Giuliano Di Baldassarre

List of Publications by Year
in descending order

139 papers	10,137 citations	38742 50 h-index	40979 93 g-index
209 all docs	209 docs citations	209 times ranked	8601 citing authors

#	Article	IF	Citations
1	â€œPanta Rheiâ€"Everything Flowsâ€: Change in hydrology and societyâ€"The IAHS Scientific Decade 2013â€"2022. Hydrological Sciences Journal, 2013, 58, 1256-1275.	2.6	569
2	Drought in the Anthropocene. Nature Geoscience, 2016, 9, 89-91.	12.9	537
3	Uncertainty in river discharge observations: a quantitative analysis. Hydrology and Earth System Sciences, 2009, 13, 913-921.	4.9	493
4	Twenty-three unsolved problems in hydrology (UPH) â€" a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	2.6	474
5	Socio-hydrology: conceptualising human-flood interactions. Hydrology and Earth System Sciences, 2013, 17, 3295-3303.	4.9	403
6	Debatesâ€"Perspectives on socioâ€hydrology: Capturing feedbacks between physical and social processes. Water Resources Research, 2015, 51, 4770-4781.	4.2	337
7	Flood fatalities in Africa: From diagnosis to mitigation. Geophysical Research Letters, 2010, 37, .	4.0	290
8	Drought in a human-modified world: reframing drought definitions, understanding, and analysis approaches. Hydrology and Earth System Sciences, 2016, 20, 3631-3650.	4.9	289
9	Sociohydrology: Scientific Challenges in Addressing the Sustainable Development Goals. Water Resources Research, 2019, 55, 6327-6355.	4.2	226
10	Insights from socio-hydrology modelling on dealing with flood risk â€" Roles of collective memory, risk-taking attitude and trust. Journal of Hydrology, 2014, 518, 71-82.	5.4	223
11	Flood-plain mapping: a critical discussion of deterministic and probabilistic approaches. Hydrological Sciences Journal, 2010, 55, 364-376.	2.6	213
12	Water shortages worsened by reservoir effects. Nature Sustainability, 2018, 1, 617-622.	23.7	213
13	Towards understanding the dynamic behaviour of floodplains as human-water systems. Hydrology and Earth System Sciences, 2013, 17, 3235-3244.	4.9	189
14	An intercomparison of remote sensing river discharge estimation algorithms from measurements of river height, width, and slope. Water Resources Research, 2016, 52, 4527-4549.	4.2	163
15	Adaptation to flood risk: Results of international paired flood event studies. Earth's Future, 2017, 5, 953-965.	6.3	156
16	Model selection techniques for the frequency analysis of hydrological extremes. Water Resources Research, 2009, 45, .	4.2	150
17	A technique for the calibration of hydraulic models using uncertain satellite observations of flood extent. Journal of Hydrology, 2009, 367, 276-282.	5.4	142
18	Detailed data is welcome, but with a pinch of salt: Accuracy, precision, and uncertainty in flood inundation modeling. Water Resources Research, 2013, 49, 6079-6085.	4.2	134

