

Youngsun Jung

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

1,669
citations

331670

21
h-index

289244

40
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48
all docs

48
docs citations

48
times ranked

750
citing authors

#	ARTICLE	IF	CITATIONS
1	Progress and challenges with Warn-on-Forecast. <i>Atmospheric Research</i> , 2013, 123, 2-16.	4.1	151
2	Assimilation of Simulated Polarimetric Radar Data for a Convective Storm Using the Ensemble Kalman Filter. Part I: Observation Operators for Reflectivity and Polarimetric Variables. <i>Monthly Weather Review</i> , 2008, 136, 2228-2245.	1.4	140
3	Simulations of Polarimetric Radar Signatures of a Supercell Storm Using a Two-Moment Bulk Microphysics Scheme. <i>Journal of Applied Meteorology and Climatology</i> , 2010, 49, 146-163.	1.5	110
4	Low-Level ZDR Signatures in Supercell Forward Flanks: The Role of Size Sorting and Melting of Hail. <i>Journals of the Atmospheric Sciences</i> , 2014, 71, 276-299.	1.7	100
5	Assimilation of Simulated Polarimetric Radar Data for a Convective Storm Using the Ensemble Kalman Filter. Part II: Impact of Polarimetric Data on Storm Analysis. <i>Monthly Weather Review</i> , 2008, 136, 2246-2260.	1.4	87
6	Ensemble Kalman Filter Analyses of the 29 th -30 May 2004 Oklahoma Tornadoic Thunderstorm Using One- and Two-Moment Bulk Microphysics Schemes, with Verification against Polarimetric Radar Data. <i>Monthly Weather Review</i> , 2012, 140, 1457-1475.	1.4	78
7	Analysis of a Tornadoic Mesoscale Convective Vortex Based on Ensemble Kalman Filter Assimilation of CASA X-Band and WSR-88D Radar Data. <i>Monthly Weather Review</i> , 2011, 139, 3446-3468.	1.4	73
8	Breaking New Ground in Severe Weather Prediction: The 2015 NOAA/Hazardous Weather Testbed Spring Forecasting Experiment. <i>Weather and Forecasting</i> , 2017, 32, 1541-1568.	1.4	67
9	The Community Leveraged Unified Ensemble (CLUE) in the 2016 NOAA/Hazardous Weather Testbed Spring Forecasting Experiment. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 1433-1448.	3.3	60
10	The Analysis and Prediction of Microphysical States and Polarimetric Radar Variables in a Mesoscale Convective System Using Double-Moment Microphysics, Multinetwork Radar Data, and the Ensemble Kalman Filter. <i>Monthly Weather Review</i> , 2014, 142, 141-162.	1.4	59
11	Multiscale EnKF Assimilation of Radar and Conventional Observations and Ensemble Forecasting for a Tornadoic Mesoscale Convective System. <i>Monthly Weather Review</i> , 2015, 143, 1035-1057.	1.4	58
12	Ensemble Probabilistic Forecasts of a Tornadoic Mesoscale Convective System from Ensemble Kalman Filter Analyses Using WSR-88D and CASA Radar Data. <i>Monthly Weather Review</i> , 2012, 140, 2126-2146.	1.4	57
13	Comparison of Simulated Polarimetric Signatures in Idealized Supercell Storms Using Two-Moment Bulk Microphysics Schemes in WRF. <i>Monthly Weather Review</i> , 2016, 144, 971-996.	1.4	50
14	Current Status and Future Challenges of Weather Radar Polarimetry: Bridging the Gap between Radar Meteorology/Hydrology/Engineering and Numerical Weather Prediction. <i>Advances in Atmospheric Sciences</i> , 2019, 36, 571-588.	4.3	46
15	Simultaneous Estimation of Microphysical Parameters and the Atmospheric State Using Simulated Polarimetric Radar Data and an Ensemble Kalman Filter in the Presence of an Observation Operator Error. <i>Monthly Weather Review</i> , 2010, 138, 539-562.	1.4	45
16	Simulation of Polarimetric Radar Variables from 2013 CAPS Spring Experiment Storm-Scale Ensemble Forecasts and Evaluation of Microphysics Schemes. <i>Monthly Weather Review</i> , 2017, 145, 49-73.	1.4	40
17	Prediction and Ensemble Forecast Verification of Hail in the Supercell Storms of 20 May 2013. <i>Weather and Forecasting</i> , 2016, 31, 811-825.	1.4	39
18	Simulations of Polarimetric, X-Band Radar Signatures in Supercells. Part II: ZDR Columns and Rings and KDP Columns. <i>Journal of Applied Meteorology and Climatology</i> , 2017, 56, 2001-2026.	1.5	31

