

# Russ Schumacher

## List of Publications by Year in descending order

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77  
papers

3,256  
citations

136885

32  
h-index

155592

55  
g-index

77  
all docs

77  
docs citations

77  
times ranked

2452  
citing authors

#	ARTICLE	IF	CITATIONS
1	Organization and Environmental Properties of Extreme-Rain-Producing Mesoscale Convective Systems. <i>Monthly Weather Review</i> , 2005, 133, 961-976.	0.5	328
2	Characteristics of U.S. Extreme Rain Events during 1999–2003. <i>Weather and Forecasting</i> , 2006, 21, 69-85.	0.5	206
3	The 2015 Plains Elevated Convection at Night Field Project. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 767-786.	1.7	200
4	The Great Colorado Flood of September 2013. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 1461-1487.	1.7	175
5	Mesoscale Processes Contributing to Extreme Rainfall in a Midlatitude Warm-Season Flash Flood. <i>Monthly Weather Review</i> , 2008, 136, 3964-3986.	0.5	127
6	Predecessor Rain Events ahead of Tropical Cyclones. <i>Monthly Weather Review</i> , 2010, 138, 3272-3297.	0.5	120
7	Rapid, Vehicle-Based Identification of Location and Magnitude of Urban Natural Gas Pipeline Leaks. <i>Environmental Science &amp; Technology</i> , 2017, 51, 4091-4099.	4.6	105
8	Quasi-Stationary, Extreme-Rain-Producing Convective Systems Associated with Midlevel Cyclonic Circulations. <i>Weather and Forecasting</i> , 2009, 24, 555-574.	0.5	96
9	The formation, character and changing nature of mesoscale convective systems. <i>Nature Reviews Earth &amp; Environment</i> , 2020, 1, 300-314.	12.2	86
10	A 10-Year Survey of Extreme Rainfall Events in the Central and Eastern United States Using Gridded Multisensor Precipitation Analyses. <i>Monthly Weather Review</i> , 2014, 142, 3147-3162.	0.5	85
11	Money Doesn't Grow on Trees, but Forecasts Do: Forecasting Extreme Precipitation with Random Forests. <i>Monthly Weather Review</i> , 2018, 146, 1571-1600.	0.5	84
12	Mechanisms for Quasi-Stationary Behavior in Simulated Heavy-Rain-Producing Convective Systems. <i>Journals of the Atmospheric Sciences</i> , 2009, 66, 1543-1568.	0.6	65
13	The development of a flash flood severity index. <i>Journal of Hydrology</i> , 2016, 541, 523-532.	2.3	65
14	North American extreme precipitation events and related large-scale meteorological patterns: a review of statistical methods, dynamics, modeling, and trends. <i>Climate Dynamics</i> , 2019, 53, 6835-6875.	1.7	61
15	Distant Effects of a Recurring Tropical Cyclone on Rainfall in a Midlatitude Convective System: A High-Impact Predecessor Rain Event*. <i>Monthly Weather Review</i> , 2011, 139, 650-667.	0.5	58
16	The Mesoscale Predictability Experiment (MPEX). <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 2127-2149.	1.7	55
17	Sensitivity in the Overland Reintensification of Tropical Cyclone Erin (2007) to Near-Surface Soil Moisture Characteristics. <i>Monthly Weather Review</i> , 2011, 139, 3848-3870.	0.5	53
18	Factors Influencing the Development and Maintenance of Nocturnal Heavy-Rain-Producing Convective Systems in a Storm-Scale Ensemble. <i>Monthly Weather Review</i> , 2013, 141, 2778-2801.	0.5	47

