Clemens J Simmer

List of Publications by Year
in descending order

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189	6,522	53794	85541
papers	citations	45 h-index	71 g-index

209	209	209	6037
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A network suitable microwave radiometer for operational monitoring of the cloudy atmosphere. Atmospheric Research, 2005, 75, 183-200.	4.1	343
2	PARSIVEL Snow Observations: A Critical Assessment. Journal of Atmospheric and Oceanic Technology, 2010, 27, 333-344.	1.3	203
3	Changing structure of European precipitation: Longer wet periods leading to more abundant rainfalls. Geophysical Research Letters, 2010, 37, .	4.0	198
4	RESEARCH CAMPAIGN: The Convective and Orographically Induced Precipitation Study. Bulletin of the American Meteorological Society, 2008, 89, 1477-1486.	3.3	194
5	Proof of concept of regional scale hydrologic simulations at hydrologic resolution utilizing massively parallel computer resources. Water Resources Research, 2010, 46, .	4.2	178
6	Largeâ€eddy simulations over Germany using ICON: a comprehensive evaluation. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 69-100.	2.7	175
7	ISCCP Cloud Algorithm Intercomparison. Journal of Climate and Applied Meteorology, 1985, 24, 877-903.	1.0	169
8	Changes in the Duration of European Wet and Dry Spells during the Last 60 Years. Journal of Climate, 2013, 26, 2022-2047.	3.2	159
9	A Scale-Consistent Terrestrial Systems Modeling Platform Based on COSMO, CLM, and ParFlow. Monthly Weather Review, 2014, 142, 3466-3483.	1.4	140
10	Potential Utilization of Specific Attenuation for Rainfall Estimation, Mitigation of Partial Beam Blockage, and Radar Networking. Journal of Atmospheric and Oceanic Technology, 2014, 31, 599-619.	1.3	135
11	Analysis of extreme precipitation over Europe from different reanalyses: a comparative assessment. Global and Planetary Change, 2004, 44, 129-161.	3.5	114
12	Quasi-Vertical Profilesâ€”A New Way to Look at Polarimetric Radar Data. Journal of Atmospheric and Oceanic Technology, 2016, 33, 551-562.	1.3	112
13	The Influence of Hydrologic Modeling on the Predicted Local Weather: Two-Way Coupling of a Mesoscale Weather Prediction Model and a Land Surface Hydrologic Model. Journal of Hydrometeorology, 2002, 3, 505-523.	1.9	107
14	Improving Estimates of Heavy and Extreme Precipitation Using Daily Records from European Rain Gauges. Journal of Hydrometeorology, 2009, 10, 701-716.	1.9	106
15	Seasonally dependent changes of precipitation extremes over Germany since 1950 from a very dense observational network. Journal of Geophysical Research, 2008, 113, .	3.3	105
16	Effects of the Near-Surface Soil Moisture Profile on the Assimilation of L-band Microwave Brightness Temperature. Journal of Hydrometeorology, 2006, 7, 433-442.	1.9	98
17	Remote sensing of cloud liquid water. Meteorology and Atmospheric Physics, 1994, 54, 157-171.	2.0	97
18	The Added Value of Large-eddy and Storm-resolving Models for Simulating Clouds and Precipitation. Journal of the Meteorological Society of Japan, 2020, 98, 395-435.	1.8	93

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19	JOYCE: JÃ¼lich Observatory for Cloud Evolution. Bulletin of the American Meteorological Society, 2015, 96, 1157-1174.	3.3	87
20	Radiation physics and modelling for off-nadir satellite-sensing of non-Lambertian surfaces. Remote Sensing of Environment, 1986, 20, 1-29.	11.0	84
21	Landâ€atmosphere coupling in EUROâ€CORDEX evaluation experiments. Journal of Geophysical Research D: Atmospheres, 2017, 122, 79-103.	3.3	84
22	An Integrated Approach toward Retrieving Physically Consistent Profiles of Temperature, Humidity, and Cloud Liquid Water. Journal of Applied Meteorology and Climatology, 2004, 43, 1295-1307.	1.7	81
23	Monitoring and Modeling the Terrestrial System from Pores to Catchments: The Transregional Collaborative Research Center on Patterns in the Soilâ€“Vegetationâ€“Atmosphere System. Bulletin of the American Meteorological Society, 2015, 96, 1765-1787.	3.3	80