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19	Ensemble Kalman Filter Assimilation of Polarimetric Radar Observations for the 20 May 2013 Oklahoma Tornado Supercell Case. <i>Monthly Weather Review</i> , 2019, 147, 2511-2533.	1.4	26
20	The Relationship between Tropical Cyclone Rainfall Area and Environmental Conditions over the Subtropical Oceans. <i>Journal of Climate</i> , 2018, 31, 4605-4616.	3.2	23
21	Simulations of Polarimetric, X-Band Radar Signatures in Supercells. Part I: Description of Experiment and Simulated I_{hv} Rings. <i>Journal of Applied Meteorology and Climatology</i> , 2017, 56, 1977-1999.	1.5	22
22	Comparison of the Analyses and Forecasts of a Tornado Supercell Storm from Assimilating Phased-Array Radar and WSR-88D Observations. <i>Weather and Forecasting</i> , 2017, 32, 1379-1401.	1.4	22
23	Ensemble Probabilistic Prediction of a Mesoscale Convective System and Associated Polarimetric Radar Variables Using Single-Moment and Double-Moment Microphysics Schemes and EnKF Radar Data Assimilation. <i>Monthly Weather Review</i> , 2017, 145, 2257-2279.	1.4	21
24	Ensemble Hail Prediction for the Storms of 10 May 2010 in South-Central Oklahoma Using Single- and Double-Moment Microphysical Schemes. <i>Monthly Weather Review</i> , 2017, 145, 4911-4936.	1.4	21
25	Assimilation of GOES-R Geostationary Lightning Mapper Flash Extent Density Data in GSI EnKF for the Analysis and Short-Term Forecast of a Mesoscale Convective System. <i>Monthly Weather Review</i> , 2020, 148, 2111-2133.	1.4	21
26	Towards the Next Generation Operational Meteorological Radar. <i>Bulletin of the American Meteorological Society</i> , 2021, 102, E1357-E1383.	3.3	21
27	A Hybrid MPI/OpenMP Parallel Algorithm and Performance Analysis for an Ensemble Square Root Filter Designed for Multiscale Observations. <i>Journal of Atmospheric and Oceanic Technology</i> , 2013, 30, 1382-1397.	1.3	18
28	State estimation of convective storms with a two-moment microphysics scheme and an ensemble Kalman filter: Experiments with simulated radar data. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2010, 136, 685-700.	2.7	17
29	Tornado-Resolving Ensemble and Probabilistic Predictions of the 20 May 2013 Newcastle Moore EF5 Tornado. <i>Monthly Weather Review</i> , 2019, 147, 1215-1235.	1.4	16
30	Explicit Ensemble Prediction of Hail in 19 May 2013 Oklahoma City Thunderstorms and Analysis of Hail Growth Processes with Several Multimoment Microphysics Schemes. <i>Monthly Weather Review</i> , 2019, 147, 1193-1213.	1.4	15
31	Optimal Temporal Frequency of NSSL Phased Array Radar Observations for an Experimental Warn-on-Forecast System. <i>Weather and Forecasting</i> , 2020, 35, 193-214.	1.4	15
32	Error modeling of simulated reflectivity observations for ensemble Kalman filter assimilation of convective storms. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	13
33	Direct Assimilation of Radar Data With Ensemble Kalman Filter and Hybrid Ensemble-Variational Method in the National Weather Service Operational Data Assimilation System GSI for the Stand-Alone Regional FV3 Model at a Convection-Allowing Resolution. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090179.	4.0	12
34	Evaluation of Unified Model Microphysics in High-resolution NWP Simulations Using Polarimetric Radar Observations. <i>Advances in Atmospheric Sciences</i> , 2018, 35, 771-784.	4.3	10
35	How Well Does an FV3-Based Model Predict Precipitation at a Convection-Allowing Resolution? Results From CAPS Forecasts for the 2018 NOAA Hazardous Weather Test Bed With Different Physics Combinations. <i>Geophysical Research Letters</i> , 2019, 46, 3523-3531.	4.0	10
36	Assimilating polarimetric radar data with an ensemble Kalman filter: OSSEs with a tornadic supercell storm simulated with a two-moment microphysics scheme. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2020, 146, 1880-1900.	2.7	10

