Berit Arheimer

List of Publications by Year
in descending order

102 papers	8,997 citations	57758 44 h-index	43889 91 g-index
142 all docs	142 docs citations	142 times ranked	9220 citing authors

#	Article	IF	Citations
1	A decade of Predictions in Ungauged Basins (PUB)â€"a review. Hydrological Sciences Journal, 2013, 58, 1198-1255.	2.6	821
2	Changing climate both increases and decreases European river floods. Nature, 2019, 573, 108-111.	27.8	639
3	Regional and global concerns over wetlands and water quality. Trends in Ecology and Evolution, 2006, 21, 96-103.	8.7	637
4	Changing climate shifts timing of European floods. Science, 2017, 357, 588-590.	12.6	584
5	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
6	Twenty-three unsolved problems in hydrology (UPH) â€" a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	2.6	474
7	Development and testing of the HYPE (Hydrological Predictions for the Environment) water quality model for different spatial scales. Hydrology Research, 2010, 41, 295-319.	2.7	432
8	Understanding flood regime changes in Europe: a state-of-the-art assessment. Hydrology and Earth System Sciences, 2014, 18, 2735-2772.	4.9	423
9	Potential applications of subseasonalâ€toâ€seasonal (<scp>S2S</scp>) predictions. Meteorological Applications, 2017, 24, 315-325.	2.1	265
10	Using flow signatures and catchment similarities to evaluate the E-HYPE multi-basin model across Europe. Hydrological Sciences Journal, 2016, 61, 255-273.	2.6	189
11	Nitrogen and phosphorus concentrations from agricultural catchmentsâ€"influence of spatial and temporal variables. Journal of Hydrology, 2000, 227, 140-159.	5.4	170
12	How the performance of hydrological models relates to credibility of projections under climate change. Hydrological Sciences Journal, 2018, 63, 696-720.	2.6	133
13	Most computational hydrology is not reproducible, so is it really science?. Water Resources Research, 2016, 52, 7548-7555.	4.2	119
14	Variation of nitrogen concentration in forest streams â€" influences of flow, seasonality and catchment characteristics. Journal of Hydrology, 1996, 179, 281-304.	5.4	117
15	Comparing reconstructed past variations and future projections of the Baltic Sea ecosystemâ€"first results from multi-model ensemble simulations. Environmental Research Letters, 2012, 7, 034005.	5.2	116
16	Water and nutrient predictions in ungauged basins: set-up and evaluation of a model at the national scale. Hydrological Sciences Journal, 2012, 57, 229-247.	2.6	116
17	Modelling nitrogen removal in potential wetlands at the catchment scale. Ecological Engineering, 2002, 19, 63-80.	3.6	113
18	Intercomparison of regional-scale hydrological models and climate change impacts projected for 12 large river basins worldwideâ€"a synthesis. Environmental Research Letters, 2017, 12, 105002.	5.2	109

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19	Climate impact on floods: changes in high flows in Sweden in the past and the future (1911â€“2100). Hydrology and Earth System Sciences, 2015, 19, 771-784.	4.9	105
20	A comparison of changes in river runoff from multiple global and catchment-scale hydrological models under global warming scenarios of 1ÂÂ°C, 2ÂÂ°C and 3ÂÂ°C. Climatic Change, 2017, 141, 577-595.	3.6	104
21	Climate Change Impact on Water Quality: Model Results from Southern Sweden. Ambio, 2005, 34, 559-566.	5.5	103
22	Accelerating advances in continental domain hydrologic modeling. Water Resources Research, 2015, 51, 10078-10091.	4.2	102
23	Understanding hydrologic variability across Europe through catchment classification. Hydrology and Earth System Sciences, 2017, 21, 2863-2879.	4.9	97
24	A regional parameter estimation scheme for a pan-European multi-basin model. Journal of Hydrology: Regional Studies, 2016, 6, 90-111.	2.4	88
25	Constraining Conceptual Hydrological Models With Multiple Information Sources. Water Resources Research, 2018, 54, 8332-8362.	4.2	85
26	Large-scale hydrological modelling by using modified PUB recommendations: the India-HYPE case. Hydrology and Earth System Sciences, 2015, 19, 4559-4579.	4.9	81
27	Climate change impact on the water regime of two great Arctic rivers: modeling and uncertainty issues. Climatic Change, 2017, 141, 499-515.	3.6	77
28	Analysis of hydrological extremes at different hydro-climatic regimes under present and future conditions. Climatic Change, 2017, 141, 467-481.	3.6	77
29	Source apportionment of riverine nitrogen transport based on catchment modelling. Water Science and Technology, 1996, 33, 109-115.	2.5	76
30	Ensemble modelling of nutrient loads and nutrient load partitioning in 17 European catchments. Journal of Environmental Monitoring, 2009, 11, 572.	2.1	75
31	Global catchment modelling using World-Wide HYPE (WWH), open data, and stepwise parameter estimation. Hydrology and Earth System Sciences, 2020, 24, 535-559.	4.9	75
32	Regulation of snow-fed rivers affects flow regimes more than climate change. Nature Communications, 2017, 8, 62.	12.8	73
33	Climate Change Impact on Riverine Nutrient Load and Land-Based Remedial Measures of the Baltic Sea Action Plan. Ambio, 2012, 41, 600-612.	5.5	65
34	Dominant effect of increasing forest biomass on evapotranspiration: interpretations of movement in Budyko space. Hydrology and Earth System Sciences, 2018, 22, 567-580.	4.9	65
35	Virtual laboratories: new opportunities for collaborative water science. Hydrology and Earth System Sciences, 2015, 19, 2101-2117.	4.9	63
36	The evolution of root-zone moisture capacities after deforestation: a step towards hydrological predictions under change?. Hydrology and Earth System Sciences, 2016, 20, 4775-4799.	4.9	61

