Joachim Reuder

List of Publications by Year
in descending order

Version: 2024-02-01

		218677	276875
98	2,228	26	41
papers	citations	h-index	g-index

119	119	119	2507
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The BLLAST field experiment: Boundary-Layer Late Afternoon and Sunset Turbulence. Atmospheric Chemistry and Physics, 2014, 14, 10931-10960.	4.9	151
2	The Small Unmanned Meteorological Observer SUMO: A new tool for atmospheric boundary layer research. Meteorologische Zeitschrift, 2009, 18, 141-147.	1.0	114
3	Intercomparison of Small Unmanned Aircraft System (sUAS) Measurements for Atmospheric Science during the LAPSE-RATE Campaign. Sensors, 2019, 19, 2179.	3.8	88
4	Diurnal Winds in the Himalayan Kali Gandaki Valley. Part I: Observations. Monthly Weather Review, 2000, 128, 1106-1122.	1.4	74
5	The Small Unmanned Meteorological Observer SUMO: Recent developments and applications of a micro-UAS for atmospheric boundary layer research. Acta Geophysica, 2012, 60, 1454-1473.	2.0	69
6	Atmospheric profiling with the UAS SUMO: a new perspective for the evaluation of fine-scale atmospheric models. Meteorology and Atmospheric Physics, 2012, 116, 15-26.	2.0	66
7	Turbulent kinetic energy estimates from profiling wind LiDAR measurements and their potential for wind energy applications. Renewable Energy, 2016, 99, 898-910.	8.9	61
8	Aerosol effects on UV radiation in nonurban regions. Journal of Geophysical Research, 1999, 104, 4065-4077.	3.3	57
9	A â€˜No-Flow-Sensorâ€™ Wind Estimation Algorithm for Unmanned Aerial Systems. International Journal of Micro Air Vehicles, 2012, 4, 15-29.	1.3	52
10	Effects of altitude and aerosol on UV radiation. Journal of Geophysical Research, 2006, 111, .	3.3	51
11	Diurnal Winds in the Himalayan Kali Gandaki Valley. Part III: Remotely Piloted Aircraft Soundings. Monthly Weather Review, 2002, 130, 2042-2058.	1.4	48
12	Evaluation of different wind fields for the investigation of the dynamic response of offshore wind turbines. Wind Energy, 2020, 23, 1810-1830.	4.2	46
13	Spectral variation of the solar radiation during an eclipse. Meteorologische Zeitschrift, 2001, 10, 179-186.	1.0	45
14	Innovative Strategies for Observations in the Arctic Atmospheric Boundary Layer (ISOBAR)â€”The Hailuoto 2017 Campaign. Atmosphere, 2018, 9, 268.	2.3	45
15	Velocity Spectra and Coherence Estimates in the Marine Atmospheric Boundary Layer. Boundary-Layer Meteorology, 2018, 169, 429-460.	2.3	44
16	Diurnal Circulation of the Bolivian Altiplano. Part I: Observations. Monthly Weather Review, 2005, 133, 911-924.	1.4	43
17	The Norwegian IPYâ€“THORPEX: Polar Lows and Arctic Fronts during the 2008 AndÃ¸ya Campaign. Bulletin of the American Meteorological Society, 2011, 92, 1443-1466.	3.3	43
18	An evaluation of surface meteorology and fluxes over the Iceland and Greenland Seas in <scp>ERA5</scp> reanalysis: The impact of sea ice distribution. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 691-712.	2.7	43

