Hester Biemans

List of Publications by Year
in descending order

33 papers	5,094 citations	279798 23 h-index	377865 34 g-index
36 all docs	36 docs citations	36 times ranked	6619 citing authors

#	Article	IF	Citations
1	Global water resources affected by human interventions and climate change. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3251-3256.	7.1	971
2	Importance and vulnerability of the worldâ€™s water towers. Nature, 2020, 577, 364-369.	27.8	885
3	Impact of reservoirs on river discharge and irrigation water supply during the 20th century. Water Resources Research, 2011, 47, .	4.2	340
4	Accounting for environmental flow requirements in global water assessments. Hydrology and Earth System Sciences, 2014, 18, 5041-5059.	4.9	295
5	Selecting representative climate models for climate change impact studies: an advanced envelopeâ€based selection approach. International Journal of Climatology, 2016, 36, 3988-4005.	3.5	262
6	Global Water Availability and Requirements for Future Food Production. Journal of Hydrometeorology, 2011, 12, 885-899.	1.9	233
7	Exploring SSP land-use dynamics using the IMAGE model: Regional and gridded scenarios of land-use change and land-based climate change mitigation. Global Environmental Change, 2018, 48, 119-135.	7.8	202
8	Importance of snow and glacier meltwater for agriculture on the Indo-Gangetic Plain. Nature Sustainability, 2019, 2, 594-601.	23.7	197
9	Effects of Precipitation Uncertainty on Discharge Calculations for Main River Basins. Journal of Hydrometeorology, 2009, 10, 1011-1025.	1.9	195
10	High-resolution assessment of global technical and economic hydropower potential. Nature Energy, 2017, 2, 821-828.	39.5	186
11	Reconciling irrigated food production with environmental flows for Sustainable Development Goals implementation. Nature Communications, 2017, 8, 15900.	12.8	168
12	The global nexus of foodâ€“tradeâ€“water sustaining environmental flows by 2050. Nature Sustainability, 2019, 2, 499-507.	23.7	161
13	LPJmL4 â€“ a dynamic global vegetation model with managed land â€“ PartÂ1: Model description. Geoscientific Model Development, 2018, 11, 1343-1375.	3.6	140
14	The need for bottom-up assessments of climate risks and adaptation in climate-sensitive regions. Nature Climate Change, 2019, 9, 503-511.	18.8	130
15	Adaptation to changing water resources in the Ganges basin, northern India. Environmental Science and Policy, 2011, 14, 758-769.	4.9	122
16	Snowmelt contributions to discharge of the Ganges. Science of the Total Environment, 2013, 468-469, S93-S101.	8.0	86
17	Integrated scenarios to support analysis of the foodâ€“energyâ€“water nexus. Nature Sustainability, 2019, 2, 1132-1141.	23.7	79
18	Impacts of future deforestation and climate change on the hydrology of the Amazon Basin: a multi-model analysis with a new set of land-cover change scenarios. Hydrology and Earth System Sciences, 2017, 21, 1455-1475.	4.9	69

#	Article	IF	Citations
19	South Asian river basins in a 1.5ÂÂ°C warmer world. Regional Environmental Change, 2019, 19, 833-847.	2.9	55
20	Climate change vs. socio-economic development: understanding the future South Asian water gap. Hydrology and Earth System Sciences, 2018, 22, 6297-6321.	4.9	54
21	A Global Analysis of Future Water Deficit Based On Different Allocation Mechanisms. Water Resources Research, 2018, 54, 5803-5824.	4.2	42
22	Crop-specific seasonal estimates of irrigation-water demand in South Asia. Hydrology and Earth System Sciences, 2016, 20, 1971-1982.	4.9	40
23	South Asian agriculture increasingly dependent on meltwater and groundwater. Nature Climate Change, 2022, 12, 566-573.	18.8	38
24	Flexible Strategies for Coping with Rainfall Variability: Seasonal Adjustments in Cropped Area in the Ganges Basin. PLoS ONE, 2016, 11, e0149397.	2.5	21
25	Seasonal streamflow forecasts for Europe â€“ Part I: Hindcast verification with pseudo- and real observations. Hydrology and Earth System Sciences, 2018, 22, 3453-3472.	4.9	19
26	A systematic framework for the assessment of sustainable hydropower potential in a river basin â€“ The case of the upper Indus. Science of the Total Environment, 2021, 786, 147142.	8.0	18
27	Future upstream water consumption and its impact on downstream water availability in the transboundary Indus Basin. Hydrology and Earth System Sciences, 2022, 26, 861-883.	4.9	16
28	Going local: Evaluating and regionalizing a global hydrological modelâ€™s simulation of river flows in a medium-sized East African basin. Journal of Hydrology: Regional Studies, 2018, 19, 349-364.	2.4	13
29	Financial Feasibility of Water Conservation in Agriculture. Earth's Future, 2021, 9, e2020EF001726.	6.3	10
30	From narratives to numbers: Spatial downscaling and quantification of future water, food & energy security requirements in the Indus basin. Futures, 2021, 133, 102831.	2.5	10
31	Advances in global hydrologyâ€“crop modelling to support the UNâ€™s Sustainable Development Goals in South Asia. Current Opinion in Environmental Sustainability, 2019, 40, 108-116.	6.3	8
32	Water conservation can reduce future water-energy-food-environment trade-offs in a medium-sized African river basin. Agricultural Water Management, 2022, 266, 107548.	5.6	8
33	Trade-offs between water needs for food, utilities, and the environmentâ€”a nexus quantification at different scales. Environmental Research Letters, 2021, 16, 115003.	5.2	5