Hans de Moel

List of Publications by Year in Descending Order

68 papers	4,729 citations	34 h-index	68 g-index
69 ext. papers	5,688 ext. citations	5.9 avg, IF	5.87 L-index

#	Paper	IF	Citations
68	Using rapid damage observations for Bayesian updating of hurricane vulnerability functions: A case study of Hurricane Dorian using social media. *International Journal of Disaster Risk Reduction*, **2022**, 72, 102839	4.5	1
67	Blue-green roofs with forecast-based operation to reduce the impact of weather extremes. *Journal of Environmental Management*, **2022**, 301, 113750	7.9	4
66	A globally consistent local-scale assessment of future tropical cyclone risk.. *Science Advances*, **2022**, 8, eabm8438	14.3	3
65	Improving flood damage assessments in data-scarce areas by retrieval of building characteristics through UAV image segmentation and machine learning – a case study of the 2019 floods in southern Malawi. *Natural Hazards and Earth System Sciences*, **2021**, 21, 3199-3218	3.9	0
64	Economic damages from Hurricane Sandy attributable to sea level rise caused by anthropogenic climate change. *Nature Communications*, **2021**, 12, 2720	17.4	18
63	Modeling urban development and its exposure to river flood risk in Southeast Asia. *Computers, Environment and Urban Systems*, **2021**, 87, 101620	5.9	4
62	The Asynergies of Structural Disaster Risk Reduction Measures: Comparing Floods and Earthquakes. *Earth's Future*, **2021**, 9, e2020EF001531	7.9	6
61	Improved Transferability of Data-Driven Damage Models Through Sample Selection Bias Correction. *Risk Analysis*, **2021**, 41, 37-55	3.9	5
60	Adequately reflecting the severity of tropical cyclones using the new Tropical Cyclone Severity Scale. *Environmental Research Letters*, **2021**, 16, 014048	6.2	4
59	Insights into Flood Risk Misperceptions of Homeowners in the Dutch River Delta. *Risk Analysis*, **2020**, 40, 1450-1468	3.9	9
58	What Will the Weather Do? Forecasting Flood Losses Based on Oscillation Indices. *Earth's Future*, **2020**, 8, e2019EF001450	7.9	2
57	A framework for comparing permanent and forecast-based flood risk-reduction strategies. *Science of the Total Environment*, **2020**, 720, 137572	10.2	10
56	Improving the classification of flood tweets with contextual hydrological information in a multimodal neural network. *Computers and Geosciences*, **2020**, 140, 104485	4.5	14
55	Global-scale benefit–cost analysis of coastal flood adaptation to different flood risk drivers using structural measures. *Natural Hazards and Earth System Sciences*, **2020**, 20, 1025-1044	3.9	29
54	Generation of a global synthetic tropical cyclone hazard dataset using STORM. *Scientific Data*, **2020**, 7, 40	8.2	29
53	Estimation of global tropical cyclone wind speed probabilities using the STORM dataset. *Scientific Data*, **2020**, 7, 377	8.2	4
52	A micro-scale cost-benefit analysis of building-level flood risk adaptation measures in Los Angeles. *Water Resources and Economics*, **2020**, 32, 100147	2	14

51	Enhancement of large-scale flood risk assessments using building-material-based vulnerability curves for an object-based approach in urban and rural areas. *Natural Hazards and Earth System Sciences*, **2019**, 19, 1703-1722	3.9	17
50	An economic evaluation of adaptation pathways in coastal mega cities: An illustration for Los Angeles. *Science of the Total Environment*, **2019**, 678, 647-659	10.2	17
49	Adoption of Individual Flood Damage Mitigation Measures in New York City: An Extension of Protection Motivation Theory. *Risk Analysis*, **2019**, 39, 2143-2159	3.9	37
48	Data schemas for multiple hazards, exposure and vulnerability. *Disaster Prevention and Management*, **2019**, 28, 752-763	1.5	5
47	A global database of historic and real-time flood events based on social media. *Scientific Data*, **2019** , 6, 311	8.2	41
46	Global modeling of tropical cyclone storm surges using high-resolution forecasts. *Climate Dynamics*, **2019**, 52, 5031-5044	4.2	34
45	Climate change and natural disasters: Government mitigation activities and public property demand response. *Land Use Policy*, **2019**, 82, 436-443	5.6	20
44	TAGGS: Grouping Tweets to Improve Global Geoparsing for Disaster Response. *Journal of Geovisualization and Spatial Analysis*, **2018**, 2, 1	3.5	44
43	Future extreme precipitation intensities based on a historic event. *Hydrology and Earth System Sciences*, **2018**, 22, 3777-3788	5.5	23
42	Pathways to resilience: adapting to sea level rise in Los Angeles. *Annals of the New York Academy of Sciences*, **2018**, 1427, 1-90	6.5	21
41	The influence of antecedent conditions on flood risk in sub-Saharan Africa. *Natural Hazards and Earth System Sciences*, **2018**, 18, 271-285	3.9	13
40	Explaining differences in flood management approaches in Europe and in the USA - a comparative analysis. *Journal of Flood Risk Management*, **2017**, 10, 436-445	3.1	78
39	Integrating Household Risk Mitigation Behavior in Flood Risk Analysis: An Agent-Based Model Approach. *Risk Analysis*, **2017**, 37, 1977-1992	3.9	67
38	Urban transformation with TURAS open innovations; opportunities for transitioning through transdisciplinarity. *Current Opinion in Environmental Sustainability*, **2016**, 22, 57-62	7.2	10
37	Over the hills and further away from coast: global geospatial patterns of human and environment over the 20th□21st centuries. *Environmental Research Letters*, **2016**, 11, 034010	6.2	99
36	FLOPROS: an evolving global database of flood protection standards. *Natural Hazards and Earth System Sciences*, **2016**, 16, 1049-1061	3.9	125
35	Preface: Flood-risk analysis and integrated management. *Natural Hazards and Earth System Sciences* , **2016**, 16, 1005-1010	3.9	19
34	Uncertainty in flood damage estimates and its potential effect on investment decisions. *Natural Hazards and Earth System Sciences*, **2016**, 16, 1-14	3.9	68