#	ARTICLE	IF	CITATIONS
19	Using Convection-Allowing Ensembles to Understand the Predictability of an Extreme Rainfall Event. <i>Monthly Weather Review</i> , 2016, 144, 3651-3676.	0.5	44
20	Sensitivity of Precipitation Accumulation in Elevated Convective Systems to Small Changes in Low-Level Moisture. <i>Journals of the Atmospheric Sciences</i> , 2015, 72, 2507-2524.	0.6	43
21	Mechanisms for Organization and Echo Training in a Flash-Flood-Producing Mesoscale Convective System. <i>Monthly Weather Review</i> , 2015, 143, 1058-1085.	0.5	43
22	Spatial and Temporal Characteristics of Heavy Hourly Rainfall in the United States. <i>Monthly Weather Review</i> , 2013, 141, 4564-4575.	0.5	42
23	A Storm Safari in Subtropical South America: Proyecto RELAMPAGO. <i>Bulletin of the American Meteorological Society</i> , 2021, 102, E1621-E1644.	1.7	42
24	Extreme Precipitation in Models: An Evaluation. <i>Weather and Forecasting</i> , 2016, 31, 1853-1879.	0.5	39
25	Dynamical Insights into Extreme Short-Term Precipitation Associated with Supercells and Mesovortices. <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 2983-3009.	0.6	39
26	Convective Snowbands Downstream of the Rocky Mountains in an Environment with Conditional, Dry Symmetric, and Inertial Instabilities. <i>Monthly Weather Review</i> , 2010, 138, 4416-4438.	0.5	38
27	Objective Categorization of Heavy-Rain-Producing MCS Synoptic Types by Rotated Principal Component Analysis. <i>Monthly Weather Review</i> , 2014, 142, 1716-1737.	0.5	36
28	Double Impact: When Both Tornadoes and Flash Floods Threaten the Same Place at the Same Time. <i>Weather and Forecasting</i> , 2015, 30, 1673-1693.	0.5	36
29	Evaluation of Ensemble Configurations for the Analysis and Prediction of Heavy-Rain-Producing Mesoscale Convective Systems*. <i>Monthly Weather Review</i> , 2014, 142, 4108-4138.	0.5	35
30	Forecasting Severe Weather with Random Forests. <i>Monthly Weather Review</i> , 2020, 148, 2135-2161.	0.5	35
31	Ensemble-Based Forecast Uncertainty Analysis of Diverse Heavy Rainfall Events. <i>Weather and Forecasting</i> , 2010, 25, 1103-1122.	0.5	33
32	The Bow and Arrow Mesoscale Convective Structure. <i>Monthly Weather Review</i> , 2013, 141, 1648-1672.	0.5	33
33	Cold-Season Tornadoes: Climatological and Meteorological Insights. <i>Weather and Forecasting</i> , 2018, 33, 671-691.	0.5	33
34	Dynamics Governing a Simulated Mesoscale Convective System with a Training Convective Line. <i>Journals of the Atmospheric Sciences</i> , 2016, 73, 2643-2664.	0.6	30
35	Ensemble-Based Analysis of Factors Leading to the Development of a Multiday Warm-Season Heavy Rain Event. <i>Monthly Weather Review</i> , 2011, 139, 3016-3035.	0.5	29
36	Ensemble-Based Analysis of the May 2010 Extreme Rainfall in Tennessee and Kentucky. <i>Monthly Weather Review</i> , 2014, 142, 222-239.	0.5	29

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37	“Dendrology” in Numerical Weather Prediction: What Random Forests and Logistic Regression Tell Us about Forecasting Extreme Precipitation. <i>Monthly Weather Review</i> , 2018, 146, 1785-1812.	0.5	29
38	The Role of Convective Outflow in the Waldo Canyon Fire. <i>Monthly Weather Review</i> , 2014, 142, 3061-3080.	0.5	28
39	Moisture Transport into Midlatitudes ahead of Recurring Tropical Cyclones and Its Relevance in Two Predecessor Rain Events. <i>Monthly Weather Review</i> , 2012, 140, 1810-1827.	0.5	27
40	Mesoscale Thermodynamic Influences on Convection Initiation near a Surface Dryline in a Convection-Permitting Ensemble. <i>Monthly Weather Review</i> , 2015, 143, 3726-3753.	0.5	27
41	The Impact of Low-Level Moisture Errors on Model Forecasts of an MCS Observed during PECAN. <i>Monthly Weather Review</i> , 2017, 145, 3599-3624.	0.5	27
42	Multidisciplinary Analysis of an Unusual Tornado: Meteorology, Climatology, and the Communication and Interpretation of Warnings*. <i>Weather and Forecasting</i> , 2010, 25, 1412-1429.	0.5	26
43	Using Reforecasts to Improve Forecasting of Fog and Visibility for Aviation*. <i>Weather and Forecasting</i> , 2016, 31, 467-482.	0.5	25
44	Near-Surface Thermodynamic Sensitivities in Simulated Extreme-Rain-Producing Mesoscale Convective Systems. <i>Monthly Weather Review</i> , 2017, 145, 2177-2200.	0.5	25
45	Dynamical Mechanisms Supporting Extreme Rainfall Accumulations in the Houston “Tax Day” 2016 Flood. <i>Monthly Weather Review</i> , 2020, 148, 83-109.	0.5	23
46	Evolution of Pre- and Postconvective Environmental Profiles from Mesoscale Convective Systems during PECAN. <i>Monthly Weather Review</i> , 2019, 147, 2329-2354.	0.5	22
47	Probabilistic Verification of Storm Prediction Center Convective Outlooks. <i>Weather and Forecasting</i> , 2018, 33, 161-184.	0.5	21
48	Convective-Storm Environments in Subtropical South America from High-Frequency Soundings during RELAMPAGO-CACTI. <i>Monthly Weather Review</i> , 2021, 149, 1439-1458.	0.5	21
49	Temporal and geographic distribution of weather conditions favorable to airborne spread of foot-and-mouth disease in the coterminous United States. <i>Preventive Veterinary Medicine</i> , 2018, 161, 41-49.	0.7	20
50	Influence of Terrain Resolution on Banded Convection in the Lee of the Rocky Mountains. <i>Monthly Weather Review</i> , 2015, 143, 1399-1416.	0.5	19
51	The Effect of the Balcones Escarpment on Three Cases of Extreme Precipitation in Central Texas. <i>Monthly Weather Review</i> , 2016, 144, 119-138.	0.5	19
52	Flash Flood Verification: Pondering Precipitation Proxies. <i>Journal of Hydrometeorology</i> , 2018, 19, 1753-1776.	0.7	19
53	Resolution Dependence of Initiation and Upscale Growth of Deep Convection in Convection-Allowing Forecasts of the 31 May–1 June 2013 Supercell and MCS. <i>Monthly Weather Review</i> , 2015, 143, 4331-4354.	0.5	18
54	Mobile Radiosonde Deployments during the Mesoscale Predictability Experiment (MPEX): Rapid and Adaptive Sampling of Upscale Convective Feedbacks. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 329-336.	1.7	18

