

Paul Bates

List of Publications by Year in Descending Order

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Version: 2024-04-27

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

289
papers

18,181
citations

80
h-index

126
g-index

334
ext. papers

20,958
ext. citations

5.1
avg. IF

7.01
L-index

#	Paper	IF	Citations
289	Inequitable patterns of US flood risk in the Anthropocene. <i>Nature Climate Change</i> , 2022 , 12, 156-162	21.4	8
288	Flood Inundation Prediction. <i>Annual Review of Fluid Mechanics</i> , 2022 , 54,	22	3
287	Estimation of Bathymetry for Modeling Multi-thread Channel Hydraulics. <i>Geophysical Monograph Series</i> , 2022 , 275-293	1.1	
286	Evaluation des risques d'inondation à périodes de retour multiples dans le bassin du fleuve Congo. <i>Geophysical Monograph Series</i> , 2022 , 537-559	1.1	
285	Estimation de la bathymétrie pour la modélisation de l'hydraulique des canaux multifilaires : application au cours moyen du fleuve Congo. <i>Geophysical Monograph Series</i> , 2022 , 283-302	1.1	
284	Site Selection, Design, and Implementation of a Sediment Sampling Program on the Kasai River, a Major Tributary of the Congo River. <i>Geophysical Monograph Series</i> , 2022 , 427-446	1.1	0
283	Towards a Framework of Catchment Classification for Hydrologic Predictions and Water Resources Management in the Ungauged Basin of the Congo River. <i>Geophysical Monograph Series</i> , 2022 , 469-498	1.1	0
282	Sélection du site, conception et mise en œuvre d'un programme d'échantillonnage des sédiments sur le fleuve Kasai, un affluent majeur du fleuve Congo. <i>Geophysical Monograph Series</i> , 2022 , 441-462	1.1	
281	Vers un cadre de classification des bassins versants pour les prédictions hydrologiques et la gestion des ressources en eau dans le bassin non jaugé du fleuve Congo : une approche a priori. <i>Geophysical Monograph Series</i> , 2022 , 485-515	1.1	
280	Multi-Return Periods, Flood Hazards, and Risk Assessment in the Congo River Basin. <i>Geophysical Monograph Series</i> , 2022 , 519-540	1.1	0
279	Assessing flooding impact to riverine bridges: an integrated analysis. <i>Natural Hazards and Earth System Sciences</i> , 2022 , 22, 1559-1576	3.9	0
278	Design flood estimation for global river networks based on machine learning models. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 5981-5999	5.5	2
277	Bare-Earth DEM Generation in Urban Areas for Flood Inundation Simulation Using Global Digital Elevation Models. <i>Water Resources Research</i> , 2021 , 57, e2020WR028516	5.4	6
276	Assessing the hydrological and geomorphic behaviour of a landscape evolution model within a limits-of-acceptability uncertainty analysis framework. <i>Earth Surface Processes and Landforms</i> , 2021 , 46, 1981-2003	3.7	2
275	Estimating River Channel Bathymetry in Large Scale Flood Inundation Models. <i>Water Resources Research</i> , 2021 , 57, e2020WR028301	5.4	3
274	Local-inertial shallow water model on unstructured triangular grids. <i>Advances in Water Resources</i> , 2021 , 152, 103930	4.7	0
273	LISFLOOD-FP 8.0: the new discontinuous Galerkin shallow-water solver for multi-core CPUs and GPUs. <i>Geoscientific Model Development</i> , 2021 , 14, 3577-3602	6.3	6

272	Knowledge gaps in our perceptual model of Great Britain's hydrology. <i>Hydrological Processes</i> , 2021 , 35, e14288	3.3	5
271	Combined Modeling of US Fluvial, Pluvial, and Coastal Flood Hazard Under Current and Future Climates. <i>Water Resources Research</i> , 2021 , 57, e2020WR028673	5.4	39
270	Simulating historical flood events at the continental scale: observational validation of a large-scale hydrodynamic model. <i>Natural Hazards and Earth System Sciences</i> , 2021 , 21, 559-575	3.9	3
269	Method Uncertainty Is Essential for Reliable Confidence Statements of Precipitation Projections. <i>Journal of Climate</i> , 2021 , 34, 1227-1240	4.4	5
268	Causes, impacts and patterns of disastrous river floods. <i>Nature Reviews Earth & Environment</i> , 2021 , 2, 592-609	30.2	26
267	Model cascade from meteorological drivers to river flood hazard: flood-cascade v1.0. <i>Geoscientific Model Development</i> , 2021 , 14, 4865-4890	6.3	1
266	Hydraulic Model Calibration Using CryoSat-2 Observations in the Zambezi Catchment. <i>Water Resources Research</i> , 2021 , 57, e2020WR029261	5.4	1
265	Increased Flood Exposure Due to Climate Change and Population Growth in the United States. <i>Earth's Future</i> , 2020 , 8, e2020EF001778	7.9	31
264	Explicit Expression of Weighting Factor for Improved Estimation of Numerical Flux in Local Inertial Models. <i>Water Resources Research</i> , 2020 , 56, e2020WR027357	5.4	3
263	New insights into US flood vulnerability revealed from flood insurance big data. <i>Nature Communications</i> , 2020 , 11, 1444	17.4	45
262	The Impact of Dams on Design Floods in the Conterminous US. <i>Water Resources Research</i> , 2020 , 56, e2019WR025380	9.4	38
261	Comparing global hydrological models and combining them with GRACE by dynamic model data averaging (DMDA). <i>Advances in Water Resources</i> , 2020 , 138, 103528	4.7	6
260	Levee Breaching: A New Extension to the LISFLOOD-FP Model. <i>Water (Switzerland)</i> , 2020 , 12, 942	3	6
259	Testing the impact of direct and indirect flood warnings on population behaviour using an agent-based model. <i>Natural Hazards and Earth System Sciences</i> , 2020 , 20, 2281-2305	3.9	9
258	Developing observational methods to drive future hydrological science: Can we make a start as a community?. <i>Hydrological Processes</i> , 2020 , 34, 868-873	3.3	24
257	A benefit-cost analysis of floodplain land acquisition for US flood damage reduction. <i>Nature Sustainability</i> , 2020 , 3, 56-62	22.1	28
256	Establishing uncertainty ranges of hydrologic indices across climate and physiographic regions of the Congo River Basin. <i>Journal of Hydrology: Regional Studies</i> , 2020 , 30, 100710	3.6	3
255	Digital Elevation Models for topographic characterisation and flood flow modelling along low-gradient, terminal dryland rivers: A comparison of spaceborne datasets for the Río Colorado, Bolivia. <i>Journal of Hydrology</i> , 2020 , 591, 125617	6	5

