Tobias Jonas

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7365834/publications.pdf

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52	2,725	172457	182427
papers	citations	29 h-index	51 g-index

54	54	54	3271
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of forest snow processes models (SnowMIP2). Journal of Geophysical Research, 2009, 114, .	3.3	290
2	How alpine plant growth is linked to snow cover and climate variability. Journal of Geophysical Research, 2008, 113, .	3.3	175
3	Simulations of future snow cover and discharge in Alpine headwater catchments. Hydrological Processes, 2009, 23, 95-108.	2.6	168
4	CO2exchange between air and water in an Arctic Alaskan and midlatitude Swiss lake: Importance of convective mixing. Journal of Geophysical Research, 2003, 108, .	3.3	153
5	Alpine Grassland Phenology as Seen in AVHRR, VEGETATION, and MODIS NDVI Time Series - a Comparison with In Situ Measurements. Sensors, 2008, 8, 2833-2853.	3.8	100
6	Alpine snow cover in a changing climate: a regional climate model perspective. Climate Dynamics, 2013, 41, 735-754.	3.8	99
7	Evaluating snow models with varying process representations for hydrological applications. Water Resources Research, 2015, 51, 2707-2723.	4.2	94
8	Snow depth mapping in high-alpine catchments using digital photogrammetry. Cryosphere, 2015, 9, 229-243.	3.9	94
9	Dynamics of snow ablation in a small Alpine catchment observed by repeated terrestrial laser scans. Hydrological Processes, 2012, 26, 1574-1585.	2.6	86
10	Canopy closure, LAI and radiation transfer from airborne LiDAR synthetic images. Agricultural and Forest Meteorology, 2014, 197, 158-168.	4.8	86
11	Recent Evidence of Large-Scale Receding Snow Water Equivalents in the European Alps. Journal of Hydrometeorology, 2017, 18, 1021-1031.	1.9	85
12	A satellite-based snow cover climatology (1985â€“2011) for the European Alps derived from AVHRR data. Cryosphere, 2014, 8, 73-90.	3.9	73
13	Influence of Initial Snowpack Properties on Runoff Formation during Rain-on-Snow Events. Journal of Hydrometeorology, 2016, 17, 1801-1815.	1.9	70
14	Comparison of different automatic methods for estimating snow water equivalent. Cold Regions Science and Technology, 2009, 57, 107-115.	3.5	69
15	Observations of a quasi shear-free lacustrine convective boundary layer: Stratification and its implications on turbulence. Journal of Geophysical Research, 2003, 108, .	3.3	65
16	Changes in alpine plant growth under future climate conditions. Biogeosciences, 2010, 7, 2013-2024.	3.3	64
17	Revisiting Snow Cover Variability and Canopy Structure Within Forest Stands: Insights From Airborne Lidar Data. Water Resources Research, 2019, 55, 6198-6216.	4.2	56
18	The role of snow interception in winterâ€time radiation processes of a coniferous subâ€alpine forest. Hydrological Processes, 2009, 23, 2498-2512.	2.6	51