24	Remote sensing of plant-water relations: An overview and future perspectives. Journal of Plant Physiology, 2018, 227, 3-19.	3.5	70
25	Multiple-scattering in radar systems: A review. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 917-947.	2.3	68
26	The HD(CP)² Observational Prototype Experiment (HOPE) â€“ an overview. Atmospheric Chemistry and Physics, 2017, 17, 4887-4914.	4.9	67
27	Assimilation of 3D radar reflectivities with an ensemble Kalman filter on the convective scale. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 1490-1504.	2.7	66
28	Microwave radiative transfer intercomparison study for 3-D dichroic media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 105, 55-67.	2.3	64
29	Backscatter Differential Phaseâ€”Estimation and Variability. Journal of Applied Meteorology and Climatology, 2013, 52, 2529-2548.	1.5	60
30	Climatic conditions and their impact on viticulture in the Upper Moselle region. Climatic Change, 2011, 109, 349-373.	3.6	59
31	Evaluation and projected changes of precipitation statistics in convection-permitting WRF climate simulations over Central Europe. Climate Dynamics, 2020, 55, 325-341.	3.8	59
32	A Stochastic Iterative Amplitude Adjusted Fourier Transform algorithm with improved accuracy. Nonlinear Processes in Geophysics, 2006, 13, 321-328.	1.3	58
33	Observation of snowfall with a low-power FM-CW K-band radar (Micro Rain Radar). Meteorology and Atmospheric Physics, 2011, 113, 75-87.	2.0	58
34	On the robustness of the estimates of centennial-scale variability in heavy precipitation from station data over Europe. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	57
35	HErZ: The German Hans-Ertel Centre for Weather Research. Bulletin of the American Meteorological Society, 2016, 97, 1057-1068.	3.3	55
36	Spectral aerosol optical properties from AERONET Sun-photometric measurements over West Africa. Atmospheric Research, 2008, 88, 89-107.	4.1	54

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37	Improved Representation of Land-surface Heterogeneity in a Non-hydrostatic Numerical Weather Prediction Model. Boundary-Layer Meteorology, 2006, 121, 153-174.	2.3	53
38	Use of Specific Attenuation for Rainfall Measurement at X-Band Radar Wavelengths. Part I: Radar Calibration and Partial Beam Blockage Estimation. Journal of Hydrometeorology, 2015, 16, 487-502.	1.9	51
39	Profiling Cloud Liquid Water by Combining Active and Passive Microwave Measurements with Cloud Model Statistics. Journal of Atmospheric and Oceanic Technology, 2001, 18, 1354-1366.	1.3	50
40	Surrogate cloud fields generated with the iterative amplitude adapted Fourier transform algorithm. Tellus, Series A: Dynamic Meteorology and Oceanography, 2006, 58, 104-120.	1.7	50
41	Evaporation Over A Heterogeneous Land Surface. Bulletin of the American Meteorological Society, 2006, 87, 775-786.	3.3	50
42	Regional dynamical downscaling with CCLM over East Asia. Meteorology and Atmospheric Physics, 2013, 121, 39-53.	2.0	50
43	Statistical characteristics of surrogate data based on geophysical measurements. Nonlinear Processes in Geophysics, 2006, 13, 449-466.	1.3	49
44	Use of Specific Attenuation for Rainfall Measurement at X-Band Radar Wavelengths. Part II: Rainfall Estimates and Comparison with Rain Gauges. Journal of Hydrometeorology, 2015, 16, 503-516.	1.9	49
45	Three-dimensional radiative transfer effects of clouds in the microwave spectral range. Journal of Geophysical Research, 1996, 101, 4289-4298.	3.3	48
46	Validation of TERRA-ML with discharge measurements. Meteorologische Zeitschrift, 2008, 17, 763-773.	1.0	47
47	Patterns in Soilâ€"Vegetationâ€"Atmosphere Systems: Monitoring, Modeling, and Data Assimilation. Vadose Zone Journal, 2010, 9, 821-827.	2.2	47
48	Investigations of Backscatter Differential Phase in the Melting Layer. Journal of Applied Meteorology and Climatology, 2014, 53, 2344-2359.	1.5	47
49	Microwave Radiometer for Cloud Carthography: A 22-channel ground-based microwave radiometer for atmospheric research. Radio Science, 2001, 36, 621-638.	1.6	46
50	Remote Sensing of Angular Characteristics of Canopy Reflectances. IEEE Transactions on Geoscience and Remote Sensing, 1985, GE-23, 648-658.	6.3	45