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19	Increasing flood risk under climate change: a pan-European assessment of the benefits of four adaptation strategies. Climatic Change, 2016, 136, 507-521.	3.6	131
20	Anthropogenic Drought: Definition, Challenges, and Opportunities. Reviews of Geophysics, 2021, 59, e2019RG000683.	23.0	126
21	Optimal Cross-Sectional Spacing in Preissmann Scheme 1D Hydrodynamic Models. Journal of Hydraulic Engineering, 2009, 135, 96-105.	1.5	123
22	Drought and flood in the Anthropocene: feedback mechanisms in reservoir operation. Earth System Dynamics, 2017, 8, 225-233.	7.1	122
23	Analysis of the effects of levee heightening on flood propagation: example of the River Po, Italy. Hydrological Sciences Journal, 2009, 54, 1007-1017.	2.6	121
24	The Utility of Spaceborne Radar to Render Flood Inundation Maps Based on Multialgorithm Ensembles. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2801-2807.	6.3	120
25	Comparing the performance of a 2-D finite element and a 2-D finite volume model of floodplain inundation using airborne SAR imagery. Hydrological Processes, 2007, 21, 2745-2759.	2.6	115
26	A review of lowâ€cost spaceâ€borne data for flood modelling: topography, flood extent and water level. Hydrological Processes, 2015, 29, 3368-3387.	2.6	107
27	Probability-weighted hazard maps for comparing different flood risk management strategies: a case study. Natural Hazards, 2009, 50, 479-496.	3.4	100
28	Future hydrology and climate in the River Nile basin: a review. Hydrological Sciences Journal, 2011, 56, 199-211.	2.6	98
29	GFPLAIN250m, a global high-resolution dataset of Earthâ€™s floodplains. Scientific Data, 2019, 6, 180309.	5.3	92
30	Near realâ€time flood wave approximation on large rivers from space: Application to the River Po, Italy. Water Resources Research, 2010, 46, .	4.2	90
31	Advancing catchment hydrology to deal with predictions under change. Hydrology and Earth System Sciences, 2014, 18, 649-671.	4.9	83
32	The need to integrate flood and drought disaster risk reduction strategies. Water Security, 2020, 11, 100070.	2.5	83
33	The failed-levee effect: Do societies learn from flood disasters?. Natural Hazards, 2015, 76, 373-388.	3.4	79
34	Assessing the impact of different sources of topographic data on 1-D hydraulic modelling of floods. Hydrology and Earth System Sciences, 2015, 19, 631-643.	4.9	78
35	Relationships between statistics of rainfall extremes and mean annual precipitation: an application for design-storm estimation in northern central Italy. Hydrology and Earth System Sciences, 2006, 10, 589-601.	4.9	77
36	A hydraulic study on the applicability of flood rating curves. Hydrology Research, 2011, 42, 10-19.	2.7	77

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37	Timely Low Resolution SAR Imagery To Support Floodplain Modelling: a Case Study Review. Surveys in Geophysics, 2011, 32, 255-269.	4.6	76
38	Relation Between the North-Atlantic Oscillation and Hydroclimatic Conditions in Mediterranean Areas. Water Resources Management, 2011, 25, 1269-1279.	3.9	76
39	Priorities and Interactions of Sustainable Development Goals (SDGs) with Focus on Wetlands. Water (Switzerland), 2019, 11, 619.	2.7	75
40	The seventh facet of uncertainty: wrong assumptions, unknowns and surprises in the dynamics of humanâ€“water systems. Hydrological Sciences Journal, 2016, 61, 1748-1758.	2.6	73
41	Socio-hydrological modelling of flood-risk dynamics: comparing the resilience of green and technological systems. Hydrological Sciences Journal, 2017, 62, 880-891.	2.6	72
42	Near real time satellite imagery to support and verify timely flood modelling. Hydrological Processes, 2009, 23, 799-803.	2.6	69
43	Hess Opinions: An interdisciplinary research agenda to explore the unintended consequences of structural flood protection. Hydrology and Earth System Sciences, 2018, 22, 5629-5637.	4.9	67
44	Design flood estimation using model selection criteria. Physics and Chemistry of the Earth, 2009, 34, 606-611.	2.9	66
45	Is the current flood of data enough? A treatise on research needs for the improvement of flood modelling. Hydrological Processes, 2012, 26, 153-158.	2.6	65
46	The role of risk perception in making flood risk management more effective. Natural Hazards and Earth System Sciences, 2013, 13, 3013-3030.	3.6	62
47	Probabilistic Flood Maps to support decisionâ€making: Mapping the Value of Information. Water Resources Research, 2016, 52, 1026-1043.	4.2	61
48	Nighttime light data reveal how flood protection shapes human proximity to rivers. Science Advances, 2018, 4, eaar5779.	10.3	59
49	Floodplain management strategies for flood attenuation in the river Po. River Research and Applications, 2011, 27, 1037-1047.	1.7	58
50	Flooding Hazard Mapping in Floodplain Areas Affected by Piping Breaches in the Po River, Italy. Journal of Hydrologic Engineering - ASCE, 2014, 19, 717-731.	1.9	58
51	Adaptation of water resources systems to changing society and environment: a statement by the International Association of Hydrological Sciences. Hydrological Sciences Journal, 2016, 61, 2803-2817.	2.6	57
52	Data errors and hydrological modelling: The role of model structure to propagate observation uncertainty. Advances in Water Resources, 2013, 51, 498-504.	3.8	55
53	Panta Rhei 2013â€“2015: global perspectives on hydrology, society and change. Hydrological Sciences Journal, 0, , 1-18.	2.6	53
54	Exposure to natural hazard events unassociated with policy change for improved disaster risk reduction. Nature Communications, 2021, 12, 193.	12.8	53