254	Toward Global Stochastic River Flood Modeling. <i>Water Resources Research</i> , 2020 , 56, e2020WR027692	5.4	6
253	What about reservoirs? Questioning anthropogenic and climatic interferences on water availability. <i>Hydrological Processes</i> , 2020 , 34, 5441-5455	3.3	4
252	A toolbox to quickly prepare flood inundation models for LISFLOOD-FP simulations. <i>Environmental Modelling and Software</i> , 2020 , 123, 104561	5.2	12
251	(Multi)wavelets increase both accuracy and efficiency of standard Godunov-type hydrodynamic models. <i>Advances in Water Resources</i> , 2019 , 129, 31-55	4.7	5
250	MERIT Hydro: A High-Resolution Global Hydrography Map Based on Latest Topography Dataset. <i>Water Resources Research</i> , 2019 , 55, 5053-5073	5.4	162
249	New estimates of flood exposure in developing countries using high-resolution population data. <i>Nature Communications</i> , 2019 , 10, 1814	17.4	65
248	Enhanced flood risk with 1.5 °C global warming in the GangesBrahmaputraMeghna basin. <i>Environmental Research Letters</i> , 2019 , 14, 074031	6.2	21
247	A flood inundation forecast of Hurricane Harvey using a continental-scale 2D hydrodynamic model. <i>Journal of Hydrology X</i> , 2019 , 4, 100039	4.6	31
246	Accuracy assessment of the TanDEM-X 90 Digital Elevation Model for selected floodplain sites. <i>Remote Sensing of Environment</i> , 2019 , 232, 111319	13.2	49
245	Comparing 2D capabilities of HEC-RAS and LISFLOOD-FP on complex topography. <i>Hydrological Sciences Journal</i> , 2019 , 64, 1769-1782	3.5	36
244	A New Automated Method for Improved Flood Defense Representation in Large-Scale Hydraulic Models. <i>Water Resources Research</i> , 2019 , 55, 11007-11034	5.4	19
243	Temporal variations in river water surface elevation and slope captured by AirSWOT. <i>Remote Sensing of Environment</i> , 2019 , 224, 304-316	13.2	16
242	The Spatial Dependence of Flood Hazard and Risk in the United States. <i>Water Resources Research</i> , 2019 , 55, 1890-1911	5.4	37
241	An agent-based model for flood risk warning 2019 ,		1
240	Evolutionary leap in large-scale flood risk assessment needed. <i>Wiley Interdisciplinary Reviews: Water</i> , 2018 , 5, e1266	5.7	38
239	A rule based quality control method for hourly rainfall data and a 1 km resolution gridded hourly rainfall dataset for Great Britain: CEH-GEAR1hr. <i>Journal of Hydrology</i> , 2018 , 564, 930-943	6	34
238	Effects of variability in probable maximum precipitation patterns on flood losses. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 2759-2773	5.5	21
237	The Need for Mapping, Modeling, and Predicting Flood Hazard and Risk at the Global Scale. <i>Geophysical Monograph Series</i> , 2018 , 1-15	1.1	5

236	From Precipitation to Damage. <i>Geophysical Monograph Series</i> , 2018 , 169-183	1.1	0
235	Global Flood Risk Modeling and Projections of Climate Change Impacts. <i>Geophysical Monograph Series</i> , 2018 , 185-203	1.1	5
234	Global Flood Forecasting for Averting Disasters Worldwide. <i>Geophysical Monograph Series</i> , 2018 , 205-228.1	1.1	4
233	Data Assimilation and River Hydrodynamic Modeling Over Large Scales. <i>Geophysical Monograph Series</i> , 2018 , 229-237	1.1	4
232	Global Flood Hazard Mapping, Modeling, and Forecasting. <i>Geophysical Monograph Series</i> , 2018 , 239-244	1.1	9
231	Rainfall Information for Global Flood Modeling. <i>Geophysical Monograph Series</i> , 2018 , 17-42	1.1	3
230	Flood Mapping Using Synthetic Aperture Radar Sensors From Local to Global Scales. <i>Geophysical Monograph Series</i> , 2018 , 55-77	1.1	8
229	Flood Hazard Mapping in Data-Scarce Areas. <i>Geophysical Monograph Series</i> , 2018 , 79-86	1.1	
228	Global Flood Monitoring Using Satellite Precipitation and Hydrological Modeling. <i>Geophysical Monograph Series</i> , 2018 , 87-113	1.1	4
227	Flood Hazard Mapping for the Humanitarian Sector. <i>Geophysical Monograph Series</i> , 2018 , 115-130	1.1	0
226	Modeling and Mapping of Global Flood Hazard Layers. <i>Geophysical Monograph Series</i> , 2018 , 131-155	1.1	3
225	Progress Toward Hyperresolution Models of Global Flood Hazard 2018 , 211-232		9
224	Epistemic uncertainties and natural hazard risk assessment [Part 2: What should constitute good practice?]. <i>Natural Hazards and Earth System Sciences</i> , 2018 , 18, 2769-2783	3.9	22
223	The Need for a High-Accuracy, Open-Access Global DEM. <i>Frontiers in Earth Science</i> , 2018 , 6,	3.5	48
222	Hess Opinions: An interdisciplinary research agenda to explore the unintended consequences of structural flood protection. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 5629-5637	5.5	50
221	Perspectives on Digital Elevation Model (DEM) Simulation for Flood Modeling in the Absence of a High-Accuracy Open Access Global DEM. <i>Frontiers in Earth Science</i> , 2018 , 6,	3.5	51
220	Epistemic uncertainties and natural hazard risk assessment [Part 1: A review of different natural hazard areas. <i>Natural Hazards and Earth System Sciences</i> , 2018 , 18, 2741-2768	3.9	24
219	Comparing TanDEM-X Data With Frequently Used DEMs for Flood Inundation Modeling. <i>Water Resources Research</i> , 2018 , 54, 10,205	5.4	25

