

Vazken AndrÃ©assian

List of Publications by Year in descending order

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Version: 2024-02-01

113
papers

11,788
citations

47006

47
h-index

29157

104
g-index

147
all docs

147
docs citations

147
times ranked

8571
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigating hydrological model versatility to simulate extreme flood events. <i>Hydrological Sciences Journal</i> , 2022, 67, 628-645.	2.6	6
2	Quantifying multi-year hydrological memory with Catchment Forgetting Curves. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 2715-2732.	4.9	9
3	On constraining a lumped hydrological model with both piezometry and streamflow: results of a large sample evaluation. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 2733-2758.	4.9	3
4	Streamflow naturalization methods: a review. <i>Hydrological Sciences Journal</i> , 2021, 66, 12-36.	2.6	23
5	When does a parsimonious model fail to simulate floods? Learning from the seasonality of model bias. <i>Hydrological Sciences Journal</i> , 2021, 66, 1288-1305.	2.6	5
6	Technical note: RAT – a robustness assessment test for calibrated and uncalibrated hydrological models. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 5013-5027.	4.9	4
7	Multi-objective fitting of concentration–discharge relationships. <i>Hydrological Processes</i> , 2021, 35, .	2.6	2
8	Technical note: PMR – a proxy metric to assess hydrological model robustness in a changing climate. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 5703-5716.	4.9	4
9	A combined mixing model for high-frequency concentration–discharge relationships. <i>Journal of Hydrology</i> , 2020, 591, 125559.	5.4	13
10	Technical note: A two-sided affine power scaling relationship to represent the concentration–discharge relationship. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 1823-1830.	4.9	11
11	Assessing the performance and robustness of two conceptual rainfall-runoff models on a worldwide sample of watersheds. <i>Journal of Hydrology</i> , 2020, 585, 124698.	5.4	31
12	Hydrograph separation: an impartial parametrisation for an imperfect method. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 1171-1187.	4.9	28
13	Caractérisation de la mémoire des bassins versants par approche croisée entre piézométrie et sâparation d'hydrogramme. <i>Houille Blanche</i> , 2020, 106, 30-37.	0.3	1
14	Élasticité des débits aux précipitations en Afrique sub-saharienne. <i>Houille Blanche</i> , 2020, 106, 97-104.	0.3	0
15	A Regularization Approach to Improve the Sequential Calibration of a Semidistributed Hydrological Model. <i>Water Resources Research</i> , 2019, 55, 8821-8839.	4.2	23
16	Technical Note: On the puzzling similarity of two water balance formulas – Turc – Mezentsev vs. Tixeront – Fu. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 2339-2350.	4.9	15
17	Hydrological modelling at multiple sub-daily time steps: Model improvement via flux-matching. <i>Journal of Hydrology</i> , 2019, 575, 1308-1327.	5.4	30
18	Twenty-three unsolved problems in hydrology (UPH) – a community perspective. <i>Hydrological Sciences Journal</i> , 2019, 64, 1141-1158.	2.6	474

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19	Une cartographie de l'Ä©coulement des riviÄ©res de Corse. Houille Blanche, 2019, 105, 68-77.	0.3	3
20	Impact of climate seasonality on catchment yield: A parameterization for commonly-used water balance formulas. Journal of Hydrology, 2018, 558, 266-274.	5.4	21
21	Inundation mapping based on reach-scale effective geometry. Hydrology and Earth System Sciences, 2018, 22, 5967-5985.	4.9	15
22	The suite of lumped GR hydrological models in an R package. Environmental Modelling and Software, 2017, 94, 166-171.	4.5	153
23	The Quantile Solidarity approach for the parsimonious regionalization of flow duration curves. Hydrological Sciences Journal, 2017, 62, 1364-1380.	2.6	5
24	ProcessÄ©based interpretation of conceptual hydrological model performance using a multinational catchment set. Water Resources Research, 2017, 53, 7247-7268.	4.2	36
25	Climate elasticity of streamflow revisited Ä© an elasticity index based on long-term hydrometeorological records. Hydrology and Earth System Sciences, 2016, 20, 4503-4524.	4.9	38
26	Impact of temporal resolution of inputs on hydrological model performance: An analysis based on 2400 flood events. Journal of Hydrology, 2016, 538, 454-470.	5.4	65
27	How should a rainfallÄ©runoff model be parameterized in an almost ungauged catchment? A methodology tested on 609 catchments. Water Resources Research, 2016, 52, 4765-4784.	4.2	30
28	On evaluating the robustness of spatial-proximity-based regionalization methods. Journal of Hydrology, 2016, 539, 196-203.	5.4	30
29	The Budyko hypothesis before Budyko: The hydrological legacy of Evald Oldekop. Journal of Hydrology, 2016, 535, 386-391.	5.4	27
30	Synergies entre acteurs opÄ©rationnels et scientifiques au service de l'amÄ©lioration de la prÄ©vision des crues. Houille Blanche, 2016, 102, 5-10.	0.3	3
31	Accelerating advances in continental domain hydrologic modeling. Water Resources Research, 2015, 51, 10078-10091.	4.2	102
32	Transferring global uncertainty estimates from gauged to ungauged catchments. Hydrology and Earth System Sciences, 2015, 19, 2535-2546.	4.9	28
33	Graphical tools based on Turc-Budyko plots to detect changes in catchment behaviour. Hydrological Sciences Journal, 2015, 60, 1394-1407.	2.6	12
34	Hydrological impact of forest-fire from paired-catchment and rainfallÄ©runoff modelling perspectives. Hydrological Sciences Journal, 2015, 60, 1213-1224.	2.6	23
35	Dependence of model-based extreme flood estimation on the calibration period: case study of the Kamp River (Austria). Hydrological Sciences Journal, 2015, 60, 1424-1437.	2.6	14
36	Comparing expert judgement and numerical criteria for hydrograph evaluation. Hydrological Sciences Journal, 2015, 60, 402-423.	2.6	46