51	Microwave radiative transfer with nonspherical precipitating hydrometeors. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 60, 365-374.	2.3	42
52	Evaluation of radar multiple scattering effects in Cloudsat configuration. Atmospheric Chemistry and Physics, 2007, 7, 1719-1730.	4.9	42
53	Evaluation of Satellite-Retrieved Extreme Precipitation over Europe using Gauge Observations. Journal of Climate, 2014, 27, 607-623.	3.2	42
54	Evaluation of daily precipitation characteristics in the CLM and their sensitivity to parameterizations. Meteorologische Zeitschrift, 2008, 17, 407-419.	1.0	41

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55	The TRIple-frequency and Polarimetric radar Experiment for improving process observations of winter precipitation. Earth System Science Data, 2019, 11, 845-863.	9.9	40
56	THE BALTEX BRIDGE CAMPAIGN: An Integrated Approach for a Better Understanding of Clouds. Bulletin of the American Meteorological Society, 2004, 85, 1565-1584.	3.3	39
57	On the role of patterns in understanding the functioning of soil-vegetation-atmosphere systems. Journal of Hydrology, 2016, 542, 63-86.	5.4	39
58	Effect of Cloud Types on the Earth Radiation Budget Calculated with the ISCCP Cl Dataset: Methodology and Initial Results. Journal of Climate, 1995, 8, 829-843.	3.2	37
59	Identifying multipleâ€scatteringâ€affected profiles in CloudSat observations over the oceans. Journal of Geophysical Research, 2008, 113, .	3.3	36
60	A Combination of Microwave Observations from Satellites and an EOF Analysis to Retrieve Vertical Humidity Profiles over the Ocean. Journal of Applied Meteorology and Climatology, 1990, 29, 1142-1157.	1.7	35
61	Impacts of grid resolution on surface energy fluxes simulated with an integrated surface-groundwater flow model. Hydrology and Earth System Sciences, 2015, 19, 4317-4326.	4.9	35
62	A Comprehensive Distributed Hydrological Modeling Intercomparison to Support Process Representation and Data Collection Strategies. Water Resources Research, 2019, 55, 990-1010.	4.2	34
63	A combined radiative transfer model for sea ice, open ocean, and atmosphere. Radio Science, 1998, 33, 303-316.	1.6	33
64	Multiresolution analysis of the temporal variance and correlation of transmittance and reflectance of an atmospheric column. Journal of Geophysical Research, 2009, 114, .	3.3	33
65	Detection of Entrainment Influences on Surface-Layer Measurements and Extension of Moninâ€“Obukhov Similarity Theory. Boundary-Layer Meteorology, 2014, 152, 19-44.	2.3	32
66	Up-scaling effects in passive microwave remote sensing: ESTAR 1.4 GHz measurements during SGP '97. Geophysical Research Letters, 1999, 26, 879-882.	4.0	31
67	Discrimination of cloud and rain liquid water path by groundbased polarized microwave radiometry. Geophysical Research Letters, 2001, 28, 267-270.	4.0	31
68	Precipitation Variability and Extremes in Central Europe: New View from STAMMEX Results. Bulletin of the American Meteorological Society, 2014, 95, 995-1002.	3.3	31
69	Validation of a Physical Retrieval Scheme of Solar Surface Irradiances from Narrowband Satellite Radiances. Journal of Applied Meteorology and Climatology, 2005, 44, 1453-1466.	1.7	29
70	How Does Multiple Scattering Affect the Spaceborne W-Band Radar Measurements at Ranges Close to and Crossing the Sea-Surface Range?. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 1644-1651.	6.3	29
71	Radar Observation of Evaporation and Implications for Quantitative Precipitation and Cooling Rate Estimation. Journal of Atmospheric and Oceanic Technology, 2016, 33, 1779-1792.	1.3	28
72	Incorporating a root water uptake model based on the hydraulic architecture approach in terrestrial systems simulations. Agricultural and Forest Meteorology, 2019, 269-270, 28-45.	4.8	28

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73	Using Microwave Backhaul Links to Optimize the Performance of Algorithms for Rainfall Estimation and Attenuation Correction. Journal of Atmospheric and Oceanic Technology, 2014, 31, 1748-1760.	1.3	26