218	Estimates of present and future flood risk in the conterminous United States. <i>Environmental Research Letters</i> , 2018 , 13, 034023	6.2	152
217	A probabilistic framework for floodplain mapping using hydrological modeling and unsteady hydraulic modeling. <i>Hydrological Sciences Journal</i> , 2018 , 63, 1759-1775	3.5	14
216	Implications of Simulating Global Digital Elevation Models for Flood Inundation Studies. <i>Water Resources Research</i> , 2018 , 54, 7910-7928	5.4	28
215	Strange Floods: The Upper Tail of Flood Peaks in the United States. <i>Water Resources Research</i> , 2018 , 54, 6510-6542	5.4	35
214	Optimisation of the two-dimensional hydraulic model LISFOOD-FP for CPU architecture. <i>Environmental Modelling and Software</i> , 2018 , 107, 148-157	5.2	31
213	Impact of the timing of a SAR image acquisition on the calibration of a flood inundation model. <i>Advances in Water Resources</i> , 2017 , 100, 126-138	4.7	22
212	Quantifying local rainfall dynamics and uncertain boundary conditions into a nested regional-local flood modeling system. <i>Water Resources Research</i> , 2017 , 53, 2770-2785	5.4	41
211	The effects of spatial resolution and dimensionality on modeling regional-scale hydraulics in a multichannel river. <i>Water Resources Research</i> , 2017 , 53, 1683-1701	5.4	24
210	Tradeoff between cost and accuracy in large-scale surface water dynamic modeling. <i>Water Resources Research</i> , 2017 , 53, 4942-4955	5.4	32
209	A high-accuracy map of global terrain elevations. <i>Geophysical Research Letters</i> , 2017 , 44, 5844-5853	4.9	425
208	A restatement of the natural science evidence concerning catchment-based natural flood management in the UK. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017 , 473, 20160706	2.4	129
207	AirSWOT measurements of river water surface elevation and slope: Tanana River, AK. <i>Geophysical Research Letters</i> , 2017 , 44, 181-189	4.9	37
206	Can Atmospheric Reanalysis Data Sets Be Used to Reproduce Flooding Over Large Scales?. <i>Geophysical Research Letters</i> , 2017 , 44, 10,369-10,377	4.9	11
205	ItzI (version 17.1): an open-source, distributed GIS model for dynamic flood simulation. <i>Geoscientific Model Development</i> , 2017 , 10, 1835-1847	6.3	15
204	GLOFRIM v1.0 A globally applicable computational framework for integrated hydrological/hydrodynamic modelling. <i>Geoscientific Model Development</i> , 2017 , 10, 3913-3929	6.3	25
203	Epistemic uncertainties and natural hazard risk assessment. 1. A review of different natural hazard areas 2017 ,		1
202	A global framework for future costs and benefits of river-flood protection in urban areas. <i>Nature Climate Change</i> , 2017 , 7, 642-646	21.4	163
201	Validation of a 30 m resolution flood hazard model of the conterminous United States. <i>Water Resources Research</i> , 2017 , 53, 7968-7986	5.4	119

200	RISK ANALYSIS AND OPTIMUM ADAPTATION FOR COASTAL FLOODING UNDER CLIMATE CHANGE. <i>Journal of Japan Society of Civil Engineers Ser B2 (Coastal Engineering)</i> , 2016 , 72, I_1519-I_1524	0.1	1
199	Application of a Three-Dimensional Unstructured-Mesh Finite-Element Flooding Model and Comparison with Two-Dimensional Approaches. <i>Water Resources Management</i> , 2016 , 30, 823-841	3.7	12
198	Improving the TanDEM-X Digital Elevation Model for flood modelling using flood extents from Synthetic Aperture Radar images. <i>Remote Sensing of Environment</i> , 2016 , 173, 15-28	13.2	40
197	Calibration of channel depth and friction parameters in the LISFLOOD-FP hydraulic model using medium-resolution SAR data and identifiability techniques. <i>Hydrology and Earth System Sciences</i> , 2016 , 20, 4983-4997	5.5	60
196	Perspectives on Open Access High Resolution Digital Elevation Models to Produce Global Flood Hazard Layers. <i>Frontiers in Earth Science</i> , 2016 , 3,	3.5	31
195	An intercomparison of remote sensing river discharge estimation algorithms from measurements of river height, width, and slope. <i>Water Resources Research</i> , 2016 , 52, 4527-4549	5.4	131
194	The credibility challenge for global fluvial flood risk analysis. <i>Environmental Research Letters</i> , 2016 , 11, 094014	6.2	96
193	ICESat-derived inland water surface spot heights. <i>Water Resources Research</i> , 2016 , 52, 3276-3284	5.4	40
192	Quantifying the importance of spatial resolution and other factors through global sensitivity analysis of a flood inundation model. <i>Water Resources Research</i> , 2016 , 52, 9146-9163	5.4	57
191	Rethinking flood hazard at the global scale. <i>Geophysical Research Letters</i> , 2016 , 43, 10,249-10,256	4.9	36
190	When does spatial resolution become spurious in probabilistic flood inundation predictions?. <i>Hydrological Processes</i> , 2016 , 30, 2014-2032	3.3	67
189	Assessing the reliability of probabilistic flood inundation model predictions. <i>Hydrological Processes</i> , 2015 , 29, 4264-4283	3.3	6
188	Efficient incorporation of channel cross-section geometry uncertainty into regional and global scale flood inundation models. <i>Journal of Hydrology</i> , 2015 , 529, 169-183	6	57
187	Hydraulic modeling of the 2011 New Madrid Floodway activation: a case study on floodway activation controls. <i>Natural Hazards</i> , 2015 , 77, 1863-1887	3	16
186	Satellite-supported flood forecasting in river networks: A real case study. <i>Journal of Hydrology</i> , 2015 , 523, 706-724	6	73
185	Measuring and Mapping Flood Processes 2015 , 35-64		5
184	Floods and Storms Practical Exercises 2015 , 213-229		0
183	A high-resolution global flood hazard model. <i>Water Resources Research</i> , 2015 , 51, 7358-7381	5.4	256