#	ARTICLE	IF	CITATIONS
37	Hydrology under change: an evaluation protocol to investigate how hydrological models deal with changing catchments. <i>Hydrological Sciences Journal</i> , 2015, 60, 1184-1199.	2.6	105
38	On the need to test hydrological models under changing conditions. <i>Hydrological Sciences Journal</i> , 2015, 60, 1165-1173.	2.6	75
39	On the lack of robustness of hydrologic models regarding water balance simulation: a diagnostic approach applied to three models of increasing complexity on 20 mountainous catchments. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 727-746.	4.9	73
40	When does higher spatial resolution rainfall information improve streamflow simulation? An evaluation using 3620 flood events. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 575-594.	4.9	152
41	Benchmarking hydrological models for low-flow simulation and forecasting on French catchments. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 2829-2857.	4.9	88
42	Large-sample hydrology: a need to balance depth with breadth. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 463-477.	4.9	208
43	Investigating the interactions between data assimilation and post-processing in hydrological ensemble forecasting. <i>Journal of Hydrology</i> , 2014, 519, 2775-2784.	5.4	42
44	â€œAs simple as possible but not simplerâ€™: What is useful in a temperature-based snow-accounting routine? Part 1 â€œ Comparison of six snow accounting routines on 380 catchments. <i>Journal of Hydrology</i> , 2014, 517, 1166-1175.	5.4	74
45	A framework for testing the ability of models to project climate change and its impacts. <i>Climatic Change</i> , 2014, 122, 271-282.	3.6	104
46	Comparison of two snowmelt modelling approaches in the Dudh Koshi basin (eastern Himalayas,). <i>Journal of Hydrology</i> , 2014, 517, 1176-1187.	2.6	21
47	â€œAs simple as possible but not simplerâ€™: What is useful in a temperature-based snow-accounting routine? Part 2 â€œ Sensitivity analysis of the Cemaneige snow accounting routine on 380 catchments. <i>Journal of Hydrology</i> , 2014, 517, 1176-1187.	5.4	146
48	Seeking genericity in the selection of parameter sets: Impact on hydrological model efficiency. <i>Water Resources Research</i> , 2014, 50, 8356-8366.	4.2	22
49	Analyse de la sensibilitÃ© des calculs hydrologiques Ã la densitÃ© spatiale des rÃ©seaux hydromÃ©triques. <i>Houille Blanche</i> , 2014, 100, 39-44.	0.3	2
50	The distributed model intercomparison project â€œ Phase 2: Experiment design and summary results of the western basin experiments. <i>Journal of Hydrology</i> , 2013, 507, 300-329.	5.4	38
51	Characterising performance of environmental models. <i>Environmental Modelling and Software</i> , 2013, 40, 1-20.	4.5	1,141
52	Blending neighbor-based and climate-based information to obtain robust low-flow estimates from short time series. <i>Water Resources Research</i> , 2013, 49, 8017-8025.	4.2	4
53	On regionalizing the Turcâ€™Mezentsev water balance formula. <i>Water Resources Research</i> , 2013, 49, 7508-7517.	4.2	24
54	On the ambiguous interpretation of the Turcâ€™Budyko nondimensional graph. <i>Water Resources Research</i> , 2012, 48, .	4.2	33

