Jens Bange

List of Publications by Year
in descending order

66 papers	2,172 citations	201575 27 h-index	243529 44 g-index
103 all docs	103 docs citations	103 times ranked	1946 citing authors

#	Article	IF	Citations
1	The Role of Atmospheric Stability and Turbulence in Offshore Wind-Farm Wakes in the German Bight. Boundary-Layer Meteorology, 2022, 182, 441-469.	1.2	14
2	Turbulence above offshore wind farms measured by aircraft. Journal of Physics: Conference Series, 2022, 2265, 022065.	0.3	0
3	Evaluation of a simple analytical model for offshore wind farm wake recovery by in situ data and Weather Research and Forecasting simulations. Wind Energy, 2021, 24, 212-228.	1.9	15
4	A Two-Day Case Study: Comparison of Turbulence Data from an Unmanned Aircraft System with a Model Chain for Complex Terrain. Boundary-Layer Meteorology, 2021, 180, 53-78.	1.2	4
5	Unmanned Aircraft Systems. Springer Handbooks, 2021, , 1331-1349.	0.3	4
6	Validating CFD Predictions of Flow over an Escarpment Using Ground-Based and Airborne Measurement Devices. Energies, 2020, 13, 4688.	1.6	6
7	CFD Prediction of Tip Vortex Aging in the Wake of a Multi-MW Wind Turbine. Journal of Physics: Conference Series, 2020, 1618, 062029.	0.3	2
8	Offshore wind farm wake recovery: Airborne measurements and its representation in engineering models. Wind Energy, 2020, 23, 1249-1265.	1.9	51
9	Turbulent kinetic energy over large offshore wind farms observed and simulated by the mesoscale model WRF (3.8.1). Geoscientific Model Development, 2020, 13, 249-268.	1.3	42
10	Long-range modifications of the wind field by offshore wind parksÂâ€“ results of the project WIPAFF. Meteorologische Zeitschrift, 2020, 29, 355-376.	0.5	30
11	Overview: Integrative and Comprehensive Understanding on Polar Environments (iCUPE) â€“ concept and initial results. Atmospheric Chemistry and Physics, 2020, 20, 8551-8592.	1.9	26
12	InÂsitu airborne measurements of atmospheric and sea surface parameters related to offshore wind parks in the German Bight. Earth System Science Data, 2020, 12, 935-946.	3.7	16
13	The Multi-Purpose Airborne Sensor Carrier MASC-3 for Wind and Turbulence Measurements in the Atmospheric Boundary Layer. Sensors, 2019, 19, 2292.	2.1	33
14	Comparison of CFD Simulation to UAS Measurements for Wind Flows in Complex Terrain: Application to the WINSENT Test Site. Energies, 2019, 12, 1992.	1.6	9
15	A new multicopter-based unmanned aerial system for pollen and spores collection in the atmospheric boundary layer. Atmospheric Measurement Techniques, 2019, 12, 1581-1598.	1.2	17
16	Calibration Procedure and Accuracy of Wind and Turbulence Measurements with Five-Hole Probes on Fixed-Wing Unmanned Aircraft in the Atmospheric Boundary Layer and Wind Turbine Wakes. Atmosphere, 2019, 10, 124.	1.0	18
17	First identification and quantification of detached-tip vortices behind a wind energy converter using fixed-wing unmanned aircraft system. Wind Energy Science, 2019, 4, 451-463.	1.2	12
18	First in situ evidence of wakes in the far field behind offshore wind farms. Scientific Reports, 2018, 8, 2163.	1.6	124