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37	Low-Level Polarimetric Radar Signatures in EnKF Analyses and Forecasts of the May 8, 2003 Oklahoma City Tornadoic Supercell: Impact of Multimoment Microphysics and Comparisons with Observation. <i>Advances in Meteorology</i> , 2013, 2013, 1-13.	1.6	8
38	Use of Power Transform Mixing Ratios as Hydrometeor Control Variables for Direct Assimilation of Radar Reflectivity in GSI En3DVar and Tests with Five Convective Storm Cases. <i>Monthly Weather Review</i> , 2021, 149, 645-659.	1.4	8
39	Development and evaluation of an advanced National Air Quality Forecasting Capability using the NOAA Global Forecast System version 16. <i>Geoscientific Model Development</i> , 2022, 15, 3281-3313.	3.6	8
40	Impact of VORTEX2 Observations on Analyses and Forecasts of the 5 June 2009 Goshen County, Wyoming, Supercell. <i>Monthly Weather Review</i> , 2016, 144, 429-449.	1.4	7
41	Effects of the Representation of Rimed Ice in Bulk Microphysics Schemes on Polarimetric Signatures. <i>Monthly Weather Review</i> , 2019, 147, 3785-3810.	1.4	7
42	Comparisons of Hybrid En3DVar with 3DVar and EnKF for Radar Data Assimilation: Tests with the 10 May 2010 Oklahoma Tornado Outbreak. <i>Monthly Weather Review</i> , 2021, 149, 21-40.	1.4	7
43	Evaluating Ensemble Kalman Filter Analyses of Severe Hailstorms on 8 May 2017 in Colorado: Effects of State Variable Updating and Multimoment Microphysics Schemes on State Variable Cross Covariances. <i>Monthly Weather Review</i> , 2020, 148, 2365-2389.	1.4	6
44	Object-based Verification of GSI-EnKF and Hybrid En3DVar Radar Data Assimilation and Convection-Allowing Forecasts within a Warn-on-Forecast Framework. <i>Weather and Forecasting</i> , 2022, , .	1.4	5
45	Evaluating Forecast Performance and Sensitivity to the GSI EnKF Data Assimilation Configuration for the 28-29 May 2017 Mesoscale Convective System Case. <i>Weather and Forecasting</i> , 2021, 36, 127-146.	1.4	4
46	The Impact of Assimilating ZDR Observations on Storm-Scale Ensemble Forecasts of the 31 May 2013 Oklahoma Storm Event. <i>Monthly Weather Review</i> , 2021, , .	1.4	2
47	Use of a Reflectivity Operator Based on Double-Moment Thompson Microphysics for Direct Assimilation of Radar Reflectivity in GSI-Based Hybrid En3DVar. <i>Monthly Weather Review</i> , 2022, 150, 907-926.	1.4	2
48	Use of Power Transform Total Number Concentration as Control Variable for Direct Assimilation of Radar Reflectivity in GSI En3DVar and Tests with Six Convective Storms Cases. <i>Monthly Weather Review</i> , 2022, 150, 821-842.	1.4	1