Vazken AndrÃ©assian

List of Publications by Year
in descending order

113	11,788	46918 47	29081 104
papers	citations	h-index	g-index

147	147	147	8571
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigating hydrological model versatility to simulate extreme flood events. Hydrological Sciences Journal, 2022, 67, 628-645.	1.2	6
2	Quantifying multi-year hydrological memory with Catchment Forgetting Curves. Hydrology and Earth System Sciences, 2022, 26, 2715-2732.	1.9	9
3	On constraining a lumped hydrological model with both piezometry and streamflow: results of a large sample evaluation. Hydrology and Earth System Sciences, 2022, 26, 2733-2758.	1.9	3
4	Streamflow naturalization methods: a review. Hydrological Sciences Journal, 2021, 66, 12-36.	1.2	23
5	When does a parsimonious model fail to simulate floods? Learning from the seasonality of model bias. Hydrological Sciences Journal, 2021, 66, 1288-1305.	1.2	5
6	Technical note: RAT â€“ a robustness assessment test for calibrated and uncalibrated hydrological models. Hydrology and Earth System Sciences, 2021, 25, 5013-5027.	1.9	4
7	Multiâ€objective fitting of concentrationâ€discharge relationships. Hydrological Processes, 2021, 35, .	1.1	2
8	Technical note: PMR â€“ a proxy metric to assess hydrological model robustness in a changing climate. Hydrology and Earth System Sciences, 2021, 25, 5703-5716.	1.9	4
9	A combined mixing model for high-frequency concentrationâ€“discharge relationships. Journal of Hydrology, 2020, 591, 125559.	2.3	13
10	Technical note: A two-sided affine power scaling relationship to represent the concentrationâ€“discharge relationship. Hydrology and Earth System Sciences, 2020, 24, 1823-1830.	1.9	11
11	Assessing the performance and robustness of two conceptual rainfall-runoff models on a worldwide sample of watersheds. Journal of Hydrology, 2020, 585, 124698.	2.3	31
12	Hydrograph separation: an impartial parametrisation for an imperfect method. Hydrology and Earth System Sciences, 2020, 24, 1171-1187.	1.9	28
13	CaractÃ©risation de la mÃ©moire des bassins versants par approche croisÃ©e entre piÃ©zomÃ©trie et sÃ©paration d'hydrogramme. Houille Blanche, 2020, 106, 30-37.	0.3	1
14	Ã‰lasticitÃ© des dÃ©bits aux prÃ©cipitations en Afrique sub-saharienne. Houille Blanche, 2020, 106, 97-104.	0.3	0
15	A Regularization Approach to Improve the Sequential Calibration of a Semidistributed Hydrological Model. Water Resources Research, 2019, 55, 8821-8839.	1.7	23
16	Technical Note: On the puzzling similarity of two water balance formulas â€“ Turcâ€“Mezentsev vs.ÂTixerontâ€“Fu. Hydrology and Earth System Sciences, 2019, 23, 2339-2350.	1.9	15
17	Hydrological modelling at multiple sub-daily time steps: Model improvement via flux-matching. Journal of Hydrology, 2019, 575, 1308-1327.	2.3	30
18	Twenty-three unsolved problems in hydrology (UPH) â€“ a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	1.2	474

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19	Une cartographie de l'Ã©coulement des riviÃ¨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.	2.3	21
21	Inundation mapping based on reach-scale effective geometry. Hydrology and Earth System Sciences, 2018, 22, 5967-5985.	1.9	15
22	The suite of lumped GR hydrological models in an R package. Environmental Modelling and Software, 2017, 94, 166-171.	1.9	153
23	The Quantile Solidarity approach for the parsimonious regionalization of flow duration curves. Hydrological Sciences Journal, 2017, 62, 1364-1380.	1.2	5
24	Processâ€based interpretation of conceptual hydrological model performance using a multinational catchment set. Water Resources Research, 2017, 53, 7247-7268.	1.7	36
25	Climate elasticity of streamflow revisited â€“ an elasticity index based on long-term hydrometeorological records. Hydrology and Earth System Sciences, 2016, 20, 4503-4524.	1.9	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.	2.3	65
27	How should a rainfallâ€runoff model be parameterized in an almost ungauged catchment? A methodology tested on 609 catchments. Water Resources Research, 2016, 52, 4765-4784.	1.7	30
28	On evaluating the robustness of spatial-proximity-based regionalization methods. Journal of Hydrology, 2016, 539, 196-203.	2.3	30
29	The Budyko hypothesis before Budyko: The hydrological legacy of Evald Oldekop. Journal of Hydrology, 2016, 535, 386-391.	2.3	27
30	Synergies entre acteurs opÃ©rationnels et scientifiques au service de l'amÃ©lioration de la prÃ©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.	1.7	102
32	Transferring global uncertainty estimates from gauged to ungauged catchments. Hydrology and Earth System Sciences, 2015, 19, 2535-2546.	1.9	28
33	Graphical tools based on Turc-Budyko plots to detect changes in catchment behaviour. Hydrological Sciences Journal, 2015, 60, 1394-1407.	1.2	12
34	Hydrological impact of forest-fire from paired-catchment and rainfallâ€“runoff modelling perspectives. Hydrological Sciences Journal, 2015, 60, 1213-1224.	1.2	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.	1.2	14
36	Comparing expert judgement and numerical criteria for hydrograph evaluation. Hydrological Sciences Journal, 2015, 60, 402-423.	1.2	46

