Sergiy Vorogushyn

List of Publications by Year
in descending order

69 papers	3,602 citations	136885 32 h-index	138417 58 g-index
102 all docs	102 docs citations	102 times ranked	3545 citing authors

#	Article	IF	Citations
1	Substantial glacier mass loss in the Tien Shan over the past 50 years. Nature Geoscience, 2015, 8, 716-722.	5.4	332
2	What do we know about past changes in the water cycle of Central Asian headwaters? A review. Global and Planetary Change, 2013, 110, 4-25.	1.6	206
3	Causes, impacts and patterns of disastrous river floods. Nature Reviews Earth & Environment, 2021, 2, 592-609.	12.2	175
4	HESS Opinions "More efforts and scientific rigour are needed to attribute trends in flood time series". Hydrology and Earth System Sciences, 2012, 16, 1379-1387.	1.9	172
5	Adaptation to flood risk: Results of international paired flood event studies. Earth's Future, 2017, 5, 953-965.	2.4	156
6	Attribution of streamflow trends in snow and glacier meltâ€dominated catchments of the <scp>T</scp>arim <scp>R</scp>iver, Central <scp>A</scp>sia. Water Resources Research, 2015, 51, 4727-4750.	1.7	146
7	A new methodology for flood hazard assessment considering dike breaches. Water Resources Research, 2010, 46, .	1.7	117
8	Spatially coherent flood risk assessment based on long-term continuous simulation with a coupled model chain. Journal of Hydrology, 2015, 524, 182-193.	2.3	115
9	Probabilistic flood hazard mapping: effects of uncertain boundary conditions. Hydrology and Earth System Sciences, 2013, 17, 3127-3140.	1.9	100
10	Analysis of a detention basin impact on dike failure probabilities and flood risk for a channel-dike-floodplain system along the river Elbe, Germany. Journal of Hydrology, 2012, 436-437, 120-131.	2.3	86
11	Changes in glacierisation, climate and runoff in the second half of the 20th century in the Naryn basin, Central Asia. Global and Planetary Change, 2013, 110, 51-61.	1.6	86
12	Causative classification of river flood events. Wiley Interdisciplinary Reviews: Water, 2019, 6, e1353.	2.8	86
13	Charting unknown watersâ€"On the role of surprise in flood risk assessment and management. Water Resources Research, 2015, 51, 6399-6416.	1.7	83
14	Continuous, largeâ€scale simulation model for flood risk assessments: proofâ€ofâ€concept. Journal of Flood Risk Management, 2016, 9, 3-21.	1.6	82
15	Development of dike fragility curves for piping and micro-instability breach mechanisms. Natural Hazards and Earth System Sciences, 2009, 9, 1383-1401.	1.5	81
16	Drivers of flood risk change in residential areas. Natural Hazards and Earth System Sciences, 2012, 12, 1641-1657.	1.5	81
17	Identification of coherent flood regions across Europe by using the longest streamflow records. Journal of Hydrology, 2015, 528, 341-360.	2.3	79
18	The value of satelliteâ€derived snow cover images for calibrating a hydrological model in snowâ€dominated catchments in Central Asia. Water Resources Research, 2014, 50, 2002-2021.	1.7	77

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19	Joint Trends in Flood Magnitudes and Spatial Extents Across Europe. Geophysical Research Letters, 2020, 47, e2020GL087464.	1.5	75
20	Evaluation of areal precipitation estimates based on downscaled reanalysis and station data by hydrological modelling. Hydrology and Earth System Sciences, 2013, 17, 2415-2434.	1.9	68
21	Hess Opinions: An interdisciplinary research agenda to explore the unintended consequences of structural flood protection. Hydrology and Earth System Sciences, 2018, 22, 5629-5637.	1.9	67
22	Hydraulic model evaluation for largeâ€scale flood risk assessments. Hydrological Processes, 2013, 27, 1331-1340.	1.1	61
23	Projections for headwater catchments of the Tarim River reveal glacier retreat and decreasing surface water availability but uncertainties are large. Environmental Research Letters, 2016, 11, 054024.	2.2	51
24	Evolutionary leap in largeâ€scale flood risk assessment needed. Wiley Interdisciplinary Reviews: Water, 2018, 5, e1266.	2.8	50
25	Flood trends along the Rhine: the role of river training. Hydrology and Earth System Sciences, 2013, 17, 3871-3884.	1.9	48
26	Analysis of changes in climate and river discharge with focus on seasonal runoff predictability in the Aksu River Basin. Environmental Earth Sciences, 2015, 73, 501-516.	1.3	47
27	The Value of Empirical Data for Estimating the Parameters of a Sociohydrological Flood Risk Model. Water Resources Research, 2019, 55, 1312-1336.	1.7	43
28	Temporal clustering of floods in Germany: Do flood-rich and flood-poor periods exist?. Journal of Hydrology, 2016, 541, 824-838.	2.3	41
29	Do small and large floods have the same drivers of change? A regional attribution analysis in Europe. Hydrology and Earth System Sciences, 2021, 25, 1347-1364.	1.9	39
30	A continuous modelling approach for design flood estimation on sub-daily time scale. Hydrological Sciences Journal, 2019, 64, 539-554.	1.2	38
31	The benefits of gravimeter observations for modelling water storage changes at the field scale. Hydrology and Earth System Sciences, 2010, 14, 1715-1730.	1.9	35
32	Variability of the Cold Season Climate in Central Asia. Part I: Weather Types and Their Tropical and Extratropical Drivers. Journal of Climate, 2018, 31, 7185-7207.	1.2	33
33	Snow-cover reconstruction methodology for mountainous regions based on historic in situ observations and recent remote sensing data. Cryosphere, 2015, 9, 451-463.	1.5	32
34	Statistical forecast of seasonal discharge in Central Asia using observational records: development of a generic linear modelling tool for operational water resource management. Hydrology and Earth System Sciences, 2018, 22, 2225-2254.	1.9	32
35	Constraining hydrological model parameters using water isotopic compositions in a glacierized basin, Central Asia. Journal of Hydrology, 2019, 571, 332-348.	2.3	31
36	A statistically based seasonal precipitation forecast model with automatic predictor selection and its application to central and south Asia. Hydrology and Earth System Sciences, 2016, 20, 4605-4623.	1.9	29

