Dirk Schindler

List of Publications by Year
in descending order

71 papers	2,233 citations	218592 26 h-index	254106 43 g-index
77 all docs	77 docs citations	77 times ranked	2243 citing authors

#	Article	IF	Citations
1	On the influence of wind speed model resolution on the global technical wind energy potential. Renewable and Sustainable Energy Reviews, 2022, 156, 112001.	8.2	27
2	On the Potential of Using Air Pressure Fluctuations to Estimate Wind-Induced Tree Motion in a Planted Scots Pine Forest. Forests, 2022, 13, 225.	0.9	3
3	A review of recent studies on wind resource projections under climate change. Renewable and Sustainable Energy Reviews, 2022, 165, 112596.	8.2	17
4	Development of onshore wind turbine fleet counteracts climate change-induced reduction in global capacity factor. Nature Energy, 2022, 7, 608-619.	19.8	24
5	Assessment of Effective Wind Loads on Individual Plantation-Grown Forest Trees. Forests, 2022, 13, 1026.	0.9	5
6	Sounding out the repowering potential of wind energy â€" A scenario-based assessment from Germany. Journal of Cleaner Production, 2021, 293, 126094.	4.6	20
7	TreeMMoSys: A low cost sensor network to measure wind-induced tree response. HardwareX, 2021, 9, e00180.	1.1	7
8	On the spatiotemporal complementarity of the European onshore wind resource. Energy Conversion and Management, 2021, 237, 114098.	4.4	8
9	The motion of trees in the wind: a data synthesis. Biogeosciences, 2021, 18, 4059-4072.	1.3	28
10	Modeling wind turbine-related greenhouse gas payback times in Europe at high spatial resolution. Energy Conversion and Management, 2021, 243, 114334.	4.4	4
11	A global wind farm potential index to increase energy yields and accessibility. Energy, 2021, 231, 120923.	4.5	10
12	Does the winter storm-related wind gust intensity in Germany increase under warming climate? â€" A high-resolution assessment. Weather and Climate Extremes, 2021, 33, 100360.	1.6	4
13	Greenhouse Gas Savings Potential under Repowering of Onshore Wind Turbines and Climate Change: A Case Study from Germany. Wind, 2021, 1, 1-19.	0.6	3
14	Distance to power grids and consideration criteria reduce global wind energy potential the most. Journal of Cleaner Production, 2021, 317, 128472.	4.6	17
15	Getting more with less? Why repowering onshore wind farms does not always lead to more wind power generation â€" A German case study. Renewable Energy, 2021, 180, 245-257.	4.3	10
16	The role of the power law exponent in wind energy assessment: A global analysis. International Journal of Energy Research, 2021, 45, 8484-8496.	2.2	31
17	Inexpensive highâ€precision system for measuring air pressure fluctuations. Meteorological Applications, 2020, 27, e1815.	0.9	7
18	Expected Impacts of Mixing European Beech with Silver Fir on Regional Air Quality and Radiation Balance. Climate, 2020, 8, 105.	1.2	3

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19	Introducing a new approach for wind energy potential assessment under climate change at the wind turbine scale. Energy Conversion and Management, 2020, 225, 113425.	4.4	28
20	The annual cycle and intra-annual variability of the global wind power distribution estimated by the system of wind speed distributions. Sustainable Energy Technologies and Assessments, 2020, 42, 100852.	1.7	10
21	On the spatiotemporal variability and potential of complementarity of wind and solar resources. Energy Conversion and Management, 2020, 218, 113016.	4.4	49
22	Assessment of the Response of a Scots Pine Tree to Effective Wind Loading. Forests, 2020, 11, 145.	0.9	11
23	Integration of small-scale surface properties in a new high resolution global wind speed model. Energy Conversion and Management, 2020, 210, 112733.	4.4	24
24	Changing wind speed distributions under future global climate. Energy Conversion and Management, 2019, 198, 111841.	4.4	37
25	Historical Winter Storm Atlas for Germany (GeWiSA). Atmosphere, 2019, 10, 387.	1.0	17
26	Wind speed distribution selection â€“ A review of recent development and progress. Renewable and Sustainable Energy Reviews, 2019, 114, 109290.	8.2	85
27	Improving empirical storm damage models by coupling with high-resolution gust speed data. Agricultural and Forest Meteorology, 2019, 268, 23-31.	1.9	15
28	From above the forest into the soil â€“ How wind affects soil gas transport through air pressure fluctuations. Agricultural and Forest Meteorology, 2019, 265, 424-434.	1.9	24
29	The temporal variability of global wind energy â€“ Long-term trends and inter-annual variability. Energy Conversion and Management, 2019, 188, 462-472.	4.4	50
30	Precipitation Atlas for Germany (GePrA). Atmosphere, 2019, 10, 737.	1.0	2
31	1D Air Pressure Fluctuations Cannot Fully Explain the Natural Pressureâ€Pumping Effect on Soil Gas Transport. Soil Science Society of America Journal, 2019, 83, 1044-1053.	1.2	4
32	No resonant response of Scots pine trees to wind excitation. Agricultural and Forest Meteorology, 2019, 265, 227-244.	1.9	19
33	The role of air density in wind energy assessment â€“ A case study from Germany. Energy, 2019, 171, 385-392.	4.5	50
34	Non-oscillatory response to wind loading dominates movement of Scots pine trees. Agricultural and Forest Meteorology, 2018, 250-251, 209-216.	1.9	23
35	3D statistical mapping of Germanyâ€™s wind resource using WSWS. Energy Conversion and Management, 2018, 159, 96-108.	4.4	25
36	Spatio-temporal analysis of present and future precipitation responses over South Germany. Journal of Water and Climate Change, 2018, 9, 490-499.	1.2	4

