equatorial Asymmetry of the East Pacific ITCZ: Observational Constraints on the Underlying Processes. Journal of Climate, 2011, 24, 1784-1800.	3.2	25
42	Improving a spectral bin microphysical scheme using TRMM satellite observations. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 382-399.	2.7	40
43	The Southeast Pacific Warm Band and Double ITCZ. Journal of Climate, 2010, 23, 1189-1208.	3.2	20
44	Satellite Data Simulator Unit. Bulletin of the American Meteorological Society, 2010, 91, 1625-1632.	3.3	85
45	An MJO Simulated by the NICAM at 14- and 7-km Resolutions. Monthly Weather Review, 2009, 137, 3254-3268.	1.4	53
46	Evaluation of Long-Term Cloud-Resolving Model Simulations Using Satellite Radiance Observations and Multifrequency Satellite Simulators. Journal of Atmospheric and Oceanic Technology, 2009, 26, 1261-1274.	1.3	78
47	Evaluation of Precipitation and High-Level Cloud Areas Associated with Large-Scale Circulation over the Tropical Pacific in the CMIP3 Models. Journal of the Meteorological Society of Japan, 2009, 87, 771-789.	1.8	3
48	A 9-season TRMM Observation of the Austral Summer MJO and Low-frequency Equatorial Waves. Journal of the Meteorological Society of Japan, 2009, 87A, 295-315.	1.8	10
49	Temporal and Spatial Variability of Clouds and Related Aerosols. , 2009, , 127-148.		2
50	A joint satellite and global cloudâ€resolving model analysis of a Maddenâ€Julian Oscillation event: Model diagnosis. Journal of Geophysical Research, 2008, 113, .	3.3	73
51	Seasonality and Regionality of the Maddenâ€“Julian Oscillation, Kelvin Wave, and Equatorial Rossby Wave. Journals of the Atmospheric Sciences, 2007, 64, 4400-4416.	1.7	66
52	A Next-generation Microwave Rainfall Retrieval Algorithm for use by TRMM and GPM. , 2007, , 235-252.		5
53	Satellite-based assessment of marine low cloud variability associated with aerosol, atmospheric stability, and the diurnal cycle. Journal of Geophysical Research, 2006, 111, .	3.3	78
54	Observations of tropical precipitating clouds ranging from shallow to deep convective systems. Geophysical Research Letters, 2006, 33, .	4.0	42

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55	Variability in the Characteristics of Precipitation Systems in the Tropical Pacific. Part II: Implications for Atmospheric Heating. Journal of Climate, 2006, 19, 1388-1406.	3.2	10
56	The Maddenâ€“Julian Oscillation Recorded in Early Observations from the Tropical Rainfall Measuring Mission (TRMM). Journals of the Atmospheric Sciences, 2006, 63, 2777-2794.	1.7	90
57	Quantifying Global Uncertainties in a Simple Microwave Rainfall Algorithm. Journal of Atmospheric and Oceanic Technology, 2006, 23, 23-37.	1.3	33
58	Variability in the Characteristics of Precipitation Systems in the Tropical Pacific. Part I: Spatial Structure. Journal of Climate, 2005, 18, 823-840.	3.2	71
59	Combined Radar and Radiometer Analysis of Precipitation Profiles for a Parametric Retrieval Algorithm. Journal of Atmospheric and Oceanic Technology, 2005, 22, 909-929.	1.3	76
60	Effects of atmospheric sphericity on stratospheric chemistry and dynamics over Antarctica. Journal of Geophysical Research, 2005, 110, .	3.3	16
61	Impact of aerosols and atmospheric thermodynamics on cloud properties within the climate system. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	57
62	Physical properties of maritime low clouds as retrieved by combined use of Tropical Rainfall Measurement Mission Microwave Imager and Visible/Infrared Scanner: Algorithm. Journal of Geophysical Research, 2002, 107, AAC 1-1-AAC 1-12.	3.3	22
63	Physical properties of maritime low clouds as retrieved by combined use of Tropical Rainfall Measuring Mission (TRMM) Microwave Imager and Visible/Infrared Scanner 2. Climatology of warm clouds and rain. Journal of Geophysical Research, 2002, 107, AAC 3-1.	3.3	37
64	Comparison of Rainfall Products Derived from TRMM Microwave Imager and Precipitation Radar. Journal of Applied Meteorology and Climatology, 2002, 41, 849-862.	1.7	76
65	The Effective Cloud Fraction of Broken Clouds Obtained by Multistream Radiative Transfer. Part I: Longwave Radiation. Journals of the Atmospheric Sciences, 2001, 58, 2455-2467.	1.7	3
66	A Radiation Hydrodynamic Model for Protostellar Collapse. II. The Second Collapse and the Birth of a Protostar. Astrophysical Journal, 2000, 531, 350-365.	4.5	398
67	Infall Signatures in Spectral Line Profiles of Protostellar Envelopes. Astrophysical Journal, 2000, 536, 406-415.	4.5	16
68	Does â€œÏ„â‰ˆ1â€•Terminate the Isothermal Evolution of Collapsing Clouds?. Astrophysical Journal, 1999, 510, 822-827.	4.5	66
69	A Radiation Hydrodynamical Model for Protostellar Collapse. Astrophysics and Space Science Library, 1999, , 169-170.	2.7	0
70	A Radiation Hydrodynamic Model for Protostellar Collapse. I. The First Collapse. Astrophysical Journal, 1998, 495, 346-369.	4.5	227