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55	Observations of Extreme Short-Term Precipitation Associated with Supercells and Mesovortices. <i>Monthly Weather Review</i> , 2020, 148, 159-182.	0.5	18
56	The Simulated Structure and Evolution of a Quasi-Idealized Warm-Season Convective System with a Training Convective Line. <i>Journals of the Atmospheric Sciences</i> , 2015, 72, 1987-2010.	0.6	17
57	General Features of Extreme Rainfall Events Produced by MCSs over East China during 2016-17. <i>Monthly Weather Review</i> , 2019, 147, 2693-2714.	0.5	17
58	From Random Forests to Flood Forecasts: A Research to Operations Success Story. <i>Bulletin of the American Meteorological Society</i> , 2021, 102, E1742-E1755.	1.7	13
59	A Hazard Multiple: Overlapping Tornado and Flash Flood Warnings in a National Weather Service Forecast Office in the Southeastern United States. <i>Weather and Forecasting</i> , 2020, 35, 1459-1481.	0.5	13
60	Mesoscale Vortex Development during Extreme Precipitation: Colorado, September 2013. <i>Monthly Weather Review</i> , 2015, 143, 4943-4962.	0.5	12
61	Verification Results from the 2017 HMT-WPC Flash Flood and Intense Rainfall Experiment. <i>Journal of Applied Meteorology and Climatology</i> , 2019, 58, 2591-2604.	0.6	10
62	Cold-season Tornado Risk Communication: Case Studies from November 2016 to February 2017. <i>Weather, Climate, and Society</i> , 2018, 10, 419-433.	0.5	9
63	Projecting End-of-Century Human Exposure from Tornadoes and Severe Hailstorms in Eastern Colorado: Meteorological and Population Perspectives. <i>Weather, Climate, and Society</i> , 2020, 12, 575-595.	0.5	8
64	The Studies of Precipitation, Flooding, and Rainfall Extremes across Disciplines (SPREAD) Workshop: An Interdisciplinary Research and Education Initiative. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 1791-1796.	1.7	7
65	Reducing Wet Ammonium Deposition in Rocky Mountain National Park: the Development and Evaluation of A Pilot Early Warning System for Agricultural Operations in Eastern Colorado. <i>Environmental Management</i> , 2019, 64, 626-639.	1.2	6
66	An Updated Severe Hail and Tornado Climatology for Eastern Colorado. <i>Journal of Applied Meteorology and Climatology</i> , 2019, 58, 2273-2293.	0.6	6
67	Cloud Computing Efforts for the Weather Research and Forecasting Model. <i>Bulletin of the American Meteorological Society</i> , 2021, 102, E1261-E1274.	1.7	5
68	A Synoptic Evolution Comparison of the Smallest and Largest MCSs in Subtropical South America between Spring and Summer. <i>Monthly Weather Review</i> , 2021, , .	0.5	4
69	Analysis of Back-Building Convection in Simulations with a Strong Low-Level Stable Layer. <i>Monthly Weather Review</i> , 2020, 148, 3773-3797.	0.5	4
70	Who Received the Most Rain Today?: An Analysis of Daily Precipitation Extremes in the Contiguous United States Using CoCoRaHS and COOP Reports. <i>Bulletin of the American Meteorological Society</i> , 2019, 101, E710-E719.	1.7	4
71	Agricultural Perspectives on Hailstorm Severity, Vulnerability, and Risk Messaging in Eastern Colorado. <i>Weather, Climate, and Society</i> , 2020, 12, 897-911.	0.5	4
72	Reply to "Comments on "Double Impact: When Both Tornadoes and Flash Floods Threaten the Same Place at the Same Time". <i>Weather and Forecasting</i> , 2016, 31, 1723-1727.	0.5	3

#	ARTICLE	IF	CITATIONS
73	Comparison of Biases in Warm-Season WRF Forecasts in North and South America. Weather and Forecasting, 2021, , .	0.5	3
74	Reply to "Comments on "Flash Flood Verification: Pondering Precipitation Proxies" Journal of Hydrometeorology, 2021, 22, 749-752.	0.7	2
75	Can Mountain Waves Contribute to Damaging Winds Far Away from the Lee Slope?. Weather and Forecasting, 2019, 34, 2045-2065.	0.5	1
76	Data Availability Principles and Practice. Monthly Weather Review, 2020, 148, 4701-4702.	0.5	1
77	High-Resolution Observations of a Destructive Macrobust. Monthly Weather Review, 2021, , .	0.5	0