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19	Visualization of UV exposure of the human body based on data from a scanning UV-measuring system. International Journal of Biometeorology, 2004, 49, 18-25.	3.0	37
20	A Comparison of LiDAR and Radiosonde Wind Measurements. Energy Procedia, 2014, 53, 214-220.	1.8	37
21	Downscaling an intense precipitation event in complex terrain: the importance of high grid resolution. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 69, 1271561.	1.7	35
22	Analysis of the vertical temperature structure in the Bergen valley, Norway, and its connection to pollution episodes. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10,645.	3.3	33
23	On the Formulation and Universality of Moninâ€“Obukhov Similarity Functions for Mean Gradients and Standard Deviations in the Unstable Surface Layer: Results from Surface-Layer-Resolving Large-Eddy Simulations. Journals of the Atmospheric Sciences, 2017, 74, 989-1010.	1.7	33
24	Improving High-Resolution Numerical Weather Simulations by Assimilating Data from an Unmanned Aerial System. Monthly Weather Review, 2012, 140, 3734-3756.	1.4	32
25	Estimation of the advection effects induced by surface heterogeneities in the surface energy budget. Atmospheric Chemistry and Physics, 2016, 16, 9489-9504.	4.9	32
26	Profiling the Arctic Stable Boundary Layer in Advent Valley, Svalbard: Measurements and Simulations. Boundary-Layer Meteorology, 2012, 143, 507-526.	2.3	28
27	Proof of concept for turbulence measurements with the RPAS SUMO during the BLLAST campaign. Atmospheric Measurement Techniques, 2016, 9, 4901-4913.	3.1	28
28	UV radiation and skin cancer in Norway. Journal of Photochemistry and Photobiology B: Biology, 2009, 96, 232-241.	3.8	27
29	Characterisation of Single Wind Turbine Wakes with Static and Scanning WINTWEX-W LiDAR Data. Energy Procedia, 2015, 80, 245-254.	1.8	27
30	Study of a prototypical convective boundary layer observed during BLLAST: contributions by large-scale forcings. Atmospheric Chemistry and Physics, 2015, 15, 4241-4257.	4.9	27
31	Validation of boundary layer parameterization schemes in the weather research and forecasting model under the aspect of offshore wind energy applicationsâ€" Part I: Average wind speed and wind shear. Wind Energy, 2015, 18, 769-782.	4.2	26
32	FLOHOF 2007: an overview of the mesoscale meteorological field campaign at HofsjÃ¶kull, Central Iceland. Meteorology and Atmospheric Physics, 2012, 116, 1-13.	2.0	23
33	Assessing the potential of a commercial pulsed lidar for wind characterisation at a bridge site. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 161, 17-26.	3.9	23
34	The Innovative Strategies for Observations in the Arctic Atmospheric Boundary Layer Project (ISOBAR): Unique Finescale Observations under Stable and Very Stable Conditions. Bulletin of the American Meteorological Society, 2021, 102, E218-E243.	3.3	23
35	Reconstruction of UV radiation over Southern Germany for the past decades. Meteorologische Zeitschrift, 2005, 14, 237-246.	1.0	22
36	Boundary layer photochemistry during a total solar eclipse. Meteorologische Zeitschrift, 2001, 10, 187-192.	1.0	21

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37	Validation of boundary layer parameterization schemes in the Weather Research and Forecasting (WRF) model under the aspect of offshore wind energy applicationsâ€"part II: boundary layer height and atmospheric stability. Wind Energy, 2015, 18, 1291-1302.	4.2	21
38	A new roughness length parameterization accounting for windâ€"wave (mis)alignment. Atmospheric Chemistry and Physics, 2019, 19, 6681-6700.	4.9	21
39	The Iceland Greenland Seas Project. Bulletin of the American Meteorological Society, 2019, 100, 1795-1817.	3.3	21
40	Actinic Radiation and Photolysis Processes in the Lower Troposphere: Effect of Clouds and Aerosols. Journal of Atmospheric Chemistry, 2002, 42, 413-441.	3.2	20
41	Quantifying the Stable Water Isotopologue Exchange Between the Snow Surface and Lower Atmosphere by Direct Flux Measurements. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034400.	3.3	20
42	Sensitivity of local air quality to the interplay between small- and large-scale circulations: a large-eddy simulation study. Atmospheric Chemistry and Physics, 2017, 17, 7261-7276.	4.9	19
43	Future UV radiation in Central Europe modelled from ozone scenarios. Journal of Photochemistry and Photobiology B: Biology, 2001, 61, 94-105.	3.8	18
44	Patterns of Dekadal Rainfall Variation Over a Selected Region in Lake Victoria Basin, Uganda. Atmosphere, 2016, 7, 150.	2.3	18
45	Improving Quantitative Rainfall Prediction Using Ensemble Analogues in the Tropics: Case Study of Uganda. Atmosphere, 2018, 9, 328.	2.3	18
46	Analysis of a Low-level Coastal Jet off the Western Coast of Norway. Energy Procedia, 2014, 53, 162-172.	1.8	17
47	Comparison of Direct Covariance Flux Measurements from an Offshore Tower and a Buoy. Journal of Atmospheric and Oceanic Technology, 2016, 33, 873-890.	1.3	16
48	Investigations on the effect of high surface albedo on erythemally effective UV irradiance: Results of a campaign at the Salar de Uyuni, Bolivia. Journal of Photochemistry and Photobiology B: Biology, 2007, 87, 1-8.	3.8	15
49	Exploring the potential of the RPA system SUMO for multipurpose boundary-layer missions during the BLLAST campaign. Atmospheric Measurement Techniques, 2016, 9, 2675-2688.	3.1	15
50	Definition of "banner clouds" based on time lapse movies. Atmospheric Chemistry and Physics, 2007, 7, 2047-2055.	4.9	14
51	Banner clouds observed at Mount Zugspitze. Atmospheric Chemistry and Physics, 2012, 12, 3611-3625.	4.9	14
52	SUMO: A small unmanned meteorological observer for atmospheric boundary layer research. IOP Conference Series: Earth and Environmental Science, 2008, 1, 012014.	0.3	13
53	Scaling the Decay of Turbulence Kinetic Energy in the Free-Convective Boundary Layer. Boundary-Layer Meteorology, 2019, 173, 79-97.	2.3	13
54	The Near-Surface Small-Scale Spatial and Temporal Variability of Sensible and Latent Heat Exchange in the Svalbard Region: A Case Study. , 2012, 2012, 1-14.		11

