

# Isabelle Braud

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

1,931  
citations

257450

24  
h-index

276875

41  
g-index

83  
all docs

83  
docs citations

83  
times ranked

2931  
citing authors

#	ARTICLE	IF	CITATIONS
1	HyMeX-SOP1: The Field Campaign Dedicated to Heavy Precipitation and Flash Flooding in the Northwestern Mediterranean. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 1083-1100.	3.3	262
2	Crowdsourced data for flood hydrology: Feedback from recent citizen science projects in Argentina, France and New Zealand. <i>Journal of Hydrology</i> , 2016, 541, 766-777.	5.4	153
3	Partitioning evapotranspiration fluxes into soil evaporation and plant transpiration using water stable isotopes under controlled conditions. <i>Hydrological Processes</i> , 2010, 24, 3177-3194.	2.6	106
4	Development and analysis of the Soil Water Infiltration Global database. <i>Earth System Science Data</i> , 2018, 10, 1237-1263.	9.9	85
5	The use of distributed hydrological models for the Gard 2002 flash flood event: Analysis of associated hydrological processes. <i>Journal of Hydrology</i> , 2010, 394, 162-181.	5.4	70
6	Sensitivity of the hydrological response to the variability of rainfall fields and soils for the Gard 2002 flash-flood event. <i>Journal of Hydrology</i> , 2010, 394, 134-147.	5.4	68
7	Modelling heat and water exchanges of fallow land covered with plant-residue mulch. <i>Agricultural and Forest Meteorology</i> , 1999, 97, 151-169.	4.8	66
8	Integrated high-resolution dataset of high-intensity European and Mediterranean flash floods. <i>Earth System Science Data</i> , 2018, 10, 1783-1794.	9.9	62
9	Multi-scale hydrometeorological observation and modelling for flash flood understanding. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 3733-3761.	4.9	61
10	Comparison of root water uptake modules using either the surface energy balance or potential transpiration. <i>Journal of Hydrology</i> , 2005, 301, 267-286.	5.4	54
11	Constraining a physically based Soil-Vegetation-Atmosphere Transfer model with surface water content and thermal infrared brightness temperature measurements using a multiobjective approach. <i>Water Resources Research</i> , 2005, 41, .	4.2	43
12	Factors controlling the isotopic partitioning between soil evaporation and plant transpiration: Assessment using a multi-objective calibration of SiSPAT-Isotope under controlled conditions. <i>Journal of Hydrology</i> , 2012, 442-443, 75-88.	5.4	42
13	Multi-objective regional modelling. <i>Journal of Hydrology</i> , 2006, 327, 339-351.	5.4	41
14	Precipitation, soil moisture and runoff variability in a small river catchment (Ardèche, France) during HyMeX Special Observation Period 1. <i>Journal of Hydrology</i> , 2014, 516, 330-342.	5.4	38
15	Regional estimation of catchment-scale soil properties by means of streamflow recession analysis for use in distributed hydrological models. <i>Hydrological Processes</i> , 2014, 28, 6276-6291.	2.6	36
16	Comparison of catchment and network delineation approaches in complex suburban environments: application to the Chaudanne catchment, France. <i>Hydrological Processes</i> , 2013, 27, 3747-3761.	2.6	35
17	SVAT modeling over the Alpilles-ReSeDA experiment: comparing SVAT models over wheat fields. <i>Agronomy for Sustainable Development</i> , 2002, 22, 651-668.	0.8	32
18	Intermittent rivers and ephemeral streams: Perspectives for critical zone science and research on socio-ecosystems. <i>Wiley Interdisciplinary Reviews: Water</i> , 2021, 8, e1523.	6.5	31