182	Sensitivity of a hydraulic model to channel erosion uncertainty during extreme flooding. <i>Hydrological Processes</i> , 2015 , 29, 261-279	3.3	20
181	Rapid and Stable Flood Inundation Modelling Using the Local Inertial Equation. <i>Suimon Mizu Shigen Gakkaishi</i> , 2015 , 28, 124-130	0.2	4
180	Regional flood frequency analysis at the global scale. <i>Water Resources Research</i> , 2015 , 51, 539-553	5.4	91
179	The influence of vertical water balance on modelling Pantanal (Brazil) spatio-temporal inundation dynamics. <i>Hydrological Processes</i> , 2014 , 28, 3539-3553	3.3	18
178	Comparing ensemble projections of flooding against flood estimation by continuous simulation. <i>Journal of Hydrology</i> , 2014 , 511, 205-219	6	28
177	Downscaling coarse grid hydrodynamic model simulations over large domains. <i>Journal of Hydrology</i> , 2014 , 508, 289-298	6	28
176	Regional flood dynamics in a bifurcating mega delta simulated in a global river model. <i>Geophysical Research Letters</i> , 2014 , 41, 3127-3135	4.9	55
175	Advances in pan-European flood hazard mapping. <i>Hydrological Processes</i> , 2014 , 28, 4067-4077	3.3	144
174	Problems with binary pattern measures for flood model evaluation. <i>Hydrological Processes</i> , 2014 , 28, 4928-4937	3.3	50
173	Investigating the application of climate models in flood projection across the UK. <i>Hydrological Processes</i> , 2014 , 28, 2810-2823	3.3	19
172	Flooding dynamics on the lower Amazon floodplain: 1. Hydraulic controls on water elevation, inundation extent, and river-floodplain discharge. <i>Water Resources Research</i> , 2014 , 50, 619-634	5.4	70
171	Development of the Global Width Database for Large Rivers. <i>Water Resources Research</i> , 2014 , 50, 3467-3480	3.4	156
170	Flooding dynamics on the lower Amazon floodplain: 2. Seasonal and interannual hydrological variability. <i>Water Resources Research</i> , 2014 , 50, 635-649	5.4	48
169	The impact of uncertain precipitation data on insurance loss estimates using a flood catastrophe model. <i>Hydrology and Earth System Sciences</i> , 2014 , 18, 2305-2324	5.5	38
168	Modelling suspended-sediment propagation and related heavy metal contamination in floodplains: a parameter sensitivity analysis. <i>Hydrology and Earth System Sciences</i> , 2014 , 18, 3539-3551	5.5	17
167	Uncertainty in Flood Inundation Modelling 2014 , 232-269		20
166	The Impact of Scale on Probabilistic Flood Inundation Maps Using a 2D Hydraulic Model with Uncertain Boundary Conditions 2014 ,		5
165	Technology: Fight floods on a global scale. <i>Nature</i> , 2014 , 507, 169	50.4	67

164	Investigating RiverBurge Interaction in Idealised Estuaries. <i>Journal of Coastal Research</i> , 2014 , 294, 248-259	18
163	Bay of Bengal cyclone extreme water level estimate uncertainty. <i>Natural Hazards</i> , 2014 , 72, 983-996	3 21
162	Observing Global Surface Water Flood Dynamics. <i>Surveys in Geophysics</i> , 2014 , 35, 839-852	7.6 39
161	Critical analysis of thermal inertia approaches for surface soil water content retrieval. <i>Hydrological Sciences Journal</i> , 2013 , 58, 1144-1161	3.5 25
160	Applicability of the local inertial approximation of the shallow water equations to flood modeling. <i>Water Resources Research</i> , 2013 , 49, 4833-4844	5.4 71
159	SRTM vegetation removal and hydrodynamic modeling accuracy. <i>Water Resources Research</i> , 2013 , 49, 5276-5289	5.4 87
158	A Change Detection Approach to Flood Mapping in Urban Areas Using TerraSAR-X. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2013 , 51, 2417-2430	8.1 230
157	A first large-scale flood inundation forecasting model. <i>Water Resources Research</i> , 2013 , 49, 6248-6257	5.4 121
156	An automated routing methodology to enable direct rainfall in high resolution shallow water models. <i>Hydrological Processes</i> , 2013 , 27, 467-476	3.3 23
155	Surface water connectivity dynamics of a large scale extreme flood. <i>Journal of Hydrology</i> , 2013 , 505, 138-149	6 48
154	Scheduling satellite-based SAR acquisition for sequential assimilation of water level observations into flood modelling. <i>Journal of Hydrology</i> , 2013 , 495, 252-266	6 86
153	Understanding the variability of an extreme storm tide along a coastline. <i>Estuarine, Coastal and Shelf Science</i> , 2013 , 123, 19-25	2.9 27
152	Probabilistic flood risk mapping including spatial dependence. <i>Hydrological Processes</i> , 2013 , 27, 1349-1363	92
151	Integrating the LISFLOOD-FP 2D hydrodynamic model with the CAESAR model: implications for modelling landscape evolution. <i>Earth Surface Processes and Landforms</i> , 2013 , 38, 1897-1906	3.7 132
150	A storm surge inundation model of the northern Bay of Bengal using publicly available data. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2013 , 139, 358-369	6.4 87
149	Hydraulic characterization of the middle reach of the Congo River. <i>Water Resources Research</i> , 2013 , 49, 5059-5070	5.4 78
148	Improving computational efficiency in global river models by implementing the local inertial flow equation and a vector-based river network map. <i>Water Resources Research</i> , 2013 , 49, 7221-7235	5.4 113
147	The contribution to future flood risk in the Severn Estuary from extreme sea level rise due to ice sheet mass loss. <i>Journal of Geophysical Research: Oceans</i> , 2013 , 118, 5887-5898	3.3 12