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55	Wind Coherence Measurement by a Single Pulsed Doppler Wind Lidar. Energy Procedia, 2016, 94, 462-477.	1.8	11
56	Offshore Wind Turbine Wake characteristics using Scanning Doppler Lidar. Energy Procedia, 2017, 137, 428-442.	1.8	11
57	The Role of Roughness and Stability on the Momentum Flux in the Marine Atmospheric Surface Layer: A Study on the Southwestern Atlantic Ocean. Journal of Geophysical Research D: Atmospheres, 2018, 123, 3914-3932.	3.3	11
58	Multi-scale variability of winds in the complex topography of southwestern Norway. Tellus, Series A: Dynamic Meteorology and Oceanography, 2012, 64, 11962.	1.7	10
59	First Results of Turbulence Measurements in a Wind Park with the Small Unmanned Meteorological Observer SUMO. Energy Procedia, 2012, 24, 176-185.	1.8	10
60	Potential and Limitations in Estimating Sensible-Heat-Flux Profiles from Consecutive Temperature Profiles Using Remotely-Piloted Aircraft Systems. Boundary-Layer Meteorology, 2020, 174, 145-177.	2.3	10
61	Diurnal circulation of the South American Altiplano: observations in a valley and at a pass. Tellus, Series A: Dynamic Meteorology and Oceanography, 2006, 58, 254-262.	1.7	9
62	Experimental Characterization of the Marine Atmospheric Boundary Layer in the Havsul Area, Norway. Energy Procedia, 2013, 35, 121-127.	1.8	9
63	Characterization of the SUMO Turbulence Measurement System for Wind Turbine Wake Assessment. Energy Procedia, 2014, 53, 173-183.	1.8	9
64	Proof of Concept for Wind Turbine Wake Investigations with the RPAS SUMO. Energy Procedia, 2016, 94, 452-461.	1.8	9
65	Processing of sonic anemometer measurements for offshore wind turbine applications. Journal of Physics: Conference Series, 2019, 1356, 012006.	0.4	9
66	The COTUR project: remote sensing of offshore turbulence for wind energy application. Atmospheric Measurement Techniques, 2021, 14, 6137-6157.	3.1	9
67	Automated measurements of whitecaps on the ocean surface from a buoy-mounted camera. Methods in Oceanography, 2016, 17, 14-31.	1.6	8
68	Bestimmung von Ozon- und NO2-Photolysefrequenzen wÃhrend der MeÃŸkampagne SANA 2: Der EinfluÃŸ von troposphÃrischem Aerosol. Meteorologische Zeitschrift, 1996, 5, 234-244.	1.0	8
69	Simplified Calibration for Broadband Solar Ultraviolet Radiation MeasurementsÂ¶. Photochemistry and Photobiology, 2003, 78, 603.	2.5	8
70	Stord Orographic Precipitation Experiment (STOPEX): an overview of phase I. Advances in Geosciences, 0, 10, 17-23.	12.0	8
71	The influence of Nunataks on atmospheric boundary layer convection during summer in Dronning Maud Land, Antarctica. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6537-6548.	3.3	7
72	2D VAR single Doppler lidar vector retrieval and its application in offshore wind energy. Energy Procedia, 2017, 137, 497-504.	1.8	7