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55	Scientists' warning on extreme wildfire risks to water supply. Hydrological Processes, 2021, 35, e14086.	2.6	51
56	Exploring the potential of SRTM topographic data for flood inundation modelling under uncertainty. Journal of Hydroinformatics, 2013, 15, 849-861.	2.4	49
57	Uncertainty in design flood profiles derived by hydraulic modelling. Hydrology Research, 2012, 43, 753-761.	2.7	48
58	An Integrative Research Framework to Unravel the Interplay of Natural Hazards and Vulnerabilities. Earth's Future, 2018, 6, 305-310.	6.3	48
59	Concurrent wet and dry hydrological extremes at the global scale. Earth System Dynamics, 2020, 11, 251-266.	7.1	48
60	Impact of social preparedness on flood early warning systems. Water Resources Research, 2017, 53, 522-534.	4.2	47
61	Donâ€™t blame the rain: Social power and the 2015â€“2017 drought in Cape Town. Journal of Hydrology, 2021, 594, 125953.	5.4	47
62	BRIDGE PIER SCOUR: A REVIEW OF PROCESSES, MEASUREMENTS AND ESTIMATES. Environmental Engineering and Management Journal, 2012, 11, 975-989.	0.6	46
63	Extreme dry and wet spells face changes in their duration and timing. Environmental Research Letters, 2020, 15, 074040.	5.2	45
64	Floods and societies: the spatial distribution of waterâ€related disaster risk and its dynamics. Wiley Interdisciplinary Reviews: Water, 2014, 1, 133-139.	6.5	40
65	Perceptual models of uncertainty for socio-hydrological systems: a flood risk change example. Hydrological Sciences Journal, 2017, 62, 1705-1713.	2.6	40
66	Exploring changes in hydrogeological risk awareness and preparedness over time: a case study in northeastern Italy. Hydrological Sciences Journal, 2020, 65, 1049-1059.	2.6	38
67	Interdisciplinary Critical Geographies of Water: Capturing the Mutual Shaping of Society and Hydrological Flows. Water (Switzerland), 2019, 11, 1973.	2.7	37
68	Effect of observation errors on the uncertainty of design floods. Physics and Chemistry of the Earth, 2012, 42-44, 85-90.	2.9	36
69	The Costs of Living with Floods in the Jamuna Floodplain in Bangladesh. Water (Switzerland), 2019, 11, 1238.	2.7	36
70	Isla Hispaniola: A trans-boundary flood risk mitigation plan. Physics and Chemistry of the Earth, 2009, 34, 209-218.	2.9	35
71	Reliability of different depth-duration-frequency equations for estimating short-duration design storms. Water Resources Research, 2006, 42, .	4.2	34
72	A review of freely accessible global datasets for the study of floods, droughts and their interactions with human societies. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1424.	6.5	34

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73	Can weather generation capture precipitation patterns across different climates, spatial scales and under data scarcity?. Scientific Reports, 2017, 7, 5449.	3.3	33
74	Selecting the appropriate hydraulic model structure using low-resolution satellite imagery. Advances in Water Resources, 2011, 34, 38-46.	3.8	32
75	Exploring the Potential of SRTM Topography and Radar Altimetry to Support Flood Propagation Modeling: Danube Case Study. Journal of Hydrologic Engineering - ASCE, 2015, 20, .	1.9	32
76	The interplay between structural flood protection, population density, and flood mortality along the Jamuna River, Bangladesh. Regional Environmental Change, 2020, 20, 5.	2.9	32
77	The direct use of radar satellites for event-specific flood risk mapping. Remote Sensing Letters, 2010, 1, 75-84.	1.4	31
78	Floodplains in the Anthropocene: A Global Analysis of the Interplay Between Human Population, Built Environment, and Flood Severity. Water Resources Research, 2021, 57, e2020WR027744.	4.2	30
79	Floodplain management in Africa: Large scale analysis of flood data. Physics and Chemistry of the Earth, 2011, 36, 292-298.	2.9	29
80	Exploring the role of risk perception in influencing flood losses over time. Hydrological Sciences Journal, 2020, 65, 12-20.	2.6	29
81	Social-ecological system approaches for water resources management. International Journal of Sustainable Development and World Ecology, 2021, 28, 109-124.	5.9	29
82	An entropy approach for the optimization of cross-section spacing for river modelling. Hydrological Sciences Journal, 2014, 59, 126-137.	2.6	28
83	Reconstruction and analysis of the Po River inundation of 1951. Hydrological Processes, 2013, 27, 1341-1348.	2.6	27
84	Impact of the timing of a SAR image acquisition on the calibration of a flood inundation model. Advances in Water Resources, 2017, 100, 126-138.	3.8	27
85	The Role of Experience and Different Sources of Knowledge in Shaping Flood Risk Awareness. Water (Switzerland), 2020, 12, 2130.	2.7	27
86	Socio-hydrological spaces in the Jamuna River floodplain in Bangladesh. Hydrology and Earth System Sciences, 2018, 22, 5159-5173.	4.9	26
87	The levee effect along the Jamuna River in Bangladesh. Water International, 2019, 44, 496-519.	1.0	26
88	A new methodology to define homogeneous regions through an entropy based clustering method. Advances in Water Resources, 2016, 96, 237-250.	3.8	25
89	Hydrological change: Towards a consistent approach to assess changes on both floods and droughts. Advances in Water Resources, 2018, 111, 31-35.	3.8	25
90	Brief communication: Comparing hydrological and hydrogeomorphic paradigms for global flood hazard mapping. Natural Hazards and Earth System Sciences, 2020, 20, 1415-1419.	3.6	24