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37	Hydrology under change: an evaluation protocol to investigate how hydrological models deal with changing catchments. Hydrological Sciences Journal, 2015, 60, 1184-1199.	1.2	105
38	On the need to test hydrological models under changing conditions. Hydrological Sciences Journal, 2015, 60, 1165-1173.	1.2	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. Hydrology and Earth System Sciences, 2014, 18, 727-746.	1.9	73
40	When does higher spatial resolution rainfall information improve streamflow simulation? An evaluation using 3620 flood events. Hydrology and Earth System Sciences, 2014, 18, 575-594.	1.9	152
41	Benchmarking hydrological models for low-flow simulation and forecasting on French catchments. Hydrology and Earth System Sciences, 2014, 18, 2829-2857.	1.9	88
42	Large-sample hydrology: a need to balance depth with breadth. Hydrology and Earth System Sciences, 2014, 18, 463-477.	1.9	208
43	Investigating the interactions between data assimilation and post-processing in hydrological ensemble forecasting. Journal of Hydrology, 2014, 519, 2775-2784.	2.3	42
44	â€˜As simple as possible but not simplerâ€™: What is useful in a temperature-based snow-accounting routine? Part 1 â€“ Comparison of six snow accounting routines on 380 catchments. Journal of Hydrology, 2014, 517, 1166-1175.	2.3	74
45	A framework for testing the ability of models to project climate change and its impacts. Climatic Change, 2014, 122, 271-282.	1.7	104
46	Comparison of two snowmelt modelling approaches in the Dudh Koshi basin (eastern Himalayas,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.2	21
47	â€˜As simple as possible but not simplerâ€™: What is useful in a temperature-based snow-accounting routine? Part 2 â€“ Sensitivity analysis of the Cemaneige snow accounting routine on 380 catchments. Journal of Hydrology, 2014, 517, 1176-1187.	2.3	146
48	Seeking genericity in the selection of parameter sets: Impact on hydrological model efficiency. Water Resources Research, 2014, 50, 8356-8366.	1.7	22
49	Analyse de la sensibilitÃ© des calculs hydrologiques Ã la densitÃ© spatiale des rÃ©seaux hydromÃ©triques. Houille Blanche, 2014, 100, 39-44.	0.3	2
50	The distributed model intercomparison project â€“ Phase 2: Experiment design and summary results of the western basin experiments. Journal of Hydrology, 2013, 507, 300-329.	2.3	38
51	Characterising performance of environmental models. Environmental Modelling and Software, 2013, 40, 1-20.	1.9	1,141
52	Blending neighbor-based and climate-based information to obtain robust low-flow estimates from short time series. Water Resources Research, 2013, 49, 8017-8025.	1.7	4
53	On regionalizing the Turcâ€Mezentsev water balance formula. Water Resources Research, 2013, 49, 7508-7517.	1.7	24
54	On the ambiguous interpretation of the Turcâ€Budyko nondimensional graph. Water Resources Research, 2012, 48, .	1.7	33

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55	Do internal flow measurements improve the calibration of rainfallâ€“runoff models?. Water Resources Research, 2012, 48, .	1.7	50
56	Crash testing hydrological models in contrasted climate conditions: An experiment on 216 Australian catchments. Water Resources Research, 2012, 48, .	1.7	307
57	All that glitters is not gold: the case of calibrating hydrological models. Hydrological Processes, 2012, 26, 2206-2210.	1.1	84
58	Towards robust methods to couple lumped rainfallâ€“runoff models and hydraulic models: A sensitivity analysis on the Illinois River. Journal of Hydrology, 2012, 418-419, 123-135.	2.3	29
59	Results of the DMIP 2 Oklahoma experiments. Journal of Hydrology, 2012, 418-419, 17-48.	2.3	97
60	Neighbors: Natureâ€™s own hydrological models. Journal of Hydrology, 2012, 414-415, 49-58.	2.3	45
61	A review of efficiency criteria suitable for evaluating low-flow simulations. Journal of Hydrology, 2012, 420-421, 171-182.	2.3	234
62	Que sait-on des prÃ©cipitations en altitude dans les Andes semi-arides du ChiliÂ?. Houille Blanche, 2012, 98, 12-17.	0.3	5
63	Mieux prÃ©voir les crues nivalesÂ: Ã©valuation de prÃ©visions probabilistes de dÃ©bit sur des bassins versants de montagne franÃ§ais. 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.	2.3	138
65	Les modÃ¨les de prÃ©vision opÃ©rationnels dâ€™aujourdâ€™hui auraient-ils Ã©tÃ© fiables sur la crue de 1910 ? Analyse rÃ©trospective critique sur une base de donnÃ©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.	1.2	9
67	Regionalization of precipitation and air temperature over high-altitude catchments â€“ learning from outliers. Hydrological Sciences Journal, 2010, 55, 928-940.	1.2	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.	1.2	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.	1.2	4
70	The Court of Miracles of Hydrology: can failure stories contribute to hydrological science?. Hydrological Sciences Journal, 2010, 55, 849-856.	1.2	48
71	Are seemingly physically similar catchments truly hydrologically similar?. Water Resources Research, 2010, 46, .	1.7	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.	1.9	165

