Daniel Viviroli

List of Publications by Year
in descending order

38 papers	4,862 citations	257450 24 h-index	345221 36 g-index
54 all docs	54 docs citations	54 times ranked	5462 citing authors

#	Article	IF	Citations
1	Importance and vulnerability of the worldâ€™s water towers. Nature, 2020, 577, 364-369.	27.8	885
2	Mountains of the world, water towers for humanity: Typology, mapping, and global significance. Water Resources Research, 2007, 43, .	4.2	839
3	Climate change and mountain water resources: overview and recommendations for research, management and policy. Hydrology and Earth System Sciences, 2011, 15, 471-504.	4.9	476
4	Global monthly water stress: 2. Water demand and severity of water stress. Water Resources Research, 2011, 47, .	4.2	342
5	The hydrological significance of mountains: from regional to global scale. Hydrology and Earth System Sciences, 2004, 8, 1017-1030.	4.9	256
6	An introduction to the hydrological modelling system PREVAH and its pre- and post-processing-tools. Environmental Modelling and Software, 2009, 24, 1209-1222.	4.5	218
7	Assessing the Hydrological Significance of the World's Mountains. Mountain Research and Development, 2003, 23, 32-40.	1.0	188
8	The potential for snow to supply human water demand in the present and future. Environmental Research Letters, 2015, 10, 114016.	5.2	178
9	Increasing dependence of lowland populations on mountain water resources. Nature Sustainability, 2020, 3, 917-928.	23.7	156
10	Over the hills and further away from coast: global geospatial patterns of human and environment over the 20thâ€“21st centuries. Environmental Research Letters, 2016, 11, 034010.	5.2	143
11	Continuous simulation for flood estimation in ungauged mesoscale catchments of Switzerland â€“ Part II: Parameter regionalisation and flood estimation results. Journal of Hydrology, 2009, 377, 208-225.	5.4	119
12	Mountains of the World: Vulnerable Water Towers for the 21st Century. Ambio, 2004, 33, 29.	5.5	112
13	Floodâ€type classification in mountainous catchments using crisp and fuzzy decision trees. Water Resources Research, 2015, 51, 7959-7976.	4.2	88
14	Impacts of environmental change on water resources in the Mt. Kenya region. Journal of Hydrology, 2007, 343, 266-278.	5.4	85
15	Seasonality and magnitude of floods in Switzerland under future climate change. Hydrological Processes, 2014, 28, 2567-2578.	2.6	80
16	Continuous simulation for flood estimation in ungauged mesoscale catchments of Switzerland â€“ Part I: Modelling framework and calibration results. Journal of Hydrology, 2009, 377, 191-207.	5.4	76
17	Flood type specific construction of synthetic design hydrographs. Water Resources Research, 2017, 53, 1390-1406.	4.2	65
18	Water resources in mountain regions: a methodological approach to assess the water balance in a highland-lowland-system. Hydrological Processes, 2007, 21, 578-585.	2.6	60

#	Article	IF	Citations
19	Marked isotopic variability within and between the Amazon River and marine dissolved black carbon pools. Nature Communications, 2019, 10, 4018.	12.8	47
20	Climate change risks pushing one-third of global food production outside the safe climatic space. One Earth, 2021, 4, 720-729.	6.8	45
21	Prediction of hydrographs and flow-duration curves in almost ungauged catchments: Which runoff measurements are most informative for model calibration?. Journal of Hydrology, 2017, 554, 613-622.	5.4	37
22	Relating climate change signals and physiographic catchment properties to clustered hydrological response types. Hydrology and Earth System Sciences, 2012, 16, 2267-2283.	4.9	34
23	Synthetic design hydrographs for ungauged catchments: a comparison of regionalization methods. Stochastic Environmental Research and Risk Assessment, 2018, 32, 1993-2023.	4.0	30
24	Effective precipitation duration for runoff peaks based on catchment modelling. Journal of Hydrology, 2018, 556, 510-522.	5.4	30
25	How does climate change affect mesoscale catchments in Switzerland? â€“ a framework for a comprehensive assessment. Advances in Geosciences, 0, 27, 111-119.	12.0	29
26	â€œWater Towersâ€â€”A Global View of the Hydrological Importance of Mountains. , 2008, , 15-20.		27
27	Hydrological model calibration with uncertain discharge data. Hydrological Sciences Journal, 2022, 67, 2441-2456.	2.6	26
28	The importance of glacier and forest change in hydrological climate-impact studies. Hydrology and Earth System Sciences, 2013, 17, 619-635.	4.9	22
29	Influence of internal variability on population exposure to hydroclimatic changes. Environmental Research Letters, 2017, 12, 044007.	5.2	22
30	Can a regionalized model parameterisation be improved with a limited number of runoff measurements?. Journal of Hydrology, 2015, 529, 49-61.	5.4	21
31	Identification of Flood Reactivity Regions via the Functional Clustering of Hydrographs. Water Resources Research, 2018, 54, 1852-1867.	4.2	19
32	Value of a Limited Number of Discharge Observations for Improving Regionalization: A Largeâ€Sample Study Across the United States. Water Resources Research, 2019, 55, 363-377.	4.2	18
33	Mountain Observatories: Status and Prospects for Enhancing and Connecting a Global Community. Mountain Research and Development, 2021, 41, .	1.0	18
34	The Significance of Mountains as Sources of the World's Fresh Water. Gaia, 2002, 11, 182-186.	0.7	9
35	Comparing model complexity for glacio-hydrological simulation in the data-scarce Peruvian Andes. Journal of Hydrology: Regional Studies, 2021, 37, 100932.	2.4	6
36	On the risk of obtaining misleading results by pooling streamflow data for trend analyses. Water Resources Research, 2012, 48, .	4.2	4

#	Article	IF	Citations
37	Snow and ice in the hydrosphere. , 2021, , 93-135.		3
38	Comments: A New Typology for Mountains and Other Relief Classes: An Application to Global Continental Water Resources and Population Distribution. Mountain Research and Development, 2001, 21, 307-307.	1.0	2