Courtney Schumacher

List of Publications by Year in descending order

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72 papers

3,778 citations

33 h-index 60 g-index

80 all docs 80 docs citations

80 times ranked 3797 citing authors

#	Article	IF	CITATIONS
1	Stratiform Rain in the Tropics as Seen by the TRMM Precipitation Radar*. Journal of Climate, 2003, 16, 1739-1756.	3.2	416
2	The Tropical Dynamical Response to Latent Heating Estimates Derived from the TRMM Precipitation Radar. Journals of the Atmospheric Sciences, 2004, 61, 1341-1358.	1.7	326
3	Review of Tropicalâ€Extratropical Teleconnections on Intraseasonal Time Scales. Reviews of Geophysics, 2017, 55, 902-937.	23.0	227
4	Proportions of convective and stratiform precipitation revealed in water isotope ratios. Nature Geoscience, 2016, 9, 624-629.	12.9	217
5	Introduction: Observations and Modeling of the Green Ocean Amazon (GoAmazon2014/5). Atmospheric Chemistry and Physics, 2016, 16, 4785-4797.	4.9	213
6	Comparison of Radar Data from the TRMM Satellite and Kwajalein Oceanic Validation Site. Journal of Applied Meteorology and Climatology, 2000, 39, 2151-2164.	1.7	129
7	The Green Ocean Amazon Experiment (GoAmazon2014/5) Observes Pollution Affecting Gases, Aerosols, Clouds, and Rainfall over the Rain Forest. Bulletin of the American Meteorological Society, 2017, 98, 981-997.	3.3	128
8	The TRMM Precipitation Radar's View of Shallow, Isolated Rain. Journal of Applied Meteorology and Climatology, 2003, 42, 1519-1524.	1.7	125
9	A comparison of the Hadley circulation in modern reanalyses. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	115
10	A comparison of TWPâ€ŀCE observational data with cloudâ€resolving model results. Journal of Geophysical Research, 2012, 117, .	3.3	108
11	Stratiform precipitation production over sub-Saharan Africa and the tropical East Atlantic as observed by TRMM. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 2235-2255.	2.7	107
12	Global energetics and local physics as drivers of past, present and future monsoons. Nature Geoscience, 2018, 11, 392-400.	12.9	100
13	Heating Structures of the TRMM Field Campaigns. Journals of the Atmospheric Sciences, 2007, 64, 2593-2610.	1.7	96
14	Convective and stratiform components of the precipitationâ€moisture relationship. Geophysical Research Letters, 2015, 42, 10,453.	4.0	79
15	Uncertainties in Oceanic Radar Rain Maps at Kwajalein and Implications for Satellite Validation. Journal of Applied Meteorology and Climatology, 2004, 43, 1114-1132.	1.7	59
16	Linking Meteorology, Turbulence, and Air Chemistry in the Amazon Rain Forest. Bulletin of the American Meteorological Society, 2016, 97, 2329-2342.	3.3	59
17	Top-of-atmosphere radiation budget of convective core/stratiform rain and anvil clouds from deep convective systems. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	56
18	Radar Nowcasting of Cloud-to-Ground Lightning over Houston, Texas. Weather and Forecasting, 2011, 26, 199-212.	1.4	56