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91	Guiding principles for hydrologists conducting interdisciplinary research and fieldwork with participants. Hydrological Sciences Journal, 2021, 66, 214-225.	2.6	24
92	Streamflow droughts aggravated by human activities despite management. Environmental Research Letters, 2022, 17, 044059.	5.2	24
93	Downscaling technique uncertainty in assessing hydrological impact of climate change in the Upper Beles River Basin, Ethiopia. Hydrology Research, 2013, 44, 377-398.	2.7	23
94	Public perceptions of multiple risks during the COVID-19 pandemic in Italy and Sweden. Scientific Data, 2020, 7, 434.	5.3	23
95	The interplay between reservoir storage and operating rules under evolving conditions. Journal of Hydrology, 2020, 590, 125270.	5.4	22
96	Human-flood interactions in Rome over the past 150 years. Advances in Geosciences, 0, 44, 9-13.	12.0	22
97	A theoretical model of water and trade. Advances in Water Resources, 2016, 89, 32-41.	3.8	21
98	Space-time disaggregation of precipitation and temperature across different climates and spatial scales. Journal of Hydrology: Regional Studies, 2019, 21, 126-146.	2.4	20
99	A flood-risk-oriented, dynamic protection motivation framework to explain risk reduction behaviours. Natural Hazards and Earth System Sciences, 2020, 20, 287-298.	3.6	20
100	Drought and society: Scientific progress, blind spots, and future prospects. Wiley Interdisciplinary Reviews: Climate Change, 2022, 13, .	8.1	20
101	Exploring disaster impacts on adaptation actions in 549 cities worldwide. Nature Communications, 2022, 13, .	12.8	19
102	Testing different cross-section spacing in 1D hydraulic modelling: a case study on Johor River, Malaysia. Hydrological Sciences Journal, 2015, 60, 351-360.	2.6	18
103	A systematic comparison of statistical and hydrological methods for design flood estimation. Hydrology Research, 2019, 50, 1665-1678.	2.7	17
104	Water management for irrigation, crop yield and social attitudes: a socio-agricultural agent-based model to explore a collective action problem. Hydrological Sciences Journal, 2020, 65, 1815-1829.	2.6	17
105	Model averaging <i>versus</i> model selection: estimating design floods with uncertain river flow data. Hydrological Sciences Journal, 2018, 63, 1913-1926.	2.6	16
106	Household resilience to climate change hazards in Uganda. International Journal of Climate Change Strategies and Management, 2020, 12, 59-73.	2.9	16
107	Hydrological risk: modeling flood memory and human proximity to rivers. Hydrology Research, 2021, 52, 241-252.	2.7	15
108	Scenarios of Human Responses to Unprecedented Socialâ€Environmental Extreme Events. Earth's Future, 2021, 9, e2020EF001911.	6.3	15