74	Coupling Groundwater, Vegetation, and Atmospheric Processes: A Comparison of Two Integrated Models. Journal of Hydrometeorology, 2017, 18, 1489-1511.	1.9	26
75	Polarimetric Radar Variables in the Layers of Melting and Dendritic Growth at X Bandâ€"Implications for a Nowcasting Strategy in Stratiform Rain. Journal of Applied Meteorology and Climatology, 2019, 58, 2497-2522.	1.5	26
76	Multiple scattering effects due to hydrometeors on precipitation radar systems. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	25
77	Assimilation of radar data in mesoscale models: Physical initialization and latent heat nudging. Physics and Chemistry of the Earth, 2000, 25, 1237-1242.	0.3	24
78	Attenuation and Differential Attenuation of 5-cm-Wavelength Radiation in Melting Hail. Journal of Applied Meteorology and Climatology, 2011, 50, 59-76.	1.5	24
79	Evaluating the Influence of Plant-Specific Physiological Parameterizations on the Partitioning of Land Surface Energy Fluxes. Journal of Hydrometeorology, 2015, 16, 517-533.	1.9	24
80	Estimating Longwave Net Radiation at Sea Surface from the Special Sensor Microwave/Imager (SSM/I). Journal of Applied Meteorology and Climatology, 1997, 36, 919-930.	1.7	23
81	Path length distributions for solar photons under cloudy skies: Comparison of measured first and second moments with predictions from classical and anomalous diffusion theories. Journal of Geophysical Research, 2006, 111, .	3.3	23
82	Interpretation of Polarization Features in Ground-Based Microwave Observations as Caused by Horizontally Aligned Oblate Raindrops. Journal of Applied Meteorology and Climatology, 2001, 40, 1918-1932.	1.7	22
83	Evaluation of Radar Multiple-Scattering Effects from a GPM Perspective. Part I: Model Description and Validation. Journal of Applied Meteorology and Climatology, 2006, 45, 1634-1647.	1.5	22
84	Rain Observations by a Multifrequency Dual-Polarized Radiometer. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 354-358.	3.1	22
85	A downscaling scheme for atmospheric variables to drive soilâ€"vegetationâ€"atmosphere transfer models. Tellus, Series B: Chemical and Physical Meteorology, 2010, 62, 242-258.	1.6	22
86	The millennium flood of July 1342 revisited. Catena, 2015, 130, 82-94.	5.0	22
87	Multimodel Ensemble Forecasts of Precipitation Based on an Object-Based Diagnostic Evaluation. Monthly Weather Review, 2020, 148, 2591-2606.	1.4	22
88	Partitioning of cloud water and rainwater content by groundâ€based observations with the Advanced Microwave Radiometer for Rain Identification (ADMIRARI) in synergy with a micro rain radar. Journal of Geophysical Research, 2012, 117, .	3.3	21
89	Cloud photogrammetry with dense stereo for fisheye cameras. Atmospheric Chemistry and Physics, 2016, 16, 14231-14248.	4.9	21
90	Characterization of Precipitating Clouds by Ground-Based Measurements with the Triple-Frequency Polarized Microwave Radiometer ADMIRARI. Journal of Applied Meteorology and Climatology, 2010, 49, 394-414.	1.5	20

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91	Polarimetric Estimates of a 1-Month Accumulation of Light Rain with a 3-cm Wavelength Radar. Journal of Hydrometeorology, 2011, 12, 1024-1039.	1.9	20
92	Estimation of Depolarization Ratio Using Weather Radars with Simultaneous Transmission/Reception. Journal of Applied Meteorology and Climatology, 2017, 56, 1797-1816.	1.5	20
93	Effects of horizontal grid resolution on evapotranspiration partitioning using TerrSysMP. Journal of Hydrology, 2018, 557, 910-915.	5.4	20
94	Connection Between Root Zone Soil Moisture and Surface Energy Flux Partitioning Using Modeling, Observations, and Data Assimilation for a Temperate Grassland Site in Germany. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2839-2862.	3.0	20
95	Improved understanding of an extreme rainfall event at the Himalayan foothills â€“ a case study using COSMO. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 67, 26031.	1.7	19
96	Regional centennial precipitation variability over Germany from extended observation records. International Journal of Climatology, 2013, 33, 2167-2184.	3.5	18
