Benjamin Renard

List of Publications by Year
in descending order

70 papers	3,828 citations	147801 31 h-index	128289 60 g-index
74 all docs	74 docs citations	74 times ranked	3964 citing authors

#	Article	IF	Citations
1	Understanding predictive uncertainty in hydrologic modeling: The challenge of identifying input and structural errors. Water Resources Research, 2010, 46, .	4.2	589
2	Critical evaluation of parameter consistency and predictive uncertainty in hydrological modeling: A case study using Bayesian total error analysis. Water Resources Research, 2009, 45, .	4.2	293
3	Use of a Gaussian copula for multivariate extreme value analysis: Some case studies in hydrology. Advances in Water Resources, 2007, 30, 897-912.	3.8	267
4	Toward a reliable decomposition of predictive uncertainty in hydrological modeling: Characterizing rainfall errors using conditional simulation. Water Resources Research, 2011, 47, .	4.2	172
5	Combining hydraulic knowledge and uncertain gaugings in the estimation of hydrometric rating curves: A Bayesian approach. Journal of Hydrology, 2014, 509, 573-587.	5.4	146
6	Regional methods for trend detection: Assessing field significance and regional consistency. Water Resources Research, 2008, 44, .	4.2	129
7	Low flows in France and their relationship to large-scale climate indices. Journal of Hydrology, 2013, 482, 105-118.	5.4	123
8	Climate-driven variability in the occurrence of major floods across North America and Europe. Journal of Hydrology, 2017, 552, 704-717.	5.4	122
9	A global analysis of the asymmetric effect of ENSO on extreme precipitation. Journal of Hydrology, 2015, 530, 51-65.	5.4	117
10	A Comparison of Methods for Streamflow Uncertainty Estimation. Water Resources Research, 2018, 54, 7149-7176.	4.2	108
11	Experimental studies on fragmentation of rock falls on impact with rock surfaces. International Journal of Rock Mechanics and Minings Sciences, 2009, 46, 708-715.	5.8	93
12	A Bayesian hierarchical approach to regional frequency analysis. Water Resources Research, 2011, 47, .	4.2	91
13	Statistical analysis of extreme events in a non-stationary context via a Bayesian framework: case study with peak-over-threshold data. Stochastic Environmental Research and Risk Assessment, 2006, 21, 97-112.	4.0	89
14	Trends in snowmelt-related streamflow timing in the conterminous United States. Journal of Hydrology, 2017, 547, 208-221.	5.4	88
15	Effects of climate, regulation, and urbanization on historical flood trends in the United States. Journal of Hydrology, 2019, 573, 697-709.	5.4	78
16	Extrapolation of rating curves by hydraulic modelling, with application to flood frequency analysis. Hydrological Sciences Journal, 2010, 55, 883-898.	2.6	77
17	Flood frequency analysis using historical data: accounting for random and systematic errors. Hydrological Sciences Journal, 2010, 55, 192-208.	2.6	71
18	There are no hydrological monsters, just models and observations with large uncertainties!. Hydrological Sciences Journal, 2010, 55, 980-991.	2.6	68