33	Political affiliation affects adaptation to climate risks: Evidence from New York City. *Climatic Change*, **2016**, 138, 353-360	4.5	24
32	A review of damage-reducing measures to manage fluvial flood risks in a changing climate. *Mitigation and Adaptation Strategies for Global Change*, **2015**, 20, 967-989	3.9	85
31	The failed-levee effect: Do societies learn from flood disasters?. *Natural Hazards*, **2015**, 76, 373-388	3	55
30	Adaptive flood risk management planning based on a comprehensive flood risk conceptualisation. *Mitigation and Adaptation Strategies for Global Change*, **2015**, 20, 845-864	3.9	92
29	Changing mechanism of global water scarcity events: Impacts of socioeconomic changes and inter-annual hydro-climatic variability. *Global Environmental Change*, **2015**, 32, 18-29	10.1	84
28	Flood risk assessments at different spatial scales. *Mitigation and Adaptation Strategies for Global Change*, **2015**, 20, 865-890	3.9	148
27	Integrated Direct and Indirect Flood Risk Modeling: Development and Sensitivity Analysis. *Risk Analysis*, **2015**, 35, 882-900	3.9	96
26	Climate adaptation. Evaluating flood resilience strategies for coastal megacities. *Science*, **2014**, 344, 473-5	33.3	287
25	Uncertainty and sensitivity of flood risk calculations for a dike ring in the south of the Netherlands. *Science of the Total Environment*, **2014**, 473-474, 224-34	10.2	30
24	Assessment of the effectiveness of flood adaptation strategies for HCMC. *Natural Hazards and Earth System Sciences*, **2014**, 14, 1441-1457	3.9	38
23	Effect of spatial adaptation measures on flood risk: study of coastal floods in Belgium. *Regional Environmental Change*, **2014**, 14, 413-425	4.3	27
22	Informing River Basin Management on Flood and Drought Risks Taking Future Uncertainties into Account. *Handbook of Environmental Chemistry*, **2014**, 197-208	0.8	
21	Human deforestation outweighs future climate change impacts of sedimentation on coral reefs. *Nature Communications*, **2013**, 4, 1986	17.4	71
20	Evaluating the effect of flood damage-reducing measures: a case study of the unembanked area of Rotterdam, the Netherlands. *Regional Environmental Change*, **2013**, 14, 895	4.3	36
19	Low-probability flood risk modeling for New York City. *Risk Analysis*, **2013**, 33, 772-88	3.9	84
18	Cost estimates for flood resilience and protection strategies in New York City. *Annals of the New York Academy of Sciences*, **2013**, 1294, 1-104	6.5	69
17	Lost food, wasted resources: global food supply chain losses and their impacts on freshwater, cropland, and fertiliser use. *Science of the Total Environment*, **2012**, 438, 477-89	10.2	674
16	Linking coral river runoff proxies with climate variability, hydrology and land-use in Madagascar catchments. *Marine Pollution Bulletin*, **2012**, 64, 2047-59	6.7	50

15	Future changes in Mekong River hydrology: impact of climate change and reservoir operation on discharge. *Hydrology and Earth System Sciences*, **2012**, 16, 4603-4619	5.5	194
14	Uncertainty and sensitivity analysis of coastal flood damage estimates in the west of the Netherlands. *Natural Hazards and Earth System Sciences*, **2012**, 12, 1045-1058	3.9	65
13	Development of flood exposure in the Netherlands during the 20th and 21st century. *Global Environmental Change*, **2011**, 21, 620-627	10.1	122
12	How are flood risk estimates affected by the choice of return-periods?. *Natural Hazards and Earth System Sciences*, **2011**, 11, 3181-3195	3.9	99
11	Future flood risk estimates along the river Rhine. *Natural Hazards and Earth System Sciences*, **2011**, 11, 459-473	3.9	145
10	Effect of uncertainty in land use, damage models and inundation depth on flood damage estimates. *Natural Hazards*, **2011**, 58, 407-425	3	248
9	How reliable are projections of future flood damage?. *Natural Hazards and Earth System Sciences*, **2011**, 11, 3293-3306	3.9	65
8	How close do we live to water? A global analysis of population distance to freshwater bodies. *PLoS ONE*, **2011**, 6, e20578	3.7	149
7	Is physical water scarcity a new phenomenon? Global assessment of water shortage over the last two millennia. *Environmental Research Letters*, **2010**, 5, 034006	6.2	275
6	Planktic foraminiferal shell thinning in the Arabian Sea due to anthropogenic ocean acidification?. *Biogeosciences*, **2009**, 6, 1917-1925	4.6	78
5	Flood maps in Europe methods, availability and use. *Natural Hazards and Earth System Sciences*, **2009**, 9, 289-301	3.9	314
4	Robustness of Sand Storage Dams under Climate Change. *Vadose Zone Journal*, **2007**, 6, 572-580	2.7	23
3	Simulating long-term Caspian Sea level changes: The impact of Holocene and future climate conditions. *Earth and Planetary Science Letters*, **2007**, 261, 685-693	5.3	31
2	Verification of a coupled climate-hydrological model against Holocene palaeohydrological records. *Global and Planetary Change*, **2007**, 57, 283-300	4.2	33
1	Climate change: a glocal problem requiring glocal action. *Journal of Integrative Environmental Sciences*, **2007**, 4, 139-148		44