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19	A Linking Test to reduce the number of hydraulic parameters necessary to simulate groundwater recharge in unsaturated soils. <i>Advances in Water Resources</i> , 2008, 31, 355-369.	3.8	28
20	Steering operational synergies in terrestrial observation networks: opportunity for advancing Earth system dynamics modelling. <i>Earth System Dynamics</i> , 2018, 9, 593-609.	7.1	28
21	Spatial variability of surface properties and estimation of surface fluxes of a savannah. <i>Agricultural and Forest Meteorology</i> , 1998, 89, 15-44.	4.8	27
22	Assessment of evaporation and water fluxes in a column of dry saline soil subject to different water table levels. <i>Hydrological Processes</i> , 2014, 28, 3655-3669.	2.6	25
23	Detecting surface runoff location in a small catchment using distributed and simple observation method. <i>Journal of Hydrology</i> , 2015, 525, 113-129.	5.4	25
24	Building a field- and model-based climatology of local water and energy cycles in the cultivated Sahel – annual budgets and seasonality. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 5001-5024.	4.9	23
25	Investigating the role of geology in the hydrological response of Mediterranean catchments prone to flash-floods: Regional modelling study and process understanding. <i>Journal of Hydrology</i> , 2016, 541, 158-172.	5.4	23
26	How does initial soil moisture influence the hydrological response? A case study from southern France. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 6127-6146.	4.9	22
27	Spatial Variability of Soil Surface Properties and Consequences for the Annual and Monthly Water Balance of a Semiarid Environment (EFEDA Experiment). <i>Journal of Hydrometeorology</i> , 2003, 4, 121-137.	1.9	21
28	Monitoring energy and mass transfers during the Alpilles-ReSeDA experiment. <i>Agronomy for Sustainable Development</i> , 2002, 22, 597-610.	0.8	21
29	Assessing the simple dynamical systems approach in a Mediterranean context: application to the Ardèche catchment (France). <i>Hydrology and Earth System Sciences</i> , 2015, 19, 2427-2449.	4.9	20
30	Description and evaluation of a surface runoff susceptibility mapping method. <i>Journal of Hydrology</i> , 2016, 541, 495-509.	5.4	20
31	Adapting HYDRUS-1D to simulate the transport of soil water isotopes with evaporation fractionation. <i>Environmental Modelling and Software</i> , 2021, 143, 105118.	4.5	20
32	A high space-time resolution dataset linking meteorological forcing and hydro-sedimentary response in a mesoscale Mediterranean catchment (Auzon) of the Ardèche region, France. <i>Earth System Science Data</i> , 2017, 9, 221-249.	9.9	20
33	Analyse conjointe des régimes pluviométriques et hydrologiques dans le bassin de la Tafna (Algérie) <i>Tj ETQq</i> , 1 0.784314 rgBT	2.6	19
34	Mapping topsoil field-saturated hydraulic conductivity from point measurements using different methods. <i>Journal of Hydrology and Hydromechanics</i> , 2017, 65, 264-275.	2.0	19
35	Incorporation of water vapor transfer in the JULES land surface model: Implications for key soil variables and land surface fluxes. <i>Water Resources Research</i> , 2012, 48, .	4.2	17
36	A methodology to quantify ecohydrological services of street trees. <i>Ecohydrology and Hydrobiology</i> , 2017, 17, 190-206.	2.3	16