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19	Modulation of Caribbean Precipitation by the Madden–Julian Oscillation. Journal of Climate, 2011, 24, 813-824.	3.2	54
20	Constructing a Merged Cloud–Precipitation Radar Dataset for Tropical Convective Clouds during the DYNAMO/AMIE Experiment at Addu Atoll. Journal of Atmospheric and Oceanic Technology, 2014, 31, 1021-1042.	1.3	53
21	Precipitation and Latent Heating Characteristics of the Major Tropical Western Pacific Cloud Regimes. Journal of Climate, 2008, 21, 4348-4364.	3.2	51
22	Convective cloud vertical velocity and massâ€flux characteristics from radar wind profiler observations during GoAmazon2014/5. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,891.	3.3	51
23	The Caribbean Low-Level Jet and Its Relationship with Precipitation in IPCC AR4 Models. Journal of Climate, 2011, 24, 5935-5950.	3.2	49
24	Downward transport of ozone rich air and implications for atmospheric chemistry in the Amazon rainforest. Atmospheric Environment, 2016, 124, 64-76.	4.1	48
25	Large-scale vertical velocity, diabatic heating and drying profiles associated with seasonal and diurnal variations of convective systems observed in the GoAmazon2014/5 experiment. Atmospheric Chemistry and Physics, 2016, 16, 14249-14264.	4.9	44
26	Analysis of Rain Classifications over the Tropics by Version 7 of the TRMM PR 2A23 Algorithm. Journal of the Meteorological Society of Japan, 2013, 91, 257-272.	1.8	44
27	Tropical Cloud Heating Profiles: Analysis from KWAJEX. Monthly Weather Review, 2008, 136, 4289-4300.	1.4	42
28	A Revised Real-Time Multivariate MJO Index. Monthly Weather Review, 2016, 144, 627-642.	1.4	42
29	TWPâ€ICE global atmospheric model intercomparison: Convection responsiveness and resolution impact. Journal of Geophysical Research, 2012, 117, .	3.3	38
30	Cloud characteristics, thermodynamic controls and radiative impacts during the Observations and Modeling of the Green Ocean Amazon (GoAmazon2014/5) experiment. Atmospheric Chemistry and Physics, 2017, 17, 14519-14541.	4.9	38
31	Heating in the tropical atmosphere: what level of detail is critical for accurate MJO simulations in GCMs?. Climate Dynamics, 2012, 39, 2547-2568.	3.8	37
32	Thick Anvils as Viewed by the TRMM Precipitation Radar. Journal of Climate, 2011, 24, 1718-1735.	3.2	36
33	Anvil Characteristics as Seen by C-POL during the Tropical Warm Pool International Cloud Experiment (TWP-ICE). Monthly Weather Review, 2008, 136, 206-222.	1.4	35
34	Overview: Precipitation characteristics and sensitivities to environmental conditions during GoAmazon2014/5 and ACRIDICON-CHUVA. Atmospheric Chemistry and Physics, 2018, 18, 6461-6482.	4.9	34
35	Geographical differences in the tropical precipitationâ€moisture relationship and rain intensity onset. Geophysical Research Letters, 2017, 44, 1114-1122.	4.0	30
36	Urban influence on the concentration and composition of submicron particulate matter in central Amazonia. Atmospheric Chemistry and Physics, 2018, 18, 12185-12206.	4.9	30

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37	Radar Nowcasting of Total Lightning over the Kennedy Space Center. Weather and Forecasting, 2012, 27, 189-204.	1.4	29
38	The role of tilted heating in the evolution of the MJO. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2966-2989.	3.3	26
39	Evolution, Properties, and Spatial Variability of MJO Convection near and off the Equator during DYNAMO. Journals of the Atmospheric Sciences, 2015, 72, 4126-4147.	1.7	24
40	Vertical motions of the tropical convective cloud spectrum over Darwin, Australia. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2277-2288.	2.7	23
41	Radar reflectivity as a proxy for convective mass transport. Journal of Geophysical Research, 2009, 114, .	3.3	21
42	Total Heating Characteristics of the ISCCP Tropical and Subtropical Cloud Regimes. Journal of Climate, 2013, 26, 7097-7116.	3.2	21
43	Radar observations of MJO and Kelvin wave interactions during DYNAMO/CINDY2011/AMIE. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6347-6367.	3.3	21
44	Frequency of tropical precipitating clouds as observed by the Tropical Rainfall Measuring Mission Precipitation Radar and ICESat/Geoscience Laser Altimeter System. Journal of Geophysical Research, 2007, 112, .	3.3	16
45	The Amazonian Low-Level Jet and Its Connection to Convective Cloud Propagation and Evolution. Monthly Weather Review, 2020, 148, 4083-4099.	1.4	16
46	Five-Year Climatology of Midtroposphere Dry Air Layers in Warm Tropical Ocean Regions as Viewed by AIRS/Aqua. Journal of Applied Meteorology and Climatology, 2009, 48, 1831-1842.	1.5	15
47	Formation of Nocturnal Offshore Rainfall near the West Coast of Sumatra: Land Breeze or Gravity Wave?. Monthly Weather Review, 2021, 149, 715-731.	1.4	15
48	Amazonian mesoscale convective systems: Life cycle and propagation characteristics. International Journal of Climatology, 2021, 41, 3968-3981.	3.5	15
49	The Relationship between Tropical Warm Pool Precipitation, Sea Surface Temperature, and Large-Scale Vertical Motion in IPCC AR4 Models. Journals of the Atmospheric Sciences, 2012, 69, 185-194.	1.7	14
50	Radiative heating of the ISCCP upper level cloud regimes and its impact on the largeâ€scale tropical circulation. Journal of Geophysical Research D: Atmospheres, 2013, 118, 592-604.	3.3	13
51	A Retrieval of Tropical Latent Heating Using the 3D Structure of Precipitation Features. Journal of Applied Meteorology and Climatology, 2016, 55, 1965-1982.	1.5	13
52	Interpreting the Diurnal Cycle of Clouds and Precipitation in the ARM GoAmazon Observations: Shallow to Deep Convection Transition. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033766.	3.3	13
53	Abrupt Southern Great Plains thunderstorm shifts linked to glacial climate variability. Nature Geoscience, 2021, 14, 396-401.	12.9	13
54	Modeled and Observed Variations in Storm Divergence and Stratiform Rain Production in Southeastern Texas. Journals of the Atmospheric Sciences, 2012, 69, 1159-1181.	1.7	10