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55	Do internal flow measurements improve the calibration of rainfall-runoff models?. Water Resources Research, 2012, 48, .	4.2	50
56	Crash testing hydrological models in contrasted climate conditions: An experiment on 216 Australian catchments. Water Resources Research, 2012, 48, .	4.2	307
57	All that glitters is not gold: the case of calibrating hydrological models. Hydrological Processes, 2012, 26, 2206-2210.	2.6	84
58	Towards robust methods to couple lumped rainfall-runoff models and hydraulic models: A sensitivity analysis on the Illinois River. Journal of Hydrology, 2012, 418-419, 123-135.	5.4	29
59	Results of the DMIP 2 Oklahoma experiments. Journal of Hydrology, 2012, 418-419, 17-48.	5.4	97
60	Neighbors: Nature's own hydrological models. Journal of Hydrology, 2012, 414-415, 49-58.	5.4	45
61	A review of efficiency criteria suitable for evaluating low-flow simulations. Journal of Hydrology, 2012, 420-421, 171-182.	5.4	234
62	Que sait-on des prÄ©cipitations en altitude dans les Andes semi-arides du Chili? Houille Blanche, 2012, 98, 12-17.	0.3	5
63	Mieux prÄ©voir les crues nivales: Ä©valuation de prÄ©visions probabilistes de dÄ©bit sur des bassins versants de montagne franÄ©sais. Houille Blanche, 2012, 98, 26-33.	0.3	5
64	A downward structural sensitivity analysis of hydrological models to improve low-flow simulation. Journal of Hydrology, 2011, 411, 66-76.	5.4	138
65	Les modÄ©les de prÄ©vision opÄ©rationnels d'aujourd'hui auraient-ils Ä©tÄ© fiables sur la crue de 1910? Analyse rÄ©trospective critique sur une base de donnÄ©es de 1910. Houille Blanche, 2011, 97, 22-29.	0.3	1
66	Data-set cleansing practices and hydrological regionalization: is there any valuable information among outliers?. Hydrological Sciences Journal, 2010, 55, 941-951.	2.6	9
67	Regionalization of precipitation and air temperature over high-altitude catchments - learning from outliers. Hydrological Sciences Journal, 2010, 55, 928-940.	2.6	59
68	How significant are quadratic criteria? Part 2. On the relative contribution of large flood events to the value of a quadratic criterion. Hydrological Sciences Journal, 2010, 55, 1063-1073.	2.6	17
69	How significant are quadratic criteria? Part 1. How many years are necessary to ensure the data-independence of a quadratic criterion value?. Hydrological Sciences Journal, 2010, 55, 1051-1062.	2.6	4
70	The Court of Miracles of Hydrology: can failure stories contribute to hydrological science?. Hydrological Sciences Journal, 2010, 55, 849-856.	2.6	48
71	Are seemingly physically similar catchments truly hydrologically similar?. Water Resources Research, 2010, 46, .	4.2	220
72	How crucial is it to account for the antecedent moisture conditions in flood forecasting? Comparison of event-based and continuous approaches on 178 catchments. Hydrology and Earth System Sciences, 2009, 13, 819-831.	4.9	165

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73	HES S Opinions "Crash tests for a standardized evaluation of hydrological models". Hydrology and Earth System Sciences, 2009, 13, 1757-1764.	4.9	124
74	The hunting of the hydrological snark. Hydrological Processes, 2009, 23, 651-654.	2.6	2
75	Has land cover a significant impact on mean annual streamflow? An international assessment using 1508 catchments. Journal of Hydrology, 2008, 357, 303-316.	5.4	145
76	How can man-made water reservoirs be accounted for in a lumped rainfall-runoff model?. Water Resources Research, 2008, 44, .	4.2	19
77	Confronting surface and groundwater balances on the La Rochefoucauld-Touvre karstic system (Charente, France). Water Resources Research, 2008, 44, .	4.2	67
78	Spatial proximity, physical similarity, regression and ungaged catchments: A comparison of regionalization approaches based on 913 French catchments. Water Resources Research, 2008, 44, .	4.2	396
79	Discrete parameterization of hydrological models: Evaluating the use of parameter sets libraries over 900 catchments. Water Resources Research, 2008, 44, .	4.2	54
80	Impact of limited streamflow data on the efficiency and the parameters of rainfall-runoff models. Hydrological Sciences Journal, 2007, 52, 131-151.	2.6	145
81	How can rainfall-runoff models handle intercatchment groundwater flows? Theoretical study based on 1040 French catchments. Water Resources Research, 2007, 43, .	4.2	109
82	What is really undermining hydrologic science today?. Hydrological Processes, 2007, 21, 2819-2822.	2.6	56
83	Dynamic averaging of rainfall-runoff model simulations from complementary model parameterizations. Water Resources Research, 2006, 42, .	4.2	171
84	Stepwise development of a two-parameter monthly water balance model. Journal of Hydrology, 2006, 318, 200-214.	5.4	160
85	Impact of biased and randomly corrupted inputs on the efficiency and the parameters of watershed models. Journal of Hydrology, 2006, 320, 62-83.	5.4	154
86	Model Parameter Estimation Experiment (MOPEX): An overview of science strategy and major results from the second and third workshops. Journal of Hydrology, 2006, 320, 3-17.	5.4	537
87	The model parameter estimation experiment (MOPEX). Journal of Hydrology, 2006, 320, 1-2.	5.4	27
88	Linking stream flow to rainfall at the annual time step: The Manabe bucket model revisited. Journal of Hydrology, 2006, 328, 283-296.	5.4	38
89	Improvement of rainfall-runoff forecasts through mean areal rainfall optimization. Journal of Hydrology, 2006, 328, 717-725.	5.4	64
90	Simple benchmark models as a basis for model efficiency criteria. River Systems, 2006, 17, 221-244.	0.2	5