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19	Airborne observations of newly formed boundary layer aerosol particles under cloudy conditions. Atmospheric Chemistry and Physics, 2018, 18, 8249-8264.	1.9	21
20	Evaluation of a Wind Farm Parametrization for Mesoscale Atmospheric Flow Models with Aircraft Measurements. Meteorologische Zeitschrift, 2018, 27, 401-415.	0.5	36
21	Application of Different Turbulence Models Simulating Wind Flow in Complex Terrain: A Case Study for the WindForS Test Site. Computation, 2018, 6, 43.	1.0	5
22	Reviewing Wind Measurement Approaches for Fixed-Wing Unmanned Aircraft. Atmosphere, 2018, 9, 422.	1.0	36
23	Innovative Strategies for Observations in the Arctic Atmospheric Boundary Layer (ISOBAR)â€"The Hailuoto 2017 Campaign. Atmosphere, 2018, 9, 268.	1.0	45
24	Measuring the local wind field at an escarpment using small remotely-piloted aircraft. Renewable Energy, 2017, 103, 613-619.	4.3	30
25	Model comparison of two different non-hydrostatic formulations for the Navier-Stokes equations simulating wind flow in complex terrain. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 169, 290-307.	1.7	10
26	Observations of the Temperature and Humidity Structure Parameter Over Heterogeneous Terrain by Airborne Measurements During the LITFASS-2003 Campaign. Boundary-Layer Meteorology, 2017, 165, 447-473.	1.2	6
27	Analysis of the influence of a lake on the lower convective boundary layer from airborne observations. Meteorologische Zeitschrift, 2017, 26, 161-180.	0.5	3
28	Comparison of Different Measurement Techniques and a CFD Simulation in Complex Terrain. Journal of Physics: Conference Series, 2016, 753, 082017.	0.3	8
29	An anisotropic synthetic turbulence method for Large-Eddy Simulation. International Journal of Heat and Fluid Flow, 2016, 62, 407-422.	1.1	2
30	A study of local turbulence and anisotropy during the afternoon and evening transition with an unmanned aerial system and mesoscale simulation. Atmospheric Chemistry and Physics, 2016, 16, 8009-8021.	1.9	25
31	An Observational Case Study on the Influence of Atmospheric Boundary-Layer Dynamics on New Particle Formation. Boundary-Layer Meteorology, 2016, 158, 67-92.	1.2	66
32	Simulation of Wing and Nacelle Stall. , 2016, , .		3
33	On the Discrepancy in Simultaneous Observations of the Structure Parameter of Temperature Using Scintillometers and Unmanned Aircraft. Boundary-Layer Meteorology, 2016, 158, 257-283.	1.2	12
34	Numerical Simulation of the Turbulent Flow Around a Wing. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2016, , 235-247.	0.2	0
35	A New Method to Generate Anisotropic Synthetic Turbulence for LES. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2016, , 223-233.	0.2	2
36	Observations of the Early Morning Boundary-Layer Transition with Small Remotely-Piloted Aircraft. Boundary-Layer Meteorology, 2015, 157, 345-373.	1.2	29