#	Article	IF	Citations
19	A general regional frequency analysis framework for quantifying local-scale climate effects: A case study of ENSO effects on Southeast Queensland rainfall. Journal of Hydrology, 2014, 512, 53-68.	5.4	66
20	An application of Bayesian analysis and Markov chain Monte Carlo methods to the estimation of a regional trend in annual maxima. Water Resources Research, 2006, 42, .	4.2	65
21	Multi-scale hydrometeorological observation and modelling for flash flood understanding. Hydrology and Earth System Sciences, 2014, 18, 3733-3761.	4.9	61
22	Evaluation of statistical models for forecast errors from the HBV model. Journal of Hydrology, 2010, 384, 142-155.	5.4	60
23	Low streamflow trends at human-impacted and reference basins in the United States. Journal of Hydrology, 2020, 580, 124254.	5.4	59
24	Bayesian Methods for Non-stationary Extreme Value Analysis. Water Science and Technology Library, 2013, , 39-95.	0.3	57
25	Dataâ€based comparison of frequency analysis methods: A general framework. Water Resources Research, 2013, 49, 825-843.	4.2	55
26	Impact of Stage Measurement Errors on Streamflow Uncertainty. Water Resources Research, 2018, 54, 1952-1976.	4.2	50
27	Trends in the hydrologic regime of Alpine rivers. Journal of Hydrology, 2015, 529, 1823-1837.	5.4	48
28	Calibrating a hydrological model in stage space to account for rating curve uncertainties: general framework and key challenges. Advances in Water Resources, 2017, 105, 51-66.	3.8	44
29	Reliability and robustness of rainfall compound distribution model based on weather pattern sub-sampling. Hydrology and Earth System Sciences, 2011, 15, 519-532.	4.9	42
30	Integrating hydropower and intermittent climateâ€related renewable energies: a call for hydrology. Hydrological Processes, 2014, 28, 5465-5468.	2.6	38
31	Regional frequency analysis conditioned on large-scale atmospheric or oceanic fields. Water Resources Research, 2014, 50, 9536-9554.	4.2	37
32	A limitedâ€memory acceleration strategy for MCMC sampling in hierarchical Bayesian calibration of hydrological models. Water Resources Research, 2010, 46, .	4.2	32
33	A European Flood Database: facilitating comprehensive flood research beyond administrative boundaries. Proceedings of the International Association of Hydrological Sciences, 0, 370, 89-95.	1.0	32
34	Shift Happens! Adjusting Stageâ€Discharge Rating Curves to Morphological Changes at Known Times. Water Resources Research, 2019, 55, 2876-2899.	4.2	30
35	A data-based comparison of flood frequency analysis methods used in France. Natural Hazards and Earth System Sciences, 2014, 14, 295-308.	3.6	28
36	Bayesian analysis of stageâ€fallâ€discharge rating curves and their uncertainties. Water Resources Research, 2016, 52, 7424-7443.	4.2	28

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37	The ENSOâ€“Precipitation Teleconnection and Its Modulation by the Interdecadal Pacific Oscillation. Journal of Climate, 2015, 28, 4753-4773.	3.2	25
38	Impact of Melon Accessions Resistant to Aphids on the Demographic Potential of Silverleaf Whitefly. Journal of Economic Entomology, 2005, 98, 557-567.	1.8	23
39	Stream Solutes and Particulates Export Regimes: A New Framework to Optimize Their Monitoring. Frontiers in Ecology and Evolution, 2020, 7, .	2.2	18
40	Comment on â€œAn integrated hydrologic Bayesian multimodel combination framework: Confronting input, parameter, and model structural uncertainty in hydrologic predictionâ€•by Newsha K. Ajami et al.. Water Resources Research, 2009, 45, .	4.2	17
41	Evolution des extrÃªmes hydromÃ©triques en France Ã partir de donnÃ©es observÃ©es. Houille Blanche, 2006, 92, 48-54.	0.3	15
42	Groundwater-level trends in the U.S. glacial aquifer system, 1964â€“2013. Journal of Hydrology, 2017, 553, 289-303.	5.4	15
43	The open source RFortran library for accessing R from Fortran, with applications in environmental modelling. Environmental Modelling and Software, 2011, 26, 219-234.	4.5	14
44	Revealing Hidden Climate Indices from the Occurrence of Hydrologic Extremes. Water Resources Research, 2019, 55, 7662-7681.	4.2	14
45	Estimating the uncertainty of videoâ€based flow velocity and discharge measurements due to the conversion of field to image coordinates. Hydrological Processes, 2021, 35, e14169.	2.6	14
46	Decomposition of Uncertainty Sources in Acoustic Doppler Current Profiler Streamflow Measurements Using Repeated Measures Experiments. Water Resources Research, 2019, 55, 7520-7540.	4.2	12
47	Bayesian trend analysis in annual rainfall total, duration and maximum in the Kara River basin (West) Tj ETQq1 1 0.784314 rgBT /Over	2.4	11
48	A Rating Curve Model Accounting for Cyclic Stageâ€Discharge Shifts due to Seasonal Aquatic Vegetation. Water Resources Research, 2021, 57, e2020WR027745.	4.2	10
49	RÃ©sultats du projet ExtraFlo (ANR 2009-2013) sur l'estimation des pluies et crues extrÃªmes. Houille Blanche, 2014, , 5-13.	0.3	9
50	Combining regional estimation and historical floods: A multivariate semiparametric peaksâ€overâ€threshold model with censored data. Water Resources Research, 2015, 51, 9646-9664.	4.2	8
51	Analyse bayÃ©sienne des courbes de tarage et de leurs incertitudes : la mÃ©thode BaRatin. Houille Blanche, 2013, 99, 31-41.	0.3	8
52	Tendances observÃ©es sur les rÃ©gimes hydrologiques de lâ€™Arc Alpin. Houille Blanche, 2012, 98, 38-43.	0.3	7
53	RÃ©sultats du projet Extraflo sur la comparaison des mÃ©thodes d'estimation des pluies extrÃªmes en France. Houille Blanche, 2014, , 14-19.	0.3	6
54	Ã‰tude du risque d'inondation d'un site industriel par des crues extrÃªmesÂ: de l'Ã©valuation des valeurs extrÃªmes aux incertitudes hydrologiques et hydrauliques. Houille Blanche, 2015, 101, 67-74.	0.3	6