146	Evaluating scale and roughness effects in urban flood modelling using terrestrial LIDAR data. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 4015-4030	5.5	52
145	Observing Global Surface Water Flood Dynamics. <i>Space Sciences Series of ISSI</i> , 2013 , 839-852	0.1	2
144	The impact of uncertainty in satellite data on the assessment of flood inundation models. <i>Journal of Hydrology</i> , 2012 , 414-415, 162-173	6	68
143	Adjustment of a spaceborne DEM for use in floodplain hydrodynamic modeling. <i>Journal of Hydrology</i> , 2012 , 436-437, 81-91	6	93
142	How much physical complexity is needed to model flood inundation?. <i>Hydrological Processes</i> , 2012 , 26, 2264-2282	3.3	140
141	Probabilistic evaluation of flood hazard in urban areas using Monte Carlo simulation. <i>Hydrological Processes</i> , 2012 , 26, 3962-3972	3.3	38
140	Near Real-Time Flood Detection in Urban and Rural Areas Using High-Resolution Synthetic Aperture Radar Images. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012 , 50, 3041-3052	8.1	135
139	Improving the stability of a simple formulation of the shallow water equations for 2-D flood modeling. <i>Water Resources Research</i> , 2012 , 48,	5.4	99
138	Automatic near real-time selection of flood water levels from high resolution Synthetic Aperture Radar images for assimilation into hydraulic models: A case study. <i>Remote Sensing of Environment</i> , 2012 , 124, 705-716	13.2	73
137	Use of terrestrial laser scanning data to drive decimetric resolution urban inundation models. <i>Advances in Water Resources</i> , 2012 , 41, 1-17	4.7	103
136	The Use of Radar Imagery in Riverine Flood Inundation Studies 2012 , 115-140		15
135	Geodetic corrections to Amazon River water level gauges using ICESat altimetry. <i>Water Resources Research</i> , 2012 , 48,	5.4	45
134	Floodplain channel morphology and networks of the middle Amazon River. <i>Water Resources Research</i> , 2012 , 48,	5.4	63
133	Calibration of two-dimensional floodplain modeling in the central Atchafalaya Basin Floodway System using SAR interferometry. <i>Water Resources Research</i> , 2012 , 48,	5.4	29
132	A subgrid channel model for simulating river hydraulics and floodplain inundation over large and data sparse areas. <i>Water Resources Research</i> , 2012 , 48,	5.4	261
131	Comparative flood damage model assessment: towards a European approach. <i>Natural Hazards and Earth System Sciences</i> , 2012 , 12, 3733-3752	3.9	264
130	Integrating remote sensing data with flood inundation models: how far have we got?. <i>Hydrological Processes</i> , 2012 , 26, 2515-2521	3.3	128
129	An entropy method for floodplain monitoring network design 2012 ,		6

128	Tracking water level changes of the Amazon Basin with space-borne remote sensing and integration with large scale hydrodynamic modelling: A review. <i>Physics and Chemistry of the Earth</i> , 2011 , 36, 223-231	3	21
127	Benchmarking urban flood models of varying complexity and scale using high resolution terrestrial LiDAR data. <i>Physics and Chemistry of the Earth</i> , 2011 , 36, 281-291	3	129
126	Selecting the appropriate hydraulic model structure using low-resolution satellite imagery. <i>Advances in Water Resources</i> , 2011 , 34, 38-46	4.7	28
125	Evaluating a new LISFLOOD-FP formulation with data from the summer 2007 floods in Tewkesbury, UK. <i>Journal of Flood Risk Management</i> , 2011 , 4, 88-95	3.1	88
124	Evaluation of a coastal flood inundation model using hard and soft data. <i>Environmental Modelling and Software</i> , 2011 , 30, 35-35	5.2	22
123	Timely Low Resolution SAR Imagery To Support Floodplain Modelling: a Case Study Review. <i>Surveys in Geophysics</i> , 2011 , 32, 255-269	7.6	62
122	Rainfall uncertainty for extreme events in NWP downscaling model. <i>Hydrological Processes</i> , 2011 , 25, 1397-1406	3.3	13
121	Geometric and structural river channel complexity and the prediction of urban inundation. <i>Hydrological Processes</i> , 2011 , 25, 3173-3186	3.3	41
120	A near real-time algorithm for flood detection in urban and rural areas using high resolution Synthetic Aperture Radar images 2011 ,		2
119	Assimilation of virtual wide swath altimetry to improve Arctic river modeling. <i>Remote Sensing of Environment</i> , 2011 , 115, 373-381	13.2	120
118	The accuracy of sequential aerial photography and SAR data for observing urban flood dynamics, a case study of the UK summer 2007 floods. <i>Remote Sensing of Environment</i> , 2011 , 115, 2536-2546	13.2	103
117	APPLICATION OF THE 1D-QUASI 2D MODEL TINFLOOD FOR FLOODPLAIN INUNDATION PREDICTION OF THE RIVER THAMES. <i>ISH Journal of Hydraulic Engineering</i> , 2011 , 17, 98-110	1.5	3
116	International Journal of River Basin Management best paper prize 2010. <i>International Journal of River Basin Management</i> , 2011 , 9, 1-1	1.7	
115	Quantifying the Uncertainty in Future Coastal Flood Risk Estimates for the U.K. <i>Journal of Coastal Research</i> , 2011 , 276, 870-881	0.6	50
114	Discussion: Modelling the hydraulics of the Carlisle 2005 flood event. <i>Water Management</i> , 2011 , 164, 103-103	1	0
113	Validation of River Flows in HadGEM1 and HadCM3 with the TRIP River Flow Model. <i>Journal of Hydrometeorology</i> , 2011 , 12, 1157-1180	3.7	28
112	Modelling the hydraulics of the Carlisle 2005 flood event. <i>Water Management</i> , 2010 , 163, 273-281	1	30
111	Movement of Amazon surface water from time-variable satellite gravity measurements and implications for water cycle parameters in land surface models. <i>Geochemistry, Geophysics, Geosystems</i> , 2010 , 11,	3.6	23