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37	ALADINA â€“ an unmanned research aircraft for observing vertical and horizontal distributions of ultrafine particles within the atmospheric boundary layer. Atmospheric Measurement Techniques, 2015, 8, 1627-1639.	1.2	84
38	Comparison of two methods simulating highly resolved atmospheric turbulence data for study of stall effects. Computers and Fluids, 2015, 108, 57-66.	1.3	8
39	Towards higher accuracy and better frequency response with standard multi-hole probes in turbulence measurement with remotely piloted aircraft (RPA). Atmospheric Measurement Techniques, 2014, 7, 1027-1041.	1.2	51
40	An inverse-modelling approach for frequency response correction of capacitive humidity sensors in ABL research with small remotely piloted aircraft (RPA). Atmospheric Measurement Techniques, 2014, 7, 3059-3069.	1.2	22
41	The Influence of Aircraft Speed Variations on Sensible Heat-Flux Measurements by Different Airborne Systems. Boundary-Layer Meteorology, 2014, 150, 153-166.	1.2	15
42	Observing Entrainment Processes Using a Small Unmanned Aerial Vehicle: A Feasibility Study. Boundary-Layer Meteorology, 2014, 150, 449-467.	1.2	27
43	MASC â€“ a small Remotely Piloted Aircraft (RPA) for wind energy research. Advances in Science and Research, 2014, 11, 55-61.	1.0	70
44	Simulation of Wing Stall. , 2013, , .		7
45	Two fast temperature sensors for probing of the atmospheric boundary layer using small remotely piloted aircraft (RPA). Atmospheric Measurement Techniques, 2013, 6, 2101-2113.	1.2	44
46	Large-Eddy Simulations of realistic atmospheric turbulence with the DLR-TAU-code initialized by in situ airborne measurements. Computers and Fluids, 2012, 66, 121-129.	1.3	6
47	Towards a Validation of Scintillometer Measurements: The LITFASS-2009 Experiment. Boundary-Layer Meteorology, 2012, 144, 83-112.	1.2	43
48	Spatially-Averaged Temperature Structure Parameter Over a Heterogeneous Surface Measured by an Unmanned Aerial Vehicle. Boundary-Layer Meteorology, 2012, 142, 55-77.	1.2	68
49	Meteorological profiling of the lower troposphere using the research UAV "M²AV Carolo". Atmospheric Measurement Techniques, 2011, 4, 705-716.	1.2	95
50	Energy balance closure for the LITFASS-2003 experiment. Theoretical and Applied Climatology, 2010, 101, 149-160.	1.3	127
51	Comparison Of High Resolution Large-Eddy Simulations And Synthetic Turbulent Wind Fields. , 2010, , .		1
52	Measuring the Wind Vector Using the Autonomous Mini Aerial Vehicle M2AV. Journal of Atmospheric and Oceanic Technology, 2008, 25, 1969-1982.	0.5	166
53	First application of the meteorological Mini-UAV 'M2AV'. Meteorologische Zeitschrift, 2007, 16, 159-169.	0.5	91
54	Turbulent flux calculation in the polar stable boundary layer: Multiresolution flux decomposition and wavelet analysis. Journal of Geophysical Research, 2007, 112, .	3.3	25

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55	Characteristics of the early-morning shallow convective boundary layer from Helipod Flights during STINHO-2. Theoretical and Applied Climatology, 2007, 90, 113-126.	1.3	32
56	A New Method for the Determination of Area-Averaged Turbulent Surface Fluxes from Low-Level Flights Using Inverse Models. Boundary-Layer Meteorology, 2006, 119, 527-561.	1.2	24
57	Area-Averaged Surface Fluxes Over the Litfass Region Based on Eddy-Covariance Measurements. Boundary-Layer Meteorology, 2006, 121, 33-65.	1.2	105
58	Turbulent fluxes from Helipod flights above quasi-homogeneous patches within the LITFASS area. Boundary-Layer Meteorology, 2006, 121, 127-151.	1.2	24
59	Evaporation Over A Heterogeneous Land Surface. Bulletin of the American Meteorological Society, 2006, 87, 775-786.	1.7	50
60	STINHO Structure of turbulent transport under inhomogeneous surface conditions part 1: The micro-scale field experiment. Meteorologische Zeitschrift, 2005, 14, 315-327.	0.5	17
61	Airborne measurements of turbulent fluxes during LITFASS-98: Comparison with ground measurements and remote sensing in a case study. Theoretical and Applied Climatology, 2002, 73, 35-51.	1.3	49
62	Determination of boundary-layer parameters using wind profiler/RASS and sodar/RASS in the frame of the LITFASS project. Theoretical and Applied Climatology, 2002, 73, 53-65.	1.3	17
63	Simulated Airborne Flux Measurements in a LES generated Convective Boundary Layer. Boundary-Layer Meteorology, 2000, 95, 437-456.	1.2	30
64	Inverse method as an analysing tool for airborne measurements. Meteorologische Zeitschrift, 2000, 9, 361-376.	0.5	4
65	Helicopter-Borne Flux Measurements in the Nocturnal Boundary Layer Over Land â€“ a Case Study. Boundary-Layer Meteorology, 1999, 92, 295-325.	1.2	43
66	Conductance of Ag on Si(111): a two-dimensional percolation problem. Journal of Physics Condensed Matter, 1993, 5, 2913-2918.	0.7	21