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73	Current and turbulence measurements at the FINO1 offshore wind energy site: analysis using 5-beam ADCPs. Ocean Dynamics, 2018, 68, 109-130.	2.2	7
74	Sensor Movement Correction for Direct Turbulence Measurements in the Marine Atmospheric Boundary Layer. Energy Procedia, 2012, 24, 159-165.	1.8	6
75	Characterization of Turbulence in Wind Turbine Wakes under Different Stability Conditions from Static Doppler LiDAR Measurements. Remote Sensing, 2017, 9, 242.	4.0	6
76	Waveâ€“induced Characteristics of Atmospheric Turbulence Flux Measurements. Energy Procedia, 2013, 35, 102-112.	1.8	5
77	Simulations of the Bergen orographic wind shelter. Tellus, Series A: Dynamic Meteorology and Oceanography, 2013, 65, 19206.	1.7	5
78	A Surface-Layer Study of the Transport and Dissipation of Turbulent Kinetic Energy and the Variances of Temperature, Humidity and CO $$_2$$ 2. Boundary-Layer Meteorology, 2017, 165, 211-231.	2.3	5
79	The large-scale circulation during air quality hazards in Bergen, Norway. Tellus, Series A: Dynamic Meteorology and Oceanography, 2017, 69, 1406265.	1.7	5
80	Potential and challenges of wind measurements using met-masts in complex topography for bridge design: Part II â€“ Spectral flow characteristics. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 211, 104585.	3.9	5
81	Assessment of Wind Conditions at a Fjord Inlet by Complementary Use of Sonic Anemometers and Lidars. Energy Procedia, 2015, 80, 411-421.	1.8	4
82	Lifted temperature minimum during the atmospheric evening transition. Atmospheric Chemistry and Physics, 2015, 15, 6981-6991.	4.9	4
83	Unmanned Aircraft Systems. Springer Handbooks, 2021, , 1331-1349.	0.6	4
84	Development of an automatic thresholding method for wake meandering studies and its application to the data set from scanning wind lidar. Wind Energy Science, 2022, 7, 849-873.	3.3	3
85	A Two-Axis Tracking System with Datalogger. Journal of Atmospheric and Oceanic Technology, 2004, 21, 975-979.	1.3	2
86	Lagrangian Measurement of Waves and Near Surface Turbulence from Acoustic Instruments. Energy Procedia, 2015, 80, 141-150.	1.8	2
87	Statistic and Coherence Response of Ship-based Lidar Observations to Motion Compensation. Journal of Physics: Conference Series, 2020, 1669, 012020.	0.4	2
88	Gradient-Based Turbulence Estimates from Multicopter Profiles in the Arctic Stable Boundary Layer. Boundary-Layer Meteorology, 0, , 1.	2.3	2
89	Characterization of Terrain-Induced Turbulence by Large-Eddy Simulation for Air Safety Considerations in Airport Siting. Atmosphere, 2022, 13, 952.	2.3	2
90	Cloud frequency with respect to remote sensing applications: example of Bavaria, southern Germany. International Journal of Remote Sensing, 2005, 26, 4733-4745.	2.9	1

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91	Preliminary Results of the NORCOWE Direct Covariance Flux System for Ship based Measurements. Energy Procedia, 2013, 35, 128-136.	1.8	1
92	Potential and challenges of wind measurements using met-masts in complex topography for bridge design: Part I â€“ Integral flow characteristics. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 211, 104584.	3.9	1
93	Diurnal circulation of the South American Altiplano: observations in a valley and at a pass. Tellus, Series A: Dynamic Meteorology and Oceanography, 2006, , .	1.7	1
94	Photolysis Frequencies of Nitrogen Dioxide and Ozone: Measurements and Model Calculations. , 1997, , 450-456.		1
95	A Ship-Based Characterization of Coherent Boundary-Layer Structures Over the Lifecycle of a Marine Cold-Air Outbreak. Boundary-Layer Meteorology, 0, , 1.	2.3	1
96	Simplified Calibration for Broadband Solar Ultraviolet Radiation MeasurementsÂ¶. Photochemistry and Photobiology, 2003, 78, 603-606.	2.5	0
97	Wind Stress in the Coastal Zone: Observations from a Buoy in Southwestern Norway. Atmosphere, 2019, 10, 491.	2.3	0
98	Interannual variability of air temperature inversions in ice-free area of northern James Ross Island, Antarctica. Theoretical and Applied Climatology, 0, , 1.	2.8	0