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37	Modelling evaporation processes in soils from the Huasco salt flat basin, Chile. <i>Hydrological Processes</i> , 2016, 30, 4704-4719.	2.6	14
38	Impact of Urban Growth and High Residential Irrigation on Streamflow and Groundwater Levels in a Peri-Urban Semiarid Catchment. <i>Journal of the American Water Resources Association</i> , 2019, 55, 720-739.	2.4	14
39	A surface runoff mapping method for optimizing risk assessment on railways. <i>Safety Science</i> , 2018, 110, 253-267.	4.9	13
40	From agricultural catchment to management scenarios: A modular tool to assess effects of landscape features on water and pesticide behavior. <i>Science of the Total Environment</i> , 2019, 671, 1144-1160.	8.0	13
41	The impact of evaporation fractionation on the inverse estimation of soil hydraulic and isotope transport parameters. <i>Journal of Hydrology</i> , 2022, 612, 128100.	5.4	13
42	Value of distributed water level and soil moisture data in the evaluation of a distributed hydrological model: Application to the PUMMA model in the Mercier catchment (6.6 km <sup>2</sup> ) in France. <i>Journal of Hydrology</i> , 2019, 569, 753-770.	5.4	11
43	Urban hydrologic trend analysis based on rainfall and runoff data analysis and conceptual model calibration. <i>Hydrological Processes</i> , 2017, 31, 1349-1359.	2.6	10
44	Dealing with shallow groundwater contexts for the modelling of urban hydrology – A simplified approach to represent interactions between surface hydrology, groundwater and underground structures in hydrological models. <i>Environmental Modelling and Software</i> , 2021, 144, 105144.	4.5	10
45	A Linking Test that establishes if groundwater recharge can be determined by optimising vegetation parameters against soil moisture. <i>Annals of Forest Science</i> , 2008, 65, 702-702.	2.0	9
46	A method to use proxy data of runoff-related impacts for the evaluation of a model mapping intense storm runoff hazard: application to the railway context. <i>Natural Hazards and Earth System Sciences</i> , 2020, 20, 947-966.	3.6	9
47	Le partage de la ressource en eau sur la Durance en 2050: vers une évolution du mode de gestion des grands ouvrages duranciens?. <i>Houille Blanche</i> , 2016, 102, 25-31.	0.3	9
48	Information content of snow hydrological signatures based on streamflow, precipitation and air temperature. <i>Hydrological Processes</i> , 2020, 34, 2763-2779.	2.6	8
49	The Challenges of Flash Flood Forecasting. , 2018, , 63-88.		7
50	Effect of aerodynamic resistance modelling on SiSPAT-RS simulated surface fluxes. <i>Agronomy for Sustainable Development</i> , 2002, 22, 641-650.	0.8	7
51	Use of post-event surveys of impacts on railways for the evaluation of the IRIP method for surface runoff mapping. <i>E3S Web of Conferences</i> , 2016, 7, 10005.	0.5	6
52	Building the information system of the French Critical Zone Observatories network: Theia/OZCAR-IS. <i>Hydrological Sciences Journal</i> , 2022, 67, 2401-2419.	2.6	6
53	Advances in flash floods understanding and modelling derived from the FloodScale project in South-East France. <i>E3S Web of Conferences</i> , 2016, 7, 04005.	0.5	5
54	Mise en œuvre de la méthode de cartographie du ruissellement IRIP pour l'analyse des risques liés aux inondations sur l'infrastructure ferroviaire. <i>Houille Blanche</i> , 2015, 101, 56-64.	0.3	4

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55	Development and evaluation of an efficient soil-atmosphere model (FHAVeT) based on the Ross fast solution of the Richards equation for bare soil conditions. Hydrology and Earth System Sciences, 2015, 19, 969-980.	4.9	3
56	Le programme HYMEX : Connaissances et perspectives des pluies intenses et crues rapides en région méditerranéenne. Houille Blanche, 2019, 105, 5-12.	0.3	3
57	Objective Analysis of Envelope Curves for Peak Floods of European and Mediterranean Flash Floods. Climate Change Management, 2020, , 267-276.	0.8	3
58	Lessons learnt from recent citizen science initiatives to document floods in France, Argentina and New Zealand. E3S Web of Conferences, 2016, 7, 16001.	0.5	2
59	Quels liens entre climatologie, occupation des sols et inondations dans le bassin versant de l'Yzeron (ouest Lyonnais) ? Apport de l'analyse conjointe de données hydroclimatiques et d'images satellitaires à haute résolution. Climatologie, 2012, 9, 83-107.	0.2	2
60	Consequences of interactions between stormwater infiltration systems, shallow groundwater and underground structures at the neighborhood scale. Urban Water Journal, 2022, 19, 812-823.	2.1	1
61	Comparison of measured and SISPAT-RS simulated brightness temperatures and reflectances at field scale during ReSeDA experiment. , 2002, 4542, 130.		0
62	Développement et évaluation d'un modèle hydrologique distribué pour des bassins périurbains - Application au bassin de l'Yzeron (150 km <sup>2</sup> ). Houille Blanche, 2015, , 84-91.	0.3	0