110	Near real-time flood wave approximation on large rivers from space: Application to the River Po, Italy. <i>Water Resources Research</i> , 2010 , 46,	5.4	77
109	Flood-plain mapping: a critical discussion of deterministic and probabilistic approaches. <i>Hydrological Sciences Journal</i> , 2010 , 55, 364-376	3.5	167
108	Coupled 1D/Quasi-2D Flood Inundation Model with Unstructured Grids. <i>Journal of Hydraulic Engineering</i> , 2010 , 136, 493-506	1.8	39
107	Data Utilization in Flood Inundation Modelling 2010 , 209-233		8
106	Flood Detection in Urban Areas Using TerraSAR-X. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2010 , 48, 882-894	8.1	173
105	A simple inertial formulation of the shallow water equations for efficient two-dimensional flood inundation modelling. <i>Journal of Hydrology</i> , 2010 , 387, 33-45	6	581
104	Visualization approaches for communicating real-time flood forecasting level and inundation information. <i>Journal of Flood Risk Management</i> , 2010 , 3, 140-150	3.1	55
103	Seasonal water storage on the Amazon floodplain measured from satellites. <i>Remote Sensing of Environment</i> , 2010 , 114, 2448-2456	13.2	104
102	A comparison of three parallelisation methods for 2D flood inundation models. <i>Environmental Modelling and Software</i> , 2010 , 25, 398-411	5.2	92
101	Assessment of soil moisture fields from imperfect climate models with uncertain satellite observations. <i>Hydrology and Earth System Sciences</i> , 2009 , 13, 1545-1553	5.5	20
100	A technique for the calibration of hydraulic models using uncertain satellite observations of flood extent. <i>Journal of Hydrology</i> , 2009 , 367, 276-282	6	114
99	Distributed whole city water level measurements from the Carlisle 2005 urban flood event and comparison with hydraulic model simulations. <i>Journal of Hydrology</i> , 2009 , 368, 42-55	6	126
98	Calibration of uncertain flood inundation models using remotely sensed water levels. <i>Journal of Hydrology</i> , 2009 , 368, 224-236	6	83
97	Amazon flood wave hydraulics. <i>Journal of Hydrology</i> , 2009 , 374, 92-105	6	117
96	Large-scale coupled hydrologic and hydraulic modelling of the Ob river in Siberia. <i>Journal of Hydrology</i> , 2009 , 379, 136-150	6	109
95	Near real time satellite imagery to support and verify timely flood modelling. <i>Hydrological Processes</i> , 2009 , 23, 799-803	3.3	57
94	A data assimilation approach to discharge estimation from space. <i>Hydrological Processes</i> , 2009 , 23, 3641-3649	3.9	116
93	Integrated analysis of risks of coastal flooding and cliff erosion under scenarios of long term change. <i>Climatic Change</i> , 2009 , 95, 249-288	4.5	164

