Sergiy Vorogushyn

List of Publications by Citations

72 papers	2,502 citations	26 h-index	49 g-index
102 ext. papers	3,018 ext. citations	5.1 avg, IF	5.11 L-index

#	Paper	IF	Citations
72	Substantial glacier mass loss in the Tien Shan over the past 50 years. *Nature Geoscience*, **2015**, 8, 716-722	18.3	260
71	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	4.2	166
70	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	5.5	141
69	Adaptation to flood risk: Results of international paired flood event studies. *Earth's Future*, **2017**, 5, 953-965	7.9	111
68	Attribution of streamflow trends in snow and glacier melt-dominated catchments of the Tarim River, Central Asia. *Water Resources Research*, **2015**, 51, 4727-4750	5.4	110
67	A new methodology for flood hazard assessment considering dike breaches. *Water Resources Research*, **2010**, 46,	5.4	97
66	Spatially coherent flood risk assessment based on long-term continuous simulation with a coupled model chain. *Journal of Hydrology*, **2015**, 524, 182-193	6	95
65	Probabilistic flood hazard mapping: effects of uncertain boundary conditions. *Hydrology and Earth System Sciences*, **2013**, 17, 3127-3140	5.5	73
64	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	6	72
63	Drivers of flood risk change in residential areas. *Natural Hazards and Earth System Sciences*, **2012**, 12, 1641-1657	3.9	70
62	Development of dike fragility curves for piping and micro-instability breach mechanisms. *Natural Hazards and Earth System Sciences*, **2009**, 9, 1383-1401	3.9	69
61	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	4.2	67
60	Identification of coherent flood regions across Europe by using the longest streamflow records. *Journal of Hydrology*, **2015**, 528, 341-360	6	65
59	Continuous, large-scale simulation model for flood risk assessments: proof-of-concept. *Journal of Flood Risk Management*, **2016**, 9, 3-21	3.1	62
58	Evaluation of areal precipitation estimates based on downscaled reanalysis and station data by hydrological modelling. *Hydrology and Earth System Sciences*, **2013**, 17, 2415-2434	5.5	55
57	The value of satellite-derived snow cover images for calibrating a hydrological model in snow-dominated catchments in Central Asia. *Water Resources Research*, **2014**, 50, 2002-2021	5.4	52
56	Charting unknown waters□On the role of surprise in flood risk assessment and management. *Water Resources Research*, **2015**, 51, 6399-6416	5.4	52

55	Hess Opinions: An interdisciplinary research agenda to explore the unintended consequences of structural flood protection. *Hydrology and Earth System Sciences*, **2018**, 22, 5629-5637	5.5	50
54	Hydraulic model evaluation for large-scale flood risk assessments. *Hydrological Processes*, **2013**, 27, 1331-1340	3.3	47
53	Causative classification of river flood events. *Wiley Interdisciplinary Reviews: Water*, **2019**, 6, e1353	5.7	45
52	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	6.2	44
51	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	2.9	41
50	Evolutionary leap in large-scale flood risk assessment needed. *Wiley Interdisciplinary Reviews: Water* , **2018**, 5, e1266	5.7	38
49	Flood trends along the Rhine: the role of river training. *Hydrology and Earth System Sciences*, **2013**, 17, 3871-3884	5.5	38
48	Joint Trends in Flood Magnitudes and Spatial Extents Across Europe.. *Geophysical Research Letters*, **2020**, 47, e2020GL087464	4.9	36
47	Temporal clustering of floods in Germany: Do flood-rich and flood-poor periods exist?. *Journal of Hydrology*, **2016**, 541, 824-838	6	32
46	The benefits of gravimeter observations for modelling water storage changes at the field scale. *Hydrology and Earth System Sciences*, **2010**, 14, 1715-1730	5.5	26
45	Causes, impacts and patterns of disastrous river floods. *Nature Reviews Earth & Environment*, **2021**, 2, 592-609	30.2	26
44	Snow-cover reconstruction methodology for mountainous regions based on historic in situ observations and recent remote sensing data. *Cryosphere*, **2015**, 9, 451-463	5.5	24
43	Evaluation of remotely sensed snow cover product in Central Asia **2013**, 44, 506-522		24
42	The Value of Empirical Data for Estimating the Parameters of a Sociohydrological Flood Risk Model. *Water Resources Research*, **2019**, 55, 1312-1336	5.4	22
41	Spatial coherence of flood-rich and flood-poor periods across Germany. *Journal of Hydrology*, **2018**, 559, 813-826	6	22
40	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	5.5	21
39	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	3.9	20
38	MODSNOW-Tool: an operational tool for daily snow cover monitoring using MODIS data. *Environmental Earth Sciences*, **2016**, 75, 1	2.9	20