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91	Should Bouchet's hypothesis be taken into account in rainfall-runoff modelling? An assessment over 308 catchments. <i>Hydrological Processes</i> , 2005, 19, 4093-4106.	2.6	8
92	The hydrological impact of the mediterranean forest: a review of French research. <i>Journal of Hydrology</i> , 2005, 301, 235-249.	5.4	156
93	Which potential evapotranspiration input for a lumped rainfall-runoff model?. <i>Journal of Hydrology</i> , 2005, 303, 290-306.	5.4	740
94	Soil Conservation Service Curve Number method: How to mend a wrong soil moisture accounting procedure?. <i>Water Resources Research</i> , 2005, 41, .	4.2	181
95	Prise en compte de barrages-réservoirs dans un modèle pluie-débit global: application au cas du bassin de la Seine amont. <i>Houille Blanche</i> , 2005, 91, 79-88.	0.3	4
96	Impact of the length of observed records on the performance of ANN and of conceptual parsimonious rainfall-runoff forecasting models. <i>Environmental Modelling and Software</i> , 2004, 19, 357-368.	4.5	141
97	Impact of spatial aggregation of inputs and parameters on the efficiency of rainfall-runoff models: A theoretical study using chimera watersheds. <i>Water Resources Research</i> , 2004, 40, .	4.2	54
98	Locating the sources of low-pass behavior within rainfall-runoff models. <i>Water Resources Research</i> , 2004, 40, .	4.2	32
99	A soil moisture index as an auxiliary ANN input for stream flow forecasting. <i>Journal of Hydrology</i> , 2004, 286, 155-167.	5.4	117
100	Impact of imperfect potential evapotranspiration knowledge on the efficiency and parameters of watershed models. <i>Journal of Hydrology</i> , 2004, 286, 19-35.	5.4	112
101	Waters and forests: from historical controversy to scientific debate. <i>Journal of Hydrology</i> , 2004, 291, 1-27.	5.4	703
102	ANN OUTPUT UPDATING OF LUMPED CONCEPTUAL RAINFALL/RUNOFF FORECASTING MODELS. <i>Journal of the American Water Resources Association</i> , 2003, 39, 1269-1279.	2.4	36
103	Improvement of a parsimonious model for streamflow simulation. <i>Journal of Hydrology</i> , 2003, 279, 275-289.	5.4	1,041
104	What kind of water models are needed for the implementation of the European water framework directive? Examples from France. <i>International Journal of River Basin Management</i> , 2003, 1, 125-135.	2.7	23
105	The exponential store: a correct formulation for rainfall-runoff modelling. <i>Hydrological Sciences Journal</i> , 2003, 48, 109-124.	2.6	43
106	A distribution-free test to detect gradual changes in watershed behavior. <i>Water Resources Research</i> , 2003, 39, .	4.2	57
107	Does a large number of parameters enhance model performance? Comparative assessment of common catchment model structures on 429 catchments. <i>Journal of Hydrology</i> , 2001, 242, 275-301.	5.4	478
108	Impact of imperfect rainfall knowledge on the efficiency and the parameters of watershed models. <i>Journal of Hydrology</i> , 2001, 250, 206-223.	5.4	229

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109	Spatial and temporal variability of Total Suspended Solids in the Seine basin. <i>Hydrobiologia</i> , 1999, 410, 295-306.	2.0	17
110	Hydrological ensemble forecasting at ungauged basins: using neighbour catchments for model setup and updating. <i>Advances in Geosciences</i> , 0, 29, 1-11.	12.0	27
111	Preface: HS02 â€“ Hydrologic Non-Stationarity and Extrapolating Models to Predict the Future. <i>Proceedings of the International Association of Hydrological Sciences</i> , 0, 371, 1-2.	1.0	4
112	Spatial variability of the parameters of a semi-distributed hydrological model. <i>Proceedings of the International Association of Hydrological Sciences</i> , 0, 373, 87-94.	1.0	18
113	What part of natural flow can be considered a "water resource"?. <i>Proceedings of the International Association of Hydrological Sciences</i> , 0, 366, 86-92.	1.0	1