97	Polarization signatures and brightness temperatures caused by horizontally oriented snow particles at microwave bands: Effects of atmospheric absorption. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6145-6160.	3.3	18
98	Quantifying the Impact of Subsurfaceâ€Land Surface Physical Processes on the Predictive Skill of Subseasonal Mesoscale Atmospheric Simulations. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9131-9151.	3.3	18
99	Representation of Precipitation Characteristics and Extremes in Regional Reanalyses and Satellite- and Gauge-Based Estimates over Western and Central Europe. Journal of Hydrometeorology, 2019, 20, 1123-1145.	1.9	18
100	Overview: Fusion of radar polarimetry and numerical atmospheric modelling towards an improved understanding of cloud and precipitation processes. Atmospheric Chemistry and Physics, 2021, 21, 17291-17314.	4.9	18
101	Assimilation of radar and satellite data in mesoscale models: A physical initialization scheme. Meteorologische Zeitschrift, 2008, 17, 887-902.	1.0	17
102	Disaggregation of screen-level variables in a numerical weather prediction model with an explicit simulation of subgrid-scale land-surface heterogeneity. Meteorology and Atmospheric Physics, 2012, 116, 81-94.	2.0	17
103	Trends in Water Level and Flooding in Dhaka, Bangladesh and Their Impact on Mortality. International Journal of Environmental Research and Public Health, 2015, 12, 1196-1215.	2.6	17
104	Introduction of an Experimental Terrestrial Forecasting/Monitoring System at Regional to Continental Scales Based on the Terrestrial Systems Modeling Platform (v1.1.0). Water (Switzerland), 2018, 10, 1697.	2.7	17
105	Streamflow simulations reveal the impact of the soil parameterization. Meteorologische Zeitschrift, 2008, 17, 751-762.	1.0	16
106	Latent Heat Flux over the North Atlantic Oceanâ€"A Case Study. Journal of Applied Meteorology and Climatology, 1991, 30, 1627-1635.	1.7	15
107	Comparison of microwave radiative transfer calculations obtained with three different approximations of hydrometeor shape. Journal of Quantitative Spectroscopy and Radiative Transfer, 1999, 63, 545-558.	2.3	15
108	Evaluation of Radar Multiple-Scattering Effects from a GPM Perspective. Part II: Model Results. Journal of Applied Meteorology and Climatology, 2006, 45, 1648-1664.	1.5	15

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109	Precipitation and microphysical processes observed by three polarimetric X-band radars and ground-based instrumentation during HOPE. Atmospheric Chemistry and Physics, 2016, 16, 7105-7116.	4.9	15
110	A new algorithm for the downscaling of cloud fields. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 91-106.	2.7	14
111	An integrated approach for the determination of regionale vapotranspiration using mesoscale modelling, remote sensing and boundary layer measurements. Meteorology and Atmospheric Physics, 2001, 76, 83-105.	2.0	13
112	Multiple Scattering Effects in Pulsed Radar Systems: An Intercomparison Study. Journal of Atmospheric and Oceanic Technology, 2008, 25, 1556-1567.	1.3	13
113	A Rain-Rate Retrieval Algorithm for Attenuated Radar Measurements. Journal of Applied Meteorology and Climatology, 2010, 49, 381-393.	1.5	13
114	Downscaling near-surface atmospheric fields with multi-objective Genetic Programming. Environmental Modelling and Software, 2016, 84, 85-98.	4.5	13
115	SSM/I Brightness Temperature Corrections for Incidence Angle Variations. Journal of Atmospheric and Oceanic Technology, 1996, 13, 246-254.	1.3	12
116	Cross-disciplinary links in environmental systems science: Current state and claimed needs identified in a meta-review of process models. Science of the Total Environment, 2018, 622-623, 954-973.	8.0	12
117	Effects of land surface inhomogeneity on convection-permitting WRF simulations over central Europe. Meteorology and Atmospheric Physics, 2020, 132, 53-69.	2.0	12
118	Two adaptive radiative transfer schemes for numerical weather prediction models. Atmospheric Chemistry and Physics, 2007, 7, 5659-5674.	4.9	11
