Amy McGovern

List of Publications by Year
in descending order

33	1,389	394421 19	454955 30
papers	citations	h-index	g-index

33	33	33	1277
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Making the Black Box More Transparent: Understanding the Physical Implications of Machine Learning. Bulletin of the American Meteorological Society, 2019, 100, 2175-2199.	3.3	251
2	Using Artificial Intelligence to Improve Real-Time Decision-Making for High-Impact Weather. Bulletin of the American Meteorological Society, 2017, 98, 2073-2090.	3.3	239
3	Storm-Based Probabilistic Hail Forecasting with Machine Learning Applied to Convection-Allowing Ensembles. Weather and Forecasting, 2017, 32, 1819-1840.	1.4	104
4	Identifying predictive multi-dimensional time series motifs: an application to severe weather prediction. Data Mining and Knowledge Discovery, 2011, 22, 232-258.	3.7	79
5	Deep Learning for Spatially Explicit Prediction of Synoptic-Scale Fronts. Weather and Forecasting, 2019, 34, 1137-1160.	1.4	64
6	Machine Learning for Real-Time Prediction of Damaging Straight-Line Convective Wind. Weather and Forecasting, 2017, 32, 2175-2193.	1.4	60
7	Machine Learning Enhancement of Storm-Scale Ensemble Probabilistic Quantitative Precipitation Forecasts. Weather and Forecasting, 2014, 29, 1024-1043.	1.4	59
8	Classification of Convective Areas Using Decision Trees. Journal of Atmospheric and Oceanic Technology, 2009, 26, 1341-1353.	1.3	46
9	Deep Learning on Three-Dimensional Multiscale Data for Next-Hour Tornado Prediction. Monthly Weather Review, 2020, 148, 2837-2861.	1.4	43
10	Enhancing understanding and improving prediction of severe weather through spatiotemporal relational learning. Machine Learning, 2014, 95, 27-50.	5.4	39
11	Evaluating Knowledge to Support Climate Action: A Framework for Sustained Assessment. Report of an Independent Advisory Committee on Applied Climate Assessment. Weather, Climate, and Society, 2019, 11, 465-487.	1.1	35
12	Automated detection of bird roosts using <scp>NEXRAD</scp> radar data and Convolutional Neural Networks. Remote Sensing in Ecology and Conservation, 2019, 5, 20-32.	4.3	33
13	Outlook for Exploiting Artificial Intelligence in the Earth and Environmental Sciences. Bulletin of the American Meteorological Society, 2021, 102, E1016-E1032.	3.3	32
14	Evaluation of statistical learning configurations for gridded solar irradiance forecasting. Solar Energy, 2017, 150, 383-393.	6.1	30
15	Classifying Convective Storms Using Machine Learning. Weather and Forecasting, 2019, 35, 537-559.	1.4	28
16	Calibration of Machine Learningâ€“Based Probabilistic Hail Predictions for Operational Forecasting. Weather and Forecasting, 2020, 35, 149-168.	1.4	27
17	Solar Energy Prediction: An International Contest to Initiate Interdisciplinary Research on Compelling Meteorological Problems. Bulletin of the American Meteorological Society, 2015, 96, 1388-1395.	3.3	25
18	Building a Basic Block Instruction Scheduler with Reinforcement Learning and Rollouts. Machine Learning, 2002, 49, 141-160.	5.4	24

#	Article	IF	Citations
19	Postprocessing Next-Day Ensemble Probabilistic Precipitation Forecasts Using Random Forests. Weather and Forecasting, 2019, 34, 2017-2044.	1.4	22
20	CREST-iMAP v1.0: A fully coupled hydrologic-hydraulic modeling framework dedicated to flood inundation mapping and prediction. Environmental Modelling and Software, 2021, 141, 105051.	4.5	22
21	Why we need to focus on developing ethical, responsible, and trustworthy artificial intelligence approaches for environmental science. , 2022, 1, .		22
22	Machine learning in space: extending our reach. Machine Learning, 2011, 84, 335-340.	5.4	19
23	Using Machine Learning to Generate Storm-Scale Probabilistic Guidance of Severe Weather Hazards in the Warn-on-Forecast System. Monthly Weather Review, 2021, 149, 1535-1557.	1.4	16
24	Climatology and Variability of Warm and Cold Fronts over North America from 1979 to 2018. Journal of Climate, 2020, 33, 6531-6554.	3.2	15
25	Development of a Probabilistic Subfreezing Road Temperature Nowcast and Forecast Using Machine Learning. Weather and Forecasting, 2020, 35, 1845-1863.	1.4	12
26	An Automated, Multiparameter Dryline Identification Algorithm. Weather and Forecasting, 2015, 30, 1781-1794.	1.4	11
27	A Framework for Sustained Climate Assessment in the United States. Bulletin of the American Meteorological Society, 2019, 100, 897-907.	3.3	10
28	Enhanced spatiotemporal relational probability trees and forests. Data Mining and Knowledge Discovery, 2013, 26, 398-433.	3.7	9
29	Quasi-Operational Testing of Real-Time Storm-Longevity Prediction via Machine Learning. Weather and Forecasting, 2019, 34, 1437-1451.	1.4	7
30	Optimistic pruning for multiple instance learning. Pattern Recognition Letters, 2008, 29, 1252-1260.	4.2	4
31	Storm Evader: Using an iPad to Teach Kids about Meteorology and Technology. Bulletin of the American Meteorological Society, 2015, 96, 397-404.	3.3	2
32	A Summary of the Twenty-Ninth AAAI Conference on Artificial Intelligence. AI Magazine, 2015, 36, 99-106.	1.6	0
33	Data Availability Principles and Practice. Weather and Forecasting, 2020, 35, 2217.	1.4	0