Keith N Musselman

List of Publications by Year
in descending order

29 papers	1,999 citations	331670 21 h-index	477307 29 g-index
40 all docs	40 docs citations	40 times ranked	2137 citing authors

#	Article	IF	Citations
1	Extending the vadose zone: Characterizing the role of snow for liquid water storage and transmission in streamflow generation. Hydrological Processes, 2022, 36, .	2.6	1
2	Pervasive alterations to snow-dominated ecosystem functions under climate change. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	13
3	Winter melt trends portend widespread declines in snow water resources. Nature Climate Change, 2021, 11, 418-424.	18.8	110
4	Snowfall and snowpack in the Western U.S. as captured by convection permitting climate simulations: current climate and pseudo global warming future climate. Climate Dynamics, 2021, 57, 2191-2215.	3.8	27
5	Spatial Distribution and Scaling Properties of Lidarâ€Derived Snow Depth in the Extratropical Andes. Water Resources Research, 2020, 56, e2020WR028480.	4.2	7
6	Data Assimilation Improves Estimates of Climate-Sensitive Seasonal Snow. Current Climate Change Reports, 2020, 6, 81-94.	8.6	27
7	Interannual and Seasonal Variability of Snow Depth Scaling Behavior in a Subalpine Catchment. Water Resources Research, 2020, 56, e2020WR027343.	4.2	15
8	Extreme Runoff Generation From Atmospheric River Driven Snowmelt During the 2017 Oroville Dam Spillways Incident. Geophysical Research Letters, 2020, 47, e2020GL088189.	4.0	38
9	The Post-Wildfire Impact of Burn Severity and Age on Black Carbon Snow Deposition and Implications for Snow Water Resources, Cascade Range, Washington. Journal of Hydrometeorology, 2020, 21, 1777-1792.	1.9	11
10	Projected increases and shifts in rain-on-snow flood risk over western North America. Nature Climate Change, 2018, 8, 808-812.	18.8	261
11	Solar radiation transmittance of a boreal balsam fir canopy: Spatiotemporal variability and impacts on growing season hydrology. Agricultural and Forest Meteorology, 2018, 263, 1-14.	4.8	19
12	Estimation of Needleleaf Canopy and Trunk Temperatures and Longwave Contribution to Melting Snow. Journal of Hydrometeorology, 2017, 18, 555-572.	1.9	32
13	Slower snowmelt in a warmer world. Nature Climate Change, 2017, 7, 214-219.	18.8	354
14	Different sensitivities of snowpacks to warming in Mediterranean climate mountain areas. Environmental Research Letters, 2017, 12, 074006.	5.2	73
15	Snowmelt response to simulated warming across a large elevation gradient, southern Sierra Nevada, California. Cryosphere, 2017, 11, 2847-2866.	3.9	29
16	Soil moisture response to snowmelt timing in mixedâ€conifer subalpine forests. Hydrological Processes, 2015, 29, 2782-2798.	2.6	92
17	Impact of windflow calculations on simulations of alpine snow accumulation, redistribution and ablation. Hydrological Processes, 2015, 29, 3983-3999.	2.6	41
18	Laser vision: lidar as a transformative tool to advance critical zone science. Hydrology and Earth System Sciences, 2015, 19, 2881-2897.	4.9	37

#	Article	IF	Citations
19	Variability in shortwave irradiance caused by forest gaps: Measurements, modelling, and implications for snow energetics. Agricultural and Forest Meteorology, 2015, 207, 69-82.	4.8	62
20	Snowpack-climate manipulation using infrared heaters in subalpine forests of the Southern Rocky Mountains, USA. Agricultural and Forest Meteorology, 2015, 203, 142-157.	4.8	17
21	Modelling the effects of the mountain pine beetle on snowmelt in a subalpine forest. Ecohydrology, 2014, 7, 226-241.	2.4	18
22	LiDARâ€derived snowpack data sets from mixed conifer forests across the Western United States. Water Resources Research, 2014, 50, 2749-2755.	4.2	75
23	Small scale spatial variability of snow density and depth over complex alpine terrain: Implications for estimating snow water equivalent. Advances in Water Resources, 2013, 55, 40-52.	3.8	136
24	Estimation of solar direct beam transmittance of conifer canopies from airborne LiDAR. Remote Sensing of Environment, 2013, 136, 402-415.	11.0	70
25	Influence of canopy structure and direct beam solar irradiance on snowmelt rates in a mixed conifer forest. Agricultural and Forest Meteorology, 2012, 161, 46-56.	4.8	74
26	Assessment of Snow Grain-Size Model and Stratigraphy Representation Impacts on Snow Radiance Assimilation: Forward Modeling Evaluation. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 4551-4564.	6.3	31
27	Improved snowmelt simulations with a canopy model forced with photoâ€derived direct beam canopy transmissivity. Water Resources Research, 2012, 48, .	4.2	35
28	Ecohydrological controls on snowmelt partitioning in mixedâ€conifer subâ€alpine forests. Ecohydrology, 2009, 2, 129-142.	2.4	137
29	Effects of vegetation on snow accumulation and ablation in a midâ€latitude subâ€alpine forest. Hydrological Processes, 2008, 22, 2767-2776.	2.6	153