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37	National and global wind resource assessment under six wind turbine installation scenarios. Energy Conversion and Management, 2018, 156, 403-415.	4.4	53
38	Fossil fuel reduction potential in Germany's transport sector by wind-to-hydrogen. International Journal of Hydrogen Energy, 2018, 43, 23161-23167.	3.8	22
39	Sensitivity analysis of the system of wind speed distributions. Energy Conversion and Management, 2018, 177, 376-384.	4.4	25
40	On the inter-annual variability of wind energy generation â€" A case study from Germany. Applied Energy, 2018, 230, 845-854.	5.1	33
41	Copula-based estimation of directional wind energy yield: A case study from Germany. Energy Conversion and Management, 2018, 169, 359-370.	4.4	24
42	Achieving Germanyâ€™s wind energy expansion target with an improved wind turbine siting approach. Energy Conversion and Management, 2018, 173, 383-398.	4.4	29
43	Introducing a system of wind speed distributions for modeling properties of wind speed regimes around the world. Energy Conversion and Management, 2017, 144, 181-192.	4.4	58
44	Global comparison of the goodness-of-fit of wind speed distributions. Energy Conversion and Management, 2017, 133, 216-234.	4.4	89
45	Development of a statistical bivariate wind speed-wind shear model (WSWS) to quantify the height-dependent wind resource. Energy Conversion and Management, 2017, 149, 303-317.	4.4	34
46	On the Annual Cycle of Meteorological and Geographical Potential of Wind Energy: A Case Study from Southwest Germany. Sustainability, 2017, 9, 1169.	1.6	17
47	Global Gust Climate Evaluation and Its Influence on Wind Turbines. Energies, 2017, 10, 1474.	1.6	18
48	The Role of Highly-Resolved Gust Speed in Simulations of Storm Damage in Forests at the Landscape Scale: A Case Study from Southwest Germany. Atmosphere, 2016, 7, 7.	1.0	17
49	Review on the Projections of Future Storminess over the North Atlantic European Region. Atmosphere, 2016, 7, 60.	1.0	47
50	Coherent Momentum Exchange above and within a Scots Pine Forest. Atmosphere, 2016, 7, 61.	1.0	9
51	Analysis of Air Pressure Fluctuations and Topsoil Gas Concentrations within a Scots Pine Forest. Atmosphere, 2016, 7, 125.	1.0	24
52	Using highly resolved maximum gust speed as predictor for forest storm damage caused by the highâ€impact winter storm Lothar in Southwest Germany. Atmospheric Science Letters, 2016, 17, 462-469.	0.8	23
53	Modelling monthly nearâ€surface maximum daily gust speed distributions in Southwest Germany. International Journal of Climatology, 2016, 36, 4058-4070.	1.5	21
54	Importance of 3-D radiant flux densities for outdoor human thermal comfort on clear-sky summer days in Freiburg, Southwest Germany. Meteorologische Zeitschrift, 2014, 23, 315-330.	0.5	71

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55	Analysis and simulation of dynamic response behavior of Scots pine trees to wind loading. International Journal of Biometeorology, 2013, 57, 819-833.	1.3	7
56	Responses of an individual deciduous broadleaved tree to wind excitation. Agricultural and Forest Meteorology, 2013, 177, 69-82.	1.9	26
57	GIS-based estimation of the winter storm damage probability in forests: a case study from Baden-Wuerttemberg (Southwest Germany). International Journal of Biometeorology, 2012, 56, 57-69.	1.3	24
58	Coherent response of a group of plantation-grown Scots pine trees to wind loading. European Journal of Forest Research, 2012, 131, 191-202.	1.1	18
59	Wind effects on trees. European Journal of Forest Research, 2012, 131, 159-163.	1.1	45
60	Vibration behavior of plantation-grown Scots pine trees in response to wind excitation. Agricultural and Forest Meteorology, 2010, 150, 984-993.	1.9	37
61	Solar radiation transmission in and around canopy gaps in an uneven-aged Nothofagus betuloides forest. International Journal of Biometeorology, 2009, 53, 355-367.	1.3	30
62	Modelling the wind damage probability in forests in Southwestern Germany for the 1999 winter storm â€˜Lotharâ€™. International Journal of Biometeorology, 2009, 53, 543-554.	1.3	29
63	Evolution of the air pollution in SW Germany evaluated by the long-term air quality index LAQx. Atmospheric Environment, 2008, 42, 5071-5078.	1.9	26
64	Responses of Scots pine trees to dynamic wind loading. Agricultural and Forest Meteorology, 2008, 148, 1733-1742.	1.9	27
65	Human thermal comfort in summer within an urban street canyon in Central Europe. Meteorologische Zeitschrift, 2008, 17, 241-250.	0.5	174
66	Assessing environmental and physiological controls over water relations in a Scots pine (Pinus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30 Plant, Cell and Environment, 2007, 30, 113-127.	2.8	83
67	Heat and drought 2003 in Europe: a climate synthesis. Annals of Forest Science, 2006, 63, 569-577.	0.8	253
68	CO2 fluxes of a Scots pine forest growing in the warm and dry southern upper Rhine plain, SW Germany. European Journal of Forest Research, 2006, 125, 201-212.	1.1	17
69	Simulation of drought for a Scots pine forest (Pinus sylvestris L.) in the southern upper Rhine plain. Meteorologische Zeitschrift, 2005, 14, 143-150.	0.5	18
70	Microclimate within beech stands?part II: thermal conditions. European Journal of Forest Research, 2004, 123, 13-28.	1.1	50
71	Highly resolved modeling of extreme wind speed in North America and Europe. Atmospheric Science Letters, 0, , .	0.8	2