119	Climate variations over the southern Altai Mountains and Dzungarian Basin region, central Asia, since 1580 CE. International Journal of Climatology, 2019, 39, 4543-4558.	3.5	11
120	Comparison between precipitation estimates of ground-based weather radar composites and GPM's DPR rainfall product over Germany. Meteorologische Zeitschrift, 2020, 29, 451-466.	1.0	11
121	Impact of surface-heterogeneity on atmosphere and land-surface interactions. Environmental Modelling and Software, 2017, 88, 35-47.	4.5	10
122	Monte Carlo simulations of the microwave emissivity of the sea surface. Journal of Geophysical Research, 1998, 103, 24983-24989.	3.3	9
123	On precipitation induced polarization of microwave radiation measured from space. Meteorologische Zeitschrift, 2002, 11, 49-60.	1.0	9
124	Explaining the polarization signal from rain dichroic effects. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 105, 84-101.	2.3	9
125	Modelling convectively induced secondary circulations in the terra incognita with <scp>TerrSysMP</scp>. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2352-2361.	2.7	9
126	Sensitivity of summer precipitation simulated by the CLM with respect to initial and boundary conditions. Meteorologische Zeitschrift, 2008, 17, 421-431.	1.0	8

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127	Contribution of microwave remote sensing from satellites to studies on the Earth energy budget and the hydrological cycle. Advances in Space Research, 1999, 24, 897-905.	2.6	7
128	Three-dimensional effects in polarization signatures as observed from precipitating clouds by low frequency ground-based microwave radiometers. Atmospheric Chemistry and Physics, 2006, 6, 4383-4394.	4.9	7
129	Understanding three-dimensional effects in polarized observations with the ground-based ADMIRARI radiometer during the CHUVA campaign. Journal of Geophysical Research, 2011, 116, .	3.3	7
130	On correcting precipitation as simulated by the regional climate model COSMO-CLM with daily rain gauge observations. Meteorology and Atmospheric Physics, 2013, 119, 31-42.	2.0	7
131	Generation and transfer of internal variability in a regional climate model. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 65, 22485.	1.7	7
132	Estimation of the refractive index structure parameter from single-level daytime routine weather data. Applied Optics, 2014, 53, 5944.	1.8	7
133	Improvement of surface runâ€off in the hydrological model ParFlow by a scaleâ€consistent river parameterization. Hydrological Processes, 2019, 33, 2006-2019.	2.6	7
134	Application of an adaptive radiative transfer scheme in a mesoscale numerical weather prediction model. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 91-102.	2.7	6
135	Pattern-based statistical downscaling of East Asian Summer Monsoon precipitation. Tellus, Series A: Dynamic Meteorology and Oceanography, 2013, 65, 19749.	1.7	6
136	A sequential ensemble prediction system at convection-permitting scales. Meteorology and Atmospheric Physics, 2014, 123, 17-31.	2.0	6
137	Gamma Drop Size Distribution Assumptions in Bulk Model Parameterizations and Radar Polarimetry and Their Impact on Polarimetric Radar Moments. Journal of Applied Meteorology and Climatology, 2019, 58, 467-478.	1.5	6
138	Assessing the benefits of specific attenuation for quantitative precipitation estimation with a C-band radar network. Journal of Hydrometeorology, 2021, , .	1.9	6
139	Emission and scattering by clouds and precipitation. , 2006, , 101-224.		6
140	Evaluation of modelled summertime convective storms using polarimetric radar observations. Atmospheric Chemistry and Physics, 2022, 22, 7593-7618.	4.9	6
141	Simulation of weather radar products from a mesoscale model. Physics and Chemistry of the Earth, 2000, 25, 1257-1261.	0.3	5
142	A case study on multiresolution visualization of local rainfall from weather radar measurements. , 0, , .		5
143	Toward the Use of Integral Radar Volume Descriptors for Quantitative Areal Precipitation Estimation: Results from Pseudoradar Observations. Journal of Atmospheric and Oceanic Technology, 2009, 26, 1798-1813.	1.3	5