37	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	5.5	20
36	A continuous modelling approach for design flood estimation on sub-daily time scale. *Hydrological Sciences Journal*, **2019**, 64, 539-554	3.5	19
35	Re-establishing glacier monitoring in Kyrgyzstan and Uzbekistan, Central Asia. *Geoscientific Instrumentation, Methods and Data Systems*, **2017**, 6, 397-418	1.5	19
34	How do changes along the risk chain affect flood risk?. *Natural Hazards and Earth System Sciences*, **2018**, 18, 3089-3108	3.9	19
33	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	4.4	19
32	CEDIM Risk Explorer &#55357;&#56496; map server solution in the project "Risk Map Germany". *Natural Hazards and Earth System Sciences*, **2006**, 6, 711-720	3.9	17
31	The impact of the uncertainty of dike breach development time on flood hazard. *Physics and Chemistry of the Earth*, **2011**, 36, 319-323	3	16
30	Constraining hydrological model parameters using water isotopic compositions in a glacierized basin, Central Asia. *Journal of Hydrology*, **2019**, 571, 332-348	6	15
29	The role of spatial dependence for large-scale flood risk estimation. *Natural Hazards and Earth System Sciences*, **2020**, 20, 967-979	3.9	15
28	The Value of Hydrograph Partitioning Curves for Calibrating Hydrological Models in Glacierized Basins. *Water Resources Research*, **2018**, 54, 2336-2361	5.4	13
27	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	5.5	13
26	Variability of the Cold Season Climate in Central Asia. Part II: Hydroclimatic Predictability. *Journal of Climate*, **2019**, 32, 6015-6033	4.4	10
25	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	5.5	10
24	Do Changing Weather Types Explain Observed Climatic Trends in the Rhine Basin? An Analysis of Within- and Between-Type Changes. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 1562-1584	4.4	8
23	Evaluation of areal precipitation estimates based on downscaled reanalysis and station data by hydrological modelling		7
22	The role of flood wave superposition in the severity of large floods. *Hydrology and Earth System Sciences*, **2020**, 24, 1633-1648	5.5	7
21	Levee Breaching: A New Extension to the LISFLOOD-FP Model. *Water (Switzerland)*, **2020**, 12, 942	3	6
20	Impacts of Climate Change in Central Asia **2018**, 195-203		6

19	Comparing Bayesian and traditional end-member mixing approaches for hydrograph separation in a glacierized basin. *Hydrology and Earth System Sciences*, **2020**, 24, 3289-3309	5.5	6
18	Multi-hazard fragility analysis for fluvial dikes in earthquake- and flood-prone areas. *Natural Hazards and Earth System Sciences*, **2018**, 18, 2345-2354	3.9	6
17	Biases in national and continental flood risk assessments by ignoring spatial dependence. *Scientific Reports*, **2020**, 10, 19387	4.9	4
16	Climate informed seasonal forecast of water availability in Central Asia: State-of-the-art and decision making context. *Water Security*, **2020**, 10, 100061	3.8	4
15	Event generation for probabilistic flood risk modelling: multi-site peak flow dependence model vs. weather-generator-based approach. *Natural Hazards and Earth System Sciences*, **2020**, 20, 1689-1703	3.9	4
14	Large-scale stochastic flood hazard analysis applied to the Po River. *Natural Hazards*, **2020**, 104, 2027-2049	3	4
13	Comparative analysis of scalar upper tail indicators. *Hydrological Sciences Journal*, **2020**, 65, 1625-1639	3.5	3
12	Harmonizing and comparing single-type natural hazard risk estimations. *Annals of Geophysics*, **2016**, 59,	1.1	3
11	Re-establishing glacier monitoring in Kyrgyzstan and Uzbekistan, Central Asia **2017**,		2
10	Statistical forecast of seasonal discharge in Central Asia for water resources management: development of a generic linear modelling tool for operational use		2
9	Hess Opinions: An interdisciplinary research agenda to explore the unintended consequences of structural flood protection		2
8	Effects of rating-curve uncertainty on probabilistic flood mapping		2
7	Comprehensive evaluation of an improved large-scale multi-site weather generator for Germany. *International Journal of Climatology*, **2021**, 41, 4933-4956	3.5	2
6	Large-scale flood risk assessment using a coupled model chain. *E3S Web of Conferences*, **2016**, 7, 11005	0.5	2
5	What drives flood trends along the Rhine River: climate or river training?		1
4	Process-Based Flood Risk Assessment for Germany. *Earth's Future*, **2021**, 9, e2021EF002259	7.9	1
3	Comparative evaluation of two types of stochastic weather generators for synthetic precipitation in the Rhine basin. *Journal of Hydrology*, **2021**, 601, 126544	6	1
2	From Precipitation to Damage. *Geophysical Monograph Series*, **2018**, 169-183	1.1	0

1 Estimating parameter values of a socio-hydrological flood model. *Proceedings of the International Association of Hydrological Sciences*,379, 193-198