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73	HESS Opinions "Crash tests for a standardized evaluation of hydrological models". Hydrology and Earth System Sciences, 2009, 13, 1757-1764.	1.9	124
74	The hunting of the hydrological snark. Hydrological Processes, 2009, 23, 651-654.	1.1	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.	2.3	145
76	How can manâ€made water reservoirs be accounted for in a lumped rainfallâ€runoff model?. Water Resources Research, 2008, 44, .	1.7	19
77	Confronting surfaceâ€and groundwater balances on the La Rochefoucauldâ€Touvre karstic system (Charente, France). Water Resources Research, 2008, 44, .	1.7	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, .	1.7	396
79	Discrete parameterization of hydrological models: Evaluating the use of parameter sets libraries over 900 catchments. Water Resources Research, 2008, 44, .	1.7	54
80	Impact of limited streamflow data on the efficiency and the parameters of rainfallâ€”runoff models. Hydrological Sciences Journal, 2007, 52, 131-151.	1.2	145
81	How can rainfall-runoff models handle intercatchment groundwater flows? Theoretical study based on 1040 French catchments. Water Resources Research, 2007, 43, .	1.7	109
82	What is really undermining hydrologic science today?. Hydrological Processes, 2007, 21, 2819-2822.	1.1	56
83	Dynamic averaging of rainfall-runoff model simulations from complementary model parameterizations. Water Resources Research, 2006, 42, .	1.7	171
84	Stepwise development of a two-parameter monthly water balance model. Journal of Hydrology, 2006, 318, 200-214.	2.3	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.	2.3	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.	2.3	537
87	The model parameter estimation experiment (MOPEX). Journal of Hydrology, 2006, 320, 1-2.	2.3	27
88	Linking stream flow to rainfall at the annual time step: The Manabe bucket model revisited. Journal of Hydrology, 2006, 328, 283-296.	2.3	38
89	Improvement of rainfall-runoff forecasts through mean areal rainfall optimization. Journal of Hydrology, 2006, 328, 717-725.	2.3	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. Hydrological Processes, 2005, 19, 4093-4106.	1.1	8
92	The hydrological impact of the mediterranean forest: a review of French research. Journal of Hydrology, 2005, 301, 235-249.	2.3	156
93	Which potential evapotranspiration input for a lumped rainfallâ€“runoff model?. Journal of Hydrology, 2005, 303, 290-306.	2.3	740
94	Soil Conservation Service Curve Number method: How to mend a wrong soil moisture accounting procedure?. Water Resources Research, 2005, 41, .	1.7	181
95	Prise en compte de barrages-rÃ©servoirs dans un modÃ¨le pluie-dÃ©bit globalÂ: application au cas du bassin de la Seine amont. Houille Blanche, 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. Environmental Modelling and Software, 2004, 19, 357-368.	1.9	141
97	Impact of spatial aggregation of inputs and parameters on the efficiency of rainfall-runoff models: A theoretical study using chimera watersheds. Water Resources Research, 2004, 40, .	1.7	54
98	Locating the sources of low-pass behavior within rainfall-runoff models. Water Resources Research, 2004, 40, .	1.7	32
99	A soil moisture index as an auxiliary ANN input for stream flow forecasting. Journal of Hydrology, 2004, 286, 155-167.	2.3	117
100	Impact of imperfect potential evapotranspiration knowledge on the efficiency and parameters of watershed models. Journal of Hydrology, 2004, 286, 19-35.	2.3	112
101	Waters and forests: from historical controversy to scientific debate. Journal of Hydrology, 2004, 291, 1-27.	2.3	703
102	ANN OUTPUT UPDATING OF LUMPED CONCEPTUAL RAINFALL/RUNOFF FORECASTING MODELS. Journal of the American Water Resources Association, 2003, 39, 1269-1279.	1.0	36
103	Improvement of a parsimonious model for streamflow simulation. Journal of Hydrology, 2003, 279, 275-289.	2.3	1,041
104	What kind of water models are needed for the implementation of the European water framework directive? Examples from France. International Journal of River Basin Management, 2003, 1, 125-135.	1.5	23
105	The exponential store: a correct formulation for rainfallâ€”runoff modelling. Hydrological Sciences Journal, 2003, 48, 109-124.	1.2	43
106	A distribution-free test to detect gradual changes in watershed behavior. Water Resources Research, 2003, 39, .	1.7	57
107	Does a large number of parameters enhance model performance? Comparative assessment of common catchment model structures on 429 catchments. Journal of Hydrology, 2001, 242, 275-301.	2.3	478
108	Impact of imperfect rainfall knowledge on the efficiency and the parameters of watershed models. Journal of Hydrology, 2001, 250, 206-223.	2.3	229

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