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37	Re-establishing glacier monitoring in Kyrgyzstan and Uzbekistan, Central Asia. Geoscientific Instrumentation, Methods and Data Systems, 2017, 6, 397-418.	0.6	29
38	Stochastic generation of spatially coherent river discharge peaks for continental event-based flood risk assessment. Natural Hazards and Earth System Sciences, 2019, 19, 1041-1053.	1.5	28
39	Evaluation of remotely sensed snow cover product in Central Asia. Hydrology Research, 2013, 44, 506-522.	1.1	27
40	Spatial coherence of flood-rich and flood-poor periods across Germany. Journal of Hydrology, 2018, 559, 813-826.	2.3	27
41	The impact of the uncertainty of dike breach development time on flood hazard. Physics and Chemistry of the Earth, 2011, 36, 319-323.	1.2	25
42	How do changes along the risk chain affect flood risk?. Natural Hazards and Earth System Sciences, 2018, 18, 3089-3108.	1.5	25
43	The role of spatial dependence for large-scale flood risk estimation. Natural Hazards and Earth System Sciences, 2020, 20, 967-979.	1.5	25
44	Understanding Heavy Tails of Flood Peak Distributions. Water Resources Research, 2022, 58, .	1.7	23
45	MODSNOW-Tool: an operational tool for daily snow cover monitoring using MODIS data. Environmental Earth Sciences, 2016, 75, 1.	1.3	22
46	CEDIM Risk Explorer â€“ a map server solution in the project "Risk Map Germany". Natural Hazards and Earth System Sciences, 2006, 6, 711-720.	1.5	20
47	The Value of Hydrograph Partitioning Curves for Calibrating Hydrological Models in Glacierized Basins. Water Resources Research, 2018, 54, 2336-2361.	1.7	19
48	Levee Breaching: A New Extension to the LISFLOOD-FP Model. Water (Switzerland), 2020, 12, 942.	1.2	19
49	Comparing Bayesian and traditional end-member mixing approaches for hydrograph separation in aÂglacierized basin. Hydrology and Earth System Sciences, 2020, 24, 3289-3309.	1.9	18
50	Can local climate variability be explained by weather patterns? A multi-station evaluation for the Rhine basin. Hydrology and Earth System Sciences, 2016, 20, 4283-4306.	1.9	17
51	The role of flood wave superposition in the severity of large floods. Hydrology and Earth System Sciences, 2020, 24, 1633-1648.	1.9	17
52	Comparative analysis of scalar upper tail indicators. Hydrological Sciences Journal, 2020, 65, 1625-1639.	1.2	14
53	Variability of the Cold Season Climate in Central Asia. Part II: Hydroclimatic Predictability. Journal of Climate, 2019, 32, 6015-6033.	1.2	13
54	Biases in national and continental flood risk assessments by ignoring spatial dependence. Scientific Reports, 2020, 10, 19387.	1.6	13

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55	Do Changing Weather Types Explain Observed Climatic Trends in the Rhine Basin? An Analysis of Withinâ€• and Betweenâ€Type Changes. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1562-1584.	1.2	11
56	Climate informed seasonal forecast of water availability in Central Asia: State-of-the-art and decision making context. Water Security, 2020, 10, 100061.	1.2	11
57	Processâ€Based Flood Risk Assessment for Germany. Earth's Future, 2021, 9, e2021EF002259.	2.4	11
58	Impacts of Climate Change in Central Asia. , 2018, , 195-203.		9
59	Multi-hazard fragility analysis for fluvial dikes in earthquake- and flood-prone areas. Natural Hazards and Earth System Sciences, 2018, 18, 2345-2354.	1.5	9
60	Comprehensive evaluation of an improved largeâ€scale multiâ€site weather generator for Germany. International Journal of Climatology, 2021, 41, 4933-4956.	1.5	8
61	Comparative evaluation of two types of stochastic weather generators for synthetic precipitation in the Rhine basin. Journal of Hydrology, 2021, 601, 126544.	2.3	7
62	Large-scale stochastic flood hazard analysis applied to the Po River. Natural Hazards, 2020, 104, 2027-2049.	1.6	6
63	Event generation for probabilistic flood risk modelling: multi-site peak flow dependence model vs.Âweather-generator-based approach. Natural Hazards and Earth System Sciences, 2020, 20, 1689-1703.	1.5	5
64	Harmonizing and comparing single-type natural hazard risk estimations. Annals of Geophysics, 2016, 59, .	0.5	5
65	Event and Catchment Controls of Heavy Tail Behavior of Floods. Water Resources Research, 2022, 58, .	1.7	5
66	Reconstructed Centennial Mass Balance Change for Golubin Glacier, Northern Tien Shan. Atmosphere, 2022, 13, 954.	1.0	4
67	Large-scale flood risk assessment using a coupled model chain. E3S Web of Conferences, 2016, 7, 11005.	0.2	2
68	On the role of floodplain storage and hydrodynamic interactions in flood risk estimation. Hydrological Sciences Journal, 2022, 67, 508-534.	1.2	2
69	Estimating parameter values of a socio-hydrological flood model. Proceedings of the International Association of Hydrological Sciences, 0, 379, 193-198.	1.0	0