#	Article	IF	Citations
19	Improved snow interception modeling using canopy parameters derived from airborne <scp>L</scp>i<scp>DAR</scp> data. Water Resources Research, 2015, 51, 5041-5059.	4.2	50
20	Comparing Aerial Lidar Observations With Terrestrial Lidar and Snowâ€Probe Transects From NASA's 2017 SnowEx Campaign. Water Resources Research, 2019, 55, 6285-6294.	4.2	49
21	Validation of a modified snow cover retrieval algorithm from historical 1-km AVHRR data over the European Alps. Remote Sensing of Environment, 2012, 121, 497-515.	11.0	44
22	Modelling liquid water transport in snow under rain-on-snow conditions â€“ considering preferential flow. Hydrology and Earth System Sciences, 2017, 21, 1741-1756.	4.9	44
23	Toward Snow Cover Estimation in Mountainous Areas Using Modern Data Assimilation Methods: A Review. Frontiers in Earth Science, 2020, 8, .	1.8	44
24	Improving representation of canopy temperatures for modeling subcanopy incoming longwave radiation to the snow surface. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9154-9172.	3.3	40
25	Modeling subcanopy incoming longwave radiation to seasonal snow using air and tree trunk temperatures. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1220-1235.	3.3	38
26	Novel forest structure metrics from airborne LiDAR data for improved snow interception estimation. Agricultural and Forest Meteorology, 2015, 208, 40-49.	4.8	36
27	A two-layer canopy model with thermal inertia for an improved snowpack energy balance below needleleaf forest (model SNOWPACK, version 3.2.1, revision 741). Geoscientific Model Development, 2015, 8, 2379-2398.	3.6	35
28	Representing spatial variability of forest snow: Implementation of a new interception model. Water Resources Research, 2016, 52, 1208-1226.	4.2	34
29	Resolving Smallâ€Scale Forest Snow Patterns Using an Energy Balance Snow Model With a Oneâ€Layer Canopy. Water Resources Research, 2020, 56, e2019WR026129.	4.2	32
30	Model simulations of the modulating effect of the snow cover in a rain-on-snow event. Hydrology and Earth System Sciences, 2014, 18, 4657-4669.	4.9	31
31	Influence of canopy shading and snow coverage on effective albedo in a snow-dominated evergreen needleleaf forest. Remote Sensing of Environment, 2018, 214, 48-58.	11.0	30
32	Measurement of Incoming Radiation below Forest Canopies: A Comparison of Different Radiometer Configurations. Journal of Hydrometeorology, 2016, 17, 853-864.	1.9	28
33	Mortality pattern of the Alpine chamois: the influence of snowâ€“meteorological factors. Annals of Glaciology, 2008, 49, 56-62.	1.4	26
34	Shading by Trees and Fractional Snow Cover Control the Subcanopy Radiation Budget. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3195-3207.	3.3	25
35	Estimating belowâ€canopy light regimes using airborne laser scanning: An application to plant community analysis. Ecology and Evolution, 2019, 9, 9149-9159.	1.9	22
36	Land surface phenology and greenness in Alpine grasslands driven by seasonal snow and meteorological factors. Science of the Total Environment, 2020, 725, 138380.	8.0	22

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37	Processâ€Level Evaluation of a Hyperâ€Resolution Forest Snow Model Using Distributed Multisensor Observations. Water Resources Research, 2020, 56, e2020WR027572.	4.2	21
38	Rainwater propagation through snowpack during rain-on-snow sprinkling experiments under different snow conditions. Hydrology and Earth System Sciences, 2017, 21, 4973-4987.	4.9	19
39	Enhancing airborne LiDAR data for improved forest structure representation in shortwave transmission models. Remote Sensing of Environment, 2020, 249, 112017.	11.0	17
40	Surface turbulence in natural waters: A comparison of large eddy simulations with microstructure observations. Journal of Geophysical Research, 2000, 105, 1195-1207.	3.3	16
41	Increasing the Physical Representation of Forestâ€Snow Processes in Coarseâ€Resolution Models: Lessons Learned From Upscaling Hyperâ€Resolution Simulations. Water Resources Research, 2021, 57, e2020WR029064.	4.2	16
42	Snow interception modelling: Isolated observations have led to many land surface models lacking appropriate temperature sensitivities. Hydrological Processes, 2021, 35, e14274.	2.6	15
43	Measuring snow ablation rates in alpine terrain with a mobile multioffset groundâ€penetrating radar system. Hydrological Processes, 2018, 32, 3272-3282.	2.6	14
44	HPEval: A canopy shortwave radiation transmission model using high-resolution hemispherical images. Agricultural and Forest Meteorology, 2020, 284, 107903.	4.8	13
45	Spatially Continuous Characterization of Forest Canopy Structure and Subcanopy Irradiance Derived from Handheld Radiometer Surveys. Journal of Hydrometeorology, 2019, 20, 1417-1433.	1.9	12
46	Hatching phenology is lagging behind an advancing snowmelt pattern in a high-alpine bird. Scientific Reports, 2021, 11, 22191.	3.3	11
47	Simulation of Longwave Enhancement in Boreal and Montane Forests. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,731.	3.3	10
48	Fractional snow-covered area: scale-independent peak of winter parameterization. Cryosphere, 2021, 15, 615-632.	3.9	10
49	Effect of Forest Canopy Structure on Wintertime Land Surface Albedo: Evaluating CLM5 Simulations With Inâ€Situ Measurements. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034118.	3.3	10
50	Spatio-temporal aspects of snowpack runoff formation during rain on snow. Hydrological Processes, 2018, 32, 3434-3445.	2.6	9
51	Exploring snow distribution dynamics in steep forested slopes with UAV-borne LiDAR. Cold Regions Science and Technology, 2022, 200, 103587.	3.5	9
52	Internal wave generation in lakes with very slow flow. , 1999, , .		8