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55	Analyse rÃ©gionale sur les extrÃªmes hydromÃ©triques en FranceÂ: dÃ©tection de changements cohÃ©rents et recherche de causalitÃ© hydrologique. Houille Blanche, 2007, 93, 83-89.	0.3	6
56	A generalised approach for identifying influential data in hydrological modelling. Environmental Modelling and Software, 2019, 111, 231-247.	4.5	5
57	Detection of Stageâ€Discharge Rating Shifts Using Gaugings: A Recursive Segmentation Procedure Accounting for Observational and Model Uncertainties. Water Resources Research, 2021, 57, e2020WR028607.	4.2	5
58	A Hidden Climate Indices Modeling Framework for Multivariable Spaceâ€Time Data. Water Resources Research, 2022, 58, .	4.2	4
59	Streamflow uncertainty due to the limited sensitivity of controls at hydrometric stations. Hydrological Processes, 2022, 36, .	2.6	3
60	DÃ©tection et prise en compte dâ€™Ã©ventuels impacts du changement climatique sur les extrÃªmes hydrologiques en France. Houille Blanche, 2008, 94, 109-117.	0.3	2
61	Scrutinizing Parameter Consistency and Predictive Uncertainty in Rainfall-Runoff Models Using Bayesian Total Error Analysis. , 2008, , .		1
62	Estimating the long-term evolution of river bed levels using hydrometric data. E3S Web of Conferences, 2018, 40, 06003.	0.5	1
63	BaRatin-SFD, analyse bayÃ©sienne des courbes de tarage Ã double Ã©chelle et de leurs incertitudes. Houille Blanche, 2017, 103, 22-28.	0.3	1
64	MÃ©thode de consolidation des courbes de tarage pour les crues d'occurrence rare sur le bassin versant expÃ©rimental du Real Collobrier. Houille Blanche, 2013, 99, 16-23.	0.3	1
65	Bayesian analysis of rating curves at twin gauge stations. , 2016, , .		1
66	Impact de la sensibilitÃ© des contrÃ1es hydrauliques sur les incertitudes hydromÃ©triques. Houille Blanche, 2018, 104, 27-35.	0.3	1
67	Estimating time-varying stage-discharge relations in rivers with aquatic vegetation. , 2020, , 1536-1543.		1
68	Estimation bayÃ©sienne des courbes de tarage et des incertitudes associÃ©esÂ: application de la mÃ©thode BaRatin au Congo Ã Brazzaville. Proceedings of the International Association of Hydrological Sciences, 0, 384, 25-29.	1.0	1
69	Investigating the Impact of Predictive Uncertainty in Rainfall-Runoff Modelling on Storage Reliability Estimates Using Bayesian Total Error Analysis. , 2008, , .		0
70	Observations dâ€™Ã©vÃ©nements extrÃªmes historiques dans le monde, selon les climats et les rÃ©seaux de mesure. Houille Blanche, 2006, 92, 60-65.	0.3	0