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109	Flood risk mitigation in developing countries: deriving accurate topographic data for remote areas under severe time and economic constraints. Journal of Flood Risk Management, 2015, 8, 301-314.	3.3	14
110	Reproducing an extreme flood with uncertain post-event information. Hydrology and Earth System Sciences, 2017, 21, 3597-3618.	4.9	14
111	Multiple hazards and risk perceptions over time: the availability heuristic in Italy and Sweden under COVID-19. Natural Hazards and Earth System Sciences, 2021, 21, 3439-3447.	3.6	14
112	Integrating Multiple Research Methods to Unravel the Complexity of Humanâ€Water Systems. AGU Advances, 2021, 2, e2021AV000473.	5.4	13
113	Testing new sources of topographic data for flood propagation modelling under structural, parameter and observation uncertainty. Hydrological Sciences Journal, 2016, 61, 1707-1715.	2.6	12
114	Socio-Hydrological Modelling: The Influence of Reservoir Management and Societal Responses on Flood Impacts. Water (Switzerland), 2020, 12, 1384.	2.7	12
115	Flood modelling: parameterisation and inflow uncertainty. Water Management, 2014, 167, 51-60.	1.2	11
116	The legacy of large dams in the United States. Ambio, 2021, 50, 1798-1808.	5.5	11
117	The interplay between human population dynamics and flooding in Bangladesh: a spatial analysis. Proceedings of the International Association of Hydrological Sciences, 0, 364, 188-191.	1.0	11
118	An entropy method for floodplain monitoring network design. AIP Conference Proceedings, 2012, , .	0.4	10
119	Disaster risk reduction and the limits of truisms: Improving the knowledge and practice interface. International Journal of Disaster Risk Reduction, 2022, 67, 102661.	3.9	10
120	Do the Benefits of School Closure Outweigh Its Costs?. International Journal of Environmental Research and Public Health, 2022, 19, 2500.	2.6	10
121	Characterizing Climate Model Uncertainty Using an Informal Bayesian Framework: Application to the River Nile. Journal of Hydrologic Engineering - ASCE, 2013, 18, 582-589.	1.9	8
122	Event and model dependent rainfall adjustments to improve discharge predictions. Hydrological Sciences Journal, 2017, 62, 232-245.	2.6	8
123	Simple vs complex rating curves: accounting for measurement uncertainty, slope ratio and sample size. Hydrological Sciences Journal, 2017, 62, 2072-2082.	2.6	8
124	Is observation uncertainty masking the signal of land use change impacts on hydrology?. Journal of Hydrology, 2019, 570, 393-400.	5.4	8
125	Global riverine flood risk â€" how do hydrogeomorphic floodplain maps compare to flood hazard maps?. Natural Hazards and Earth System Sciences, 2021, 21, 2921-2948.	3.6	8
126	COVID-19 vaccine hesitancy in Sweden and Italy: The role of trust in authorities. Scandinavian Journal of Public Health, 2022, 50, 803-809.	2.3	7

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127	Heterogeneity in flood risk awareness: A longitudinal, latent class model approach. Journal of Hydrology, 2021, 599, 126255.	5.4	6
128	HP - Special Issue on Flood Risk and Uncertainty. Hydrological Processes, 2013, 27, 1291-1291.	2.6	4
129	Remotely Sensed Nightlights to Map Societal Exposure to Hydrometeorological Hazards. Remote Sensing, 2015, 7, 12380-12399.	4.0	4
130	Longitudinal survey data for diversifying temporal dynamics in flood risk modelling. Natural Hazards and Earth System Sciences, 2021, 21, 2811-2828.	3.6	4
131	KULTURisk Methodology Application. , 2015, , 201-211.		2
132	Optimal cross-sectional sampling for river modelling with bridges: An information theory-based method. AIP Conference Proceedings, 2016, , .	0.4	2
133	Design Flood Estimation: Exploring the Potentials and Limitations of Two Alternative Approaches. Water (Switzerland), 2019, 11, 729.	2.7	2
134	RIO SOLIETTE (HAITI): AN INTERNATIONAL INITIATIVE FOR FLOOD-HAZARD ASSESSMENT AND MITIGATION. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-5/W3, 159-165.	0.2	2
135	Bridging the gap: Reply to discussion of â€œGuiding principles for hydrologists conducting interdisciplinary research and fieldwork with participantsâ€• Hydrological Sciences Journal, 0, , .	2.6	2
136	Epidemic risk perceptions in Italy and Sweden driven by authority responses to COVID-19. Scientific Reports, 2022, 12, .	3.3	2
137	Global and Low-Cost Topographic Data to Support Flood Studies. , 2015, , 105-123.		0
138	Reply to Discussion of â€œPerceptual models of uncertainty for socio-hydrological systems: a flood risk change exampleâ€• Hydrological Sciences Journal, 2018, 63, 2001-2003.	2.6	0
139	Cover Image, Volume 7, Issue 3. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1447.	6.5	0