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55	Spectral Signatures of Moisture–Convection Feedbacks over the Indian Ocean. Journals of the Atmospheric Sciences, 2018, 75, 1995-2015.	1.7	8
56	Drop-Size Distribution Variations Associated with Different Storm Types in Southeast Texas. Atmosphere, 2020, 11, 8.	2.3	8
57	Eastward-Propagating Disturbances in the Tropical Pacific. Monthly Weather Review, 2020, 148, 3713-3728.	1.4	8
58	Evaluating the Relationship Between Lightning and the Largeâ€Scale Environment and its Use for Lightning Prediction in Global Climate Models. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033990.	3.3	7
59	Representations of Precipitation Diurnal Cycle in the Amazon as Simulated by Observationally Constrained Cloudâ€System Resolving and Global Climate Models. Journal of Advances in Modeling Earth Systems, 2021, 13, e2021MS002586.	3.8	7
60	Baroclinicity Influences on Storm Divergence and Stratiform Rain: Subtropical Upper-Level Disturbances. Monthly Weather Review, 2009, 137, 1338-1357.	1.4	6
61	Predictive Statistical Representations of Observed and Simulated Rainfall Using Generalized Linear Models. Journal of Climate, 2019, 32, 3409-3427.	3.2	6
62	Impact of Cloud Longwave Scattering on Radiative Fluxes Associated With the Maddenâ€Julian Oscillation in the Indian Ocean and Maritime Continent. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032591.	3.3	6
63	Longâ€ŧerm singleâ€column model intercomparison of diurnal cycle of precipitation over midlatitude and tropical land. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 641-669.	2.7	6
64	Topographic Influences on Diurnally Driven MJO Rainfall Over the Maritime Continent. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	6
65	Assessing the Applicability of the Tropical Convective–Stratiform Paradigm in the Extratropics Using Radar Divergence Profiles. Journal of Climate, 2014, 27, 6673-6686.	3.2	5
66	Easterly Waves in the East Pacific during the OTREC 2019 Field Campaign. Journals of the Atmospheric Sciences, 2021, 78, 4071-4088.	1.7	4
67	Global multivariate point pattern models for rain type occurrence. Spatial Statistics, 2019, 31, 100355.	1.9	3
68	Assessing the Vertical Velocity of the East Pacific ITCZ. Geophysical Research Letters, 2022, 49, .	4.0	3
69	Statistical and machine learning methods applied to the prediction of different tropical rainfall types. Environmental Research Communications, 2021, 3, 111001.	2.3	2
70	Using Lomb–Scargle Analysis to Derive Empirical Orthogonal Functions from Gappy Meteorological Data. Journal of Applied Meteorology and Climatology, 2018, 57, 2217-2229.	1.5	1
71	Adapting the COSP Radar Simulator to Compare GCM Output and GPM Precipitation Radar Observations. Journal of Atmospheric and Oceanic Technology, 2021, 38, 1457-1475.	1.3	1
72	The Interaction between the Nocturnal Amazonian Low-Level Jet and Convection in CESM. Journal of Climate, 2021, 34, 8519-8532.	3.2	1