92	Flood frequency analysis for nonstationary annual peak records in an urban drainage basin. <i>Advances in Water Resources</i> , 2009 , 32, 1255-1266	4.7	292
91	The Utility of Spaceborne Radar to Render Flood Inundation Maps Based on Multialgorithm Ensembles. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2009 , 47, 2801-2807	8.1	96
90	Progress in integration of remote sensing-derived flood extent and stage data and hydraulic models. <i>Reviews of Geophysics</i> , 2009 , 47,	23.1	218
89	Optimal Cross-Sectional Spacing in Preissmann Scheme 1D Hydrodynamic Models. <i>Journal of Hydraulic Engineering</i> , 2009 , 135, 96-105	1.8	102
88	Benchmarking 2D hydraulic models for urban flooding. <i>Water Management</i> , 2008 , 161, 13-30	1	204
87	Case Study of the Use of Remotely Sensed Data for Modeling Flood Inundation on the River Severn, U.K.. <i>Journal of Hydraulic Engineering</i> , 2008 , 134, 533-540	1.8	31
86	Evaluating the effect of scale in flood inundation modelling in urban environments. <i>Hydrological Processes</i> , 2008 , 22, 5107-5118	3.3	155
85	A probabilistic methodology to estimate future coastal flood risk due to sea level rise. <i>Coastal Engineering</i> , 2008 , 55, 1062-1073	4.8	133
84	Improving River Flood Extent Delineation From Synthetic Aperture Radar Using Airborne Laser Altimetry. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007 , 45, 3932-3943	8.1	76
83	Spatial and temporal complexity of the Amazon flood measured from space. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	132
82	Modeling large-scale inundation of Amazonian seasonally flooded wetlands. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	149
81	Use of fused airborne scanning laser altimetry and digital map data for urban flood modelling. <i>Hydrological Processes</i> , 2007 , 21, 1436-1447	3.3	80
80	Comparing the performance of a 2-D finite element and a 2-D finite volume model of floodplain inundation using airborne SAR imagery. <i>Hydrological Processes</i> , 2007 , 21, 2745-2759	3.3	95
79	Simple spatially-distributed models for predicting flood inundation: A review. <i>Geomorphology</i> , 2007 , 90, 208-225	4.3	290
78	Reach scale floodplain inundation dynamics observed using airborne synthetic aperture radar imagery: Data analysis and modelling. <i>Journal of Hydrology</i> , 2006 , 328, 306-318	6	153
77	Effects of mesh resolution and topographic representation in 2D finite volume models of shallow water fluvial flow. <i>Journal of Hydrology</i> , 2006 , 329, 306-314	6	94
76	Improved simulation of flood flows using storage cell models. <i>Water Management</i> , 2006 , 159, 9-18	1	26
75	Modelling of Open Channel Flow through Vegetation 2005 , 395-428		14

74	Distributed Sensitivity Analysis of Flood Inundation Model Calibration. <i>Journal of Hydraulic Engineering</i> , 2005 , 131, 117-126	1.8	169
73	Identifiability of distributed floodplain roughness values in flood extent estimation. <i>Journal of Hydrology</i> , 2005 , 314, 139-157	6	115
72	Numerical Modelling of Floodplain Flow 2005 , 271-304		5
71	Towards Risk-Based Prediction in Real-World Applications of Complex Hydraulic Models 2005 , 461-486		
70	A Framework for Model Verification and Validation of CFD Schemes in Natural Open Channel Flows 2005 , 169-192		16
69	Parameterisation, Validation and Uncertainty Analysis of CFD Models of Fluvial and Flood Hydraulics in the Natural Environment 2005 , 193-213		10
68	An adaptive time step solution for raster-based storage cell modelling of floodplain inundation. <i>Advances in Water Resources</i> , 2005 , 28, 975-991	4.7	157
67	Simplified two-dimensional numerical modelling of coastal flooding and example applications. <i>Coastal Engineering</i> , 2005 , 52, 793-810	4.8	152
66	Flood Inundation Modelling Using LiDAR and SAR Data 2005 , 79-106		1
65	Sampling-based flood risk analysis for fluvial dike systems. <i>Stochastic Environmental Research and Risk Assessment</i> , 2005 , 19, 388-402	3.5	64
64	Flood Forecasting and Warning at the River Basin and at the European Scale. <i>Natural Hazards</i> , 2005 , 36, 25-42	3	48
63	Cascading model uncertainty from medium range weather forecasts (10 days) through a rainfall-runoff model to flood inundation predictions within the European Flood Forecasting System (EFFS). <i>Hydrology and Earth System Sciences</i> , 2005 , 9, 381-393	5.5	239
62	2005 ,		45
61	Utility of different data types for calibrating flood inundation models within a GLUE framework. <i>Hydrology and Earth System Sciences</i> , 2005 , 9, 412-430	5.5	94
60	Quantified Analysis of the Probability of Flooding in the Thames Estuary under Imaginable Worst-case Sea Level Rise Scenarios. <i>International Journal of Water Resources Development</i> , 2005 , 21, 577-591	3	57
59	Computational Fluid Dynamics Modelling for Environmental Hydraulics 2005 , 1-15		8
58	Modelling Wetting and Drying Processes in Hydraulic Models 2005 , 121-146		5
57	EFFICIENT BROAD SCALE COASTAL FLOOD RISK ASSESSMENT 2005 ,		3

56	Bayesian updating of flood inundation likelihoods conditioned on flood extent data. <i>Hydrological Processes</i> , 2004 , 18, 3347-3370	3.3	123
55	Remote sensing and flood inundation modelling. <i>Hydrological Processes</i> , 2004 , 18, 2593-2597	3.3	169
54	Toward a conceptual model of floodplain water table response. <i>Water Resources Research</i> , 2004 , 40,	5.4	64
53	Is Vostok lake in steady state?. <i>Annals of Glaciology</i> , 2004 , 39, 490-494	2.5	6
52	Development of a European flood forecasting system. <i>International Journal of River Basin Management</i> , 2003 , 1, 49-59	1.7	155
51	Numerical simulation of three-dimensional velocity fields in pressurized and non-pressurized Nye channels. <i>Annals of Glaciology</i> , 2003 , 37, 281-285	2.5	4
50	Application and validation of numerical codes in the prediction of compound channel flows. <i>Proceedings of the Institution of Civil Engineers Water and Maritime Engineering</i> , 2003 , 156, 117-128		16
49	Application of a 3D numerical model to a river with vegetated floodplains. <i>Journal of Hydroinformatics</i> , 2003 , 5, 99-112	2.6	55
48	Optimal use of high-resolution topographic data in flood inundation models. <i>Hydrological Processes</i> , 2003 , 17, 537-557	3.3	158
47	Two-dimensional hydraulic flood modelling using a finite-element mesh decomposed according to vegetation and topographic features derived from airborne scanning laser altimetry. <i>Hydrological Processes</i> , 2003 , 17, 1979-2000	3.3	113
46	Floodplain friction parameterization in two-dimensional river flood models using vegetation heights derived from airborne scanning laser altimetry. <i>Hydrological Processes</i> , 2003 , 17, 1711-1732	3.3	167
45	Attenuating reaches and the regional flood response of an urbanizing drainage basin. <i>Advances in Water Resources</i> , 2003 , 26, 673-684	4.7	43
44	Mixing of Hillslope, River, and Alluvial Ground Waters in Lowland Floodplains. <i>Ground Water</i> , 2003 , 41, 926-936	2.4	11
43	Open Channel Flow through Different Forms of Submerged Flexible Vegetation. <i>Journal of Hydraulic Engineering</i> , 2003 , 129, 847-853	1.8	184
42	Assessing the uncertainty in distributed model predictions using observed binary pattern information within GLUE. <i>Hydrological Processes</i> , 2002 , 16, 2001-2016	3.3	270
41	The Regional Hydrology of Extreme Floods in an Urbanizing Drainage Basin. <i>Journal of Hydrometeorology</i> , 2002 , 3, 267-282	3.7	125
40	Predicting floodplain inundation: raster-based modelling versus the finite-element approach. <i>Hydrological Processes</i> , 2001 , 15, 825-842	3.3	251
39	Effects of spatial resolution on a raster based model of flood flow. <i>Journal of Hydrology</i> , 2001 , 253, 239-249		255

