Joseph B Olson

List of Publications by Year
in descending order

36 papers	2,080 citations	430874 18 h-index	330143 37 g-index
39 all docs	39 docs citations	39 times ranked	2200 citing authors

#	Article	IF	Citations
1	A North American Hourly Assimilation and Model Forecast Cycle: The Rapid Refresh. Monthly Weather Review, 2016, 144, 1669-1694.	1.4	720
2	Local and Mesoscale Impacts of Wind Farms as Parameterized in a Mesoscale NWP Model. Monthly Weather Review, 2012, 140, 3017-3038.	1.4	236
3	Understanding high wintertime ozone pollution events in an oil- and natural gas-producing region of the western US. Atmospheric Chemistry and Physics, 2015, 15, 411-429.	4.9	154
4	Mesoscale Influences of Wind Farms throughout a Diurnal Cycle. Monthly Weather Review, 2013, 141, 2173-2198.	1.4	109
5	Improving Wind Energy Forecasting through Numerical Weather Prediction Model Development. Bulletin of the American Meteorological Society, 2019, 100, 2201-2220.	3.3	87
6	The Wind Forecast Improvement Project (WFIP): A Public–Private Partnership Addressing Wind Energy Forecast Needs. Bulletin of the American Meteorological Society, 2015, 96, 1699-1718.	3.3	85
7	Parameterization of Wind Farms in Climate Models. Journal of Climate, 2013, 26, 6439-6458.	3.2	77
8	A Performance Comparison between Multiphysics and Stochastic Approaches within a North American RAP Ensemble. Monthly Weather Review, 2017, 145, 1161-1179.	1.4	62
9	The Second Wind Forecast Improvement Project (WFIP2): Observational Field Campaign. Bulletin of the American Meteorological Society, 2019, 100, 1701-1723.	3.3	55
10	Multiseason Verification of the MM5. Part I: Comparison with the Eta Model over the Central and Eastern United States and Impact of MM5 Resolution. Weather and Forecasting, 2003, 18, 431-457.	1.4	49
11	The Second Wind Forecast Improvement Project (WFIP2): General Overview. Bulletin of the American Meteorological Society, 2019, 100, 1687-1699.	3.3	45
12	Stochastically Perturbed Parameterizations in an HRRR-Based Ensemble. Monthly Weather Review, 2019, 147, 153-173.	1.4	42
13	Multiseason Verification of the MM5. Part II: Evaluation of High-Resolution Precipitation Forecasts over the Northeastern United States. Weather and Forecasting, 2003, 18, 458-480.	1.4	39
14	Shallow Cumulus in WRF Parameterizations Evaluated against LASSO Large-Eddy Simulations. Monthly Weather Review, 2018, 146, 4303-4322.	1.4	36
15	Incorporation of the Rotor-Equivalent Wind Speed into the Weather Research and Forecasting Model's Wind Farm Parameterization. Monthly Weather Review, 2019, 147, 1029-1046.	1.4	26
16	Spatial Variability of Winds and HRRR–NCEP Model Error Statistics at Three Doppler-Lidar Sites in the Wind-Energy Generation Region of the Columbia River Basin. Journal of Applied Meteorology and Climatology, 2019, 58, 1633-1656.	1.5	25
17	Using SAR Remote Sensing, Field Observations, and Models to Better Understand Coastal Flows in the Gulf of Alaska. Bulletin of the American Meteorological Society, 2006, 87, 787-800.	3.3	22
18	Assessment of NWP Forecast Models in Simulating Offshore Winds through the Lower Boundary Layer by Measurements from a Ship-Based Scanning Doppler Lidar. Monthly Weather Review, 2017, 145, 4277-4301.	1.4	20

#	Article	IF	Citations
19	Evaluating and Improving NWP Forecast Models for the Future: How the Needs of Offshore Wind Energy Can Point the Way. Bulletin of the American Meteorological Society, 2018, 99, 1155-1176.	3.3	19
20	Sensitivity of Turbine-Height Wind Speeds to Parameters in the Planetary Boundary-Layer Parametrization Used in the Weather Research and Forecasting Model: Extension to Wintertime Conditions. Boundary-Layer Meteorology, 2019, 170, 507-518.	2.3	19
21	Impact of model improvements on 80â€‰m wind speeds during the second Wind Forecast Improvement Project (WFIP2). Geoscientific Model Development, 2019, 12, 4803-4821.	3.6	18
22	Three-Dimensional Idealized Simulations of Barrier Jets along the Southeast Coast of Alaska. Monthly Weather Review, 2009, 137, 391-413.	1.4	15
23	The POWER Experiment: Impact of Assimilation of a Network of Coastal Wind Profiling Radars on Simulating Offshore Winds in and above the Wind Turbine Layer. Weather and Forecasting, 2016, 31, 1071-1091.	1.4	14
24	Data assimilation impact of in situ and remote sensing meteorological observations on wind power forecasts during the first W ind F orecast I mprovement P roject (WFIP). Wind Energy, 2019, 22, 932-944.	4.2	13
25	A Progress Report on the Development of the High-Resolution Rapid Refresh Ensemble. Weather and Forecasting, 2021, 36, 791-804.	1.4	13
26	A Modified Approach to Initialize an Idealized Extratropical Cyclone within a Mesoscale Model. Monthly Weather Review, 2007, 135, 1614-1624.	1.4	11
27	Characterizing NWP Model Errors Using Doppler-Lidar Measurements of Recurrent Regional Diurnal Flows: Marine-Air Intrusions into the Columbia River Basin. Monthly Weather Review, 2020, 148, 929-953.	1.4	11
28	A Comparison of Two Coastal Barrier Jet Events along the Southeast Alaskan Coast during the SARJET Field Experiment*. Monthly Weather Review, 2007, 135, 3642-3663.	1.4	11
29	Measuring the impact of additional instrumentation on the skill of numerical weather prediction models at forecasting wind ramp events during the first Wind Forecast Improvement Project (WFIP). Wind Energy, 2019, 22, 1165-1174.	4.2	9
30	A Comparison of Two Coastal Barrier Jet Events along the Southeast Alaskan Coast during the SARJET Field Experiment. Monthly Weather Review, 2007, 135, 2973-2994.	1.4	8
31	Evaluating the WFIP2 updates to the HRRR model using scanning Doppler lidar measurements in the complex terrain of the Columbia River Basin. Journal of Renewable and Sustainable Energy, 2020, 12, .	2.0	8
32	Time Evolution and Diurnal Variability of the Parametric Sensitivity of Turbineâ€Height Winds in the MYNNâ€EDMF Parameterization. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034000.	3.3	6
33	Scale Awareness, Resolved Circulations, and Practical Limits in the MYNNâ€"EDMF Boundary Layer and Shallow Cumulus Scheme. Monthly Weather Review, 2020, 148, 4629-4639.	1.4	4
34	Wind Ramp Events Validation in NWP Forecast Models during the Second Wind Forecast Improvement Project (WFIP2) Using the Ramp Tool and Metric (RT&M). Weather and Forecasting, 2020, 35, 2407-2421.	1.4	4
35	Improved Prediction of Cold-Air Pools in the Weather Research and Forecasting Model Using a Truly Horizontal Diffusion Scheme for Potential Temperature. Monthly Weather Review, 2021, 149, 155-171.	1.4	3
36	Doppler-Lidar Evaluation of HRRR-Model Skill at Simulating Summertime Wind Regimes in the Columbia River Basin during WFIP2. Weather and Forecasting, 2021, , .	1.4	1