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	Slower snowmelt in a warmer world. Nature Climate Change, 2017, 7, 214-219.	18.8	354
2	Projected increases and shifts in rain-on-snow flood risk over western North America. Nature Climate Change, 2018, 8, 808-812.	18.8	261
3	Effects of vegetation on snow accumulation and ablation in a midâ€latitude subâ€alpine forest. Hydrological Processes, 2008, 22, 2767-2776.	2.6	153
4	Ecohydrological controls on snowmelt partitioning in mixedâ€conifer subâ€alpine forests. Ecohydrology, 2009, 2, 129-142.	2.4	137
5	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
6	Winter melt trends portend widespread declines in snow water resources. Nature Climate Change, 2021, 11, 418-424.	18.8	110
7	Soil moisture response to snowmelt timing in mixedâ€conifer subalpine forests. Hydrological Processes, 2015, 29, 2782-2798.	2.6	92
8	LiDARâ€derived snowpack data sets from mixed conifer forests across the Western United States. Water Resources Research, 2014, 50, 2749-2755.	4.2	75
9	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
10	Different sensitivities of snowpacks to warming in Mediterranean climate mountain areas. Environmental Research Letters, 2017, 12, 074006.	5.2	73
11	Estimation of solar direct beam transmittance of conifer canopies from airborne LiDAR. Remote Sensing of Environment, 2013, 136, 402-415.	11.0	70
12	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
13	Impact of windflow calculations on simulations of alpine snow accumulation, redistribution and ablation. Hydrological Processes, 2015, 29, 3983-3999.	2.6	41
14	Extreme Runoff Generation From Atmospheric River Driven Snowmelt During the 2017 Oroville Dam Spillways Incident. Geophysical Research Letters, 2020, 47, e2020GL088189.	4.0	38
15	Laser vision: lidar as a transformative tool to advance critical zone science. Hydrology and Earth System Sciences, 2015, 19, 2881-2897.	4.9	37
16	Improved snowmelt simulations with a canopy model forced with photoâ€derived direct beam canopy transmissivity. Water Resources Research, 2012, 48, .	4.2	35
17	Estimation of Needleleaf Canopy and Trunk Temperatures and Longwave Contribution to Melting Snow. Journal of Hydrometeorology, 2017, 18, 555-572.	1.9	32
18	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

#	Article	IF	Citations
19	Snowmelt response to simulated warming across a large elevation gradient, southern Sierra Nevada, California. Cryosphere, 2017, 11, 2847-2866.	3.9	29
20	Data Assimilation Improves Estimates of Climate-Sensitive Seasonal Snow. Current Climate Change Reports, 2020, 6, 81-94.	8.6	27
21	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
22	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
23	Modelling the effects of the mountain pine beetle on snowmelt in a subalpine forest. Ecohydrology, 2014, 7, 226-241.	2.4	18
24	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
25	Interannual and Seasonal Variability of Snow Depth Scaling Behavior in a Subalpine Catchment. Water Resources Research, 2020, 56, e2020WR027343.	4.2	15
26	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
27	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
28	Spatial Distribution and Scaling Properties of Lidarâ€Derived Snow Depth in the Extratropical Andes. Water Resources Research, 2020, 56, e2020WR028480.	4.2	7
29	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