38	Development of a reach scale two-dimensional finite element model for floodplain sediment deposition. <i>Proceedings of the Institution of Civil Engineers Water and Maritime Engineering</i> , 2000 , 142, 141-156		3
37	Numerical simulation of floodplain hydrology. <i>Water Resources Research</i> , 2000 , 36, 2517-2529	5.4	55
36	Development and testing of a subgrid-scale model for moving-boundary hydrodynamic problems in shallow water. <i>Hydrological Processes</i> , 2000 , 14, 2073-2088	3.3	42
35	Integration of high-resolution topographic data with floodplain flow models. <i>Hydrological Processes</i> , 2000 , 14, 2109-2122	3.3	217
34	The TELEMAC modelling system Special issue. <i>Hydrological Processes</i> , 2000 , 14, 2207-2208	3.3	31
33	Development of one, two and three-dimensional finite element groundwater models within a generalized object-oriented framework. <i>Hydrological Processes</i> , 2000 , 14, 2245-2259	3.3	7
32	Modelling suspended sediment deposition on a fluvial floodplain using a two-dimensional dynamic finite element model. <i>Journal of Hydrology</i> , 2000 , 229, 202-218	6	70
31	A simple raster-based model for flood inundation simulation. <i>Journal of Hydrology</i> , 2000 , 236, 54-77	6	931
30	Two dimensional finite element modelling of floodplain flow. <i>Houille Blanche</i> , 1999 , 85, 82-88	0.3	9
29	A preliminary investigation of the integration of modelled floodplain hydraulics with estimates of overbank floodplain sedimentation derived from Pb-210 and Cs-137 measurements. <i>Earth Surface Processes and Landforms</i> , 1999 , 24, 211-231	3.7	19
28	The importance of spatial resolution in hydraulic models for floodplain environments. <i>Journal of Hydrology</i> , 1999 , 216, 124-136	6	99
27	Modelling floods in hydrologically complex lowland river reaches. <i>Journal of Hydrology</i> , 1999 , 223, 85-106		39
26	A new method for moving boundary hydrodynamic problems in shallow water. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 1999 , 455, 3107-3128	2.4	67
25	Modelling the spatial variability in floodplain soil contamination during flood events to improve chemical mass balance estimates 1998 , 12, 1233-1255		18
24	Investigating two-dimensional, finite element predictions of floodplain inundation using fractal generated topography 1998 , 12, 1257-1277		40
23	INTERNAL AND EXTERNAL VALIDATION OF A TWO-DIMENSIONAL FINITE ELEMENT CODE FOR RIVER FLOOD SIMULATIONS.. <i>Proceedings of the Institution of Civil Engineers: Water, Maritime and Energy</i> , 1998 , 130, 127-141		41
22	Modelling the spatial variability in floodplain soil contamination during flood events to improve chemical mass balance estimates 1998 , 12, 1233		1
21	The potential application of finite element modelling of flood plain inundation to predict patterns of overbank deposition. <i>Hydrological Sciences Journal</i> , 1997 , 42, 859-875	3.5	7

20	Integrating remote sensing observations of flood hydrology and hydraulic modelling. <i>Hydrological Processes</i> , 1997 , 11, 1777-1795	3.3	142
19	Investigating the Behaviour of Two-Dimensional Finite Element Models of Compound Channel Flow 1997 , 22, 3-17		28
18	A preliminary investigation into the impact of initial conditions on flood inundation predictions using a time/space distributed sensitivity analysis. <i>Catena</i> , 1996 , 26, 115-134	5.8	28
17	The Importance of Internal Validation in the Assessment of Physically Based Distributed Models. <i>Transactions of the Institute of British Geographers</i> , 1995 , 20, 248	2.5	11
16	INITIAL COMPARISON OF TWO TWO-DIMENSIONAL FINITE ELEMENT CODES FOR RIVER FLOOD SIMULATION.. <i>Proceedings of the Institution of Civil Engineers: Water, Maritime and Energy</i> , 1995 , 112, 238-248		46
15	Initial testing of a two-dimensional finite element model for floodplain inundation. <i>Proceedings of the Royal Society A</i> , 1994 , 444, 149-159		8
14	Evaluating data constraints on two dimensional finite element models of floodplain flow. <i>Catena</i> , 1994 , 22, 1-15	5.8	15
13	A two-dimensional finite-element model for river flow inundation. <i>Proceedings of the Royal Society A</i> , 1993 , 440, 481-491		42
12	Modelling floodplain flows using a two-dimensional finite element model. <i>Earth Surface Processes and Landforms</i> , 1992 , 17, 575-588	3.7	89
11	Urban flood modelling69-77		
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