144	Must quality estimation based on climate data in the Upper Moselle region. Meteorologische Zeitschrift, 2011, 20, 479-486.	1.0	5

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145	An object-based approach for areal rainfall estimation and validation of atmospheric models. Meteorology and Atmospheric Physics, 2012, 115, 139-151.	2.0	5
146	Modeled Land Atmosphere Coupling Response to Soil Moisture Changes with Different Generations of Land Surface Models. Water (Switzerland), 2020, 12, 46.	2.7	5
147	Dual-polarimetric radar estimators of liquid water content over Germany. Meteorologische Zeitschrift, 2021, 30, 237-249.	1.0	5
148	Near-Realtime Quantitative Precipitation Estimation and Prediction (RealPEP). Bulletin of the American Meteorological Society, 2021, 102, E1591-E1596.	3.3	5
149	The use of satellites to monitor global transmission of microbes. International Journal of Remote Sensing, 1993, 14, 1447-1461.	2.9	4
150	Multisensor Characterization of Mammatus. Monthly Weather Review, 2017, 145, 235-251.	1.4	4
151	Presentation and discussion of the high-resolution atmosphereâ€“land-surfaceâ€“subsurface simulation dataset of the simulated Neckar catchment for the period 2007â€“2015. Earth System Science Data, 2021, 13, 4437-4464.	9.9	4
152	Fluxes of latent heat over the oceans: climatological studies and application of satellite observations. Dynamics of Atmospheres and Oceans, 1991, 16, 111-121.	1.8	3
153	A ground based multi-sensor system for the remote sensing of clouds. Physics and Chemistry of the Earth, 1999, 24, 207-211.	0.3	3
154	Towards nowcasting of winter precipitation: The Black Ice Event in Berlin 2014. Meteorologische Zeitschrift, 2017, 26, 147-160.	1.0	3
155	Severe Hail Detection: Hydrometeor Classification for Polarimetric C-band Radars Using Fuzzy-Logic and T-matrix Scattering Simulations. , 2018, , .		3
156	Polarimetric Radar Observations Meet Atmospheric Modelling. , 2018, , .		3
157	Deterministic and stochastic precipitation downscaling using multi-objective genetic programming. , 2018, , .		3
158	Polarimetric radar-based methods for evaluation of hydrometeor mixtures in numerical weather prediction models. , 2021, , .		3
159	Grid resolution dependency of land surface heterogeneity effects on boundaryâ€layer structure. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 141-158.	2.7	3
160	<title>Retrieval algorithms for special sensor microwave/imager (SSM/I)</title>. , 1998, , .		2
161	Evaluation of modeled high resolution virtual brightness temperatures compared to space-borne observations for the neckar catchment. , 2016, , .		2
162	A low-cost mechanically-steered weather radar concept. , 2018, , .		2

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163	Multiâ€objective downscaling of precipitation time series by genetic programming. International Journal of Climatology, 2021, 41, 6162-6182.	3.5	2
164	Retrieval of Precipitation from Satellites. , 1996, , 249-276.		2
165	Uncertainties in Weather Forecast â€“ Reasons and Handling. , 2011, , 11-33.		2
166	Microwave radiative transfer with nonspherical particles. , 1997, 3220, 174.		1
167	Dynamical downscaling with COSMO and COSMO-CLM in the Sino-Mongolian Altai region. Meteorology and Atmospheric Physics, 2017, 129, 211-228.	2.0	1
168	Downscaling near-surface atmospheric fields with multi-objective genetic programming. , 2017, , .		1
169	Dual-Doppler and Polarimetric Radar Analysis of Hail Events in Germany. , 2018, , .		1
170	Required sampling density of ground-based soil moisture and brightness temperature observations for calibration and validation of L-band satellite observations based on a virtual reality. Hydrology and Earth System Sciences, 2020, 24, 1957-1973.	4.9	1
171	Storm Cell Observation And Prediction Using Polarimetric Weather Radars. , 2021, , .		1
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173	Influence of cloud water distribution on the passive microwave retrieval of humidity. Advances in Space Research, 1989, 9, 149-152.	2.6	0
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