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37	Watershed modelling of nonpoint nitrogen losses from arable land to the Swedish coast in 1985 and 1994. Ecological Engineering, 2000, 14, 389-404.	3.6	59
38	Description of nine nutrient loss models: capabilities and suitability based on their characteristics. Journal of Environmental Monitoring, 2009, 11, 506.	2.1	59
39	Water and nutrient simulations using the HYPE model for Sweden vs. the Baltic Sea basin â€“ influence of input-data quality and scale. Hydrology Research, 2012, 43, 315-329.	2.7	59
40	Nitrogen and phosphorus retention in surface waters: an inter-comparison of predictions by catchment models of different complexity. Journal of Environmental Monitoring, 2009, 11, 584.	2.1	53
41	Lessons learnt from checking the quality of openly accessible river flow data worldwide. Hydrological Sciences Journal, 2020, 65, 699-711.	2.6	50
42	Influence of catchment characteristics, forestry activities and deposition on nitrogen export from small forested catchments. Water, Air, and Soil Pollution, 1995, 84, 81-102.	2.4	48
43	A systematic review of sensitivities in the Swedish flood-forecasting system. Atmospheric Research, 2011, 100, 275-284.	4.1	48
44	Landscape planning to reduce coastal eutrophication: agricultural practices and constructed wetlands. Landscape and Urban Planning, 2004, 67, 205-215.	7.5	46
45	Hydrological Climate Change Impact Assessment at Small and Large Scales: Key Messages from Recent Progress in Sweden. Climate, 2016, 4, 39.	2.8	46
46	How participatory can participatory modeling be? Degrees of influence of stakeholder and expert perspectives in six dimensions of participatory modeling. Water Science and Technology, 2007, 56, 207-214.	2.5	44
47	Modeling the Impact of Potential Wetlands on Phosphorus Retention in a Swedish Catchment. Ambio, 2005, 34, 544-551.	5.5	42
48	Ensemble Modeling of the Baltic Sea Ecosystem to Provide Scenarios for Management. Ambio, 2014, 43, 37-48.	5.5	42
49	Integrated Catchment Modeling for Nutrient Reduction: Scenarios Showing Impacts, Potential, and Cost of Measures. Ambio, 2005, 34, 513-520.	5.5	41
50	Future socioeconomic conditions may have a larger impact than climate change on nutrient loads to the Baltic Sea. Ambio, 2019, 48, 1325-1336.	5.5	37
51	Lessons learned? Effects of nutrient reductions from constructing wetlands in 1996â€“2006 across Sweden. Ecological Engineering, 2017, 103, 404-414.	3.6	36
52	Process refinements improve a hydrological model concept applied to the Niger River basin. Hydrological Processes, 2017, 31, 4540-4554.	2.6	33
53	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
54	The impact of climatic extreme events on the feasibility of fully renewable power systems: A case study for Sweden. Energy, 2019, 178, 695-713.	8.8	31

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55	Evolving Climate Services into Knowledgeâ€"Action Systems. Weather, Climate, and Society, 2019, 11, 385-399.	1.1	30
56	Estimating Catchment Nutrient Flow with the HBV-NP Model: Sensitivity To Input Data. Ambio, 2005, 34, 521-532.	5.5	29
57	Evaluation of the difference of eight model applications to assess diffuse annual nutrient losses from agricultural land. Journal of Environmental Monitoring, 2009, 11, 540.	2.1	28
58	Modelling diffuse nutrient flow in eutrophication control scenarios. Water Science and Technology, 2004, 49, 37-45.	2.5	27
59	Impacts of 1.5 and 2.0Â°C Warming on Panâ€Arctic River Discharge Into the Hudson Bay Complex Through 2070. Geophysical Research Letters, 2018, 45, 7561-7570.	4.0	26
60	A comparison of hydrological climate services at different scales by users and scientists. Climate Services, 2018, 11, 24-35.	2.5	26
61	Use of participatory scenario modelling as platforms in stakeholder dialogues. Water S A, 2019, 34, 439.	0.4	26
62	Editorial â€" Towards FAIR and SQUARE hydrological data. Hydrological Sciences Journal, 2020, 65, 681-682.	2.6	22
63	Nitrogen retention in a river system and the effects of river morphology and lakes. Water Science and Technology, 2005, 51, 19-29.	2.5	20
64	An integrated biogeochemical model system for the Baltic Sea. , 1999, 393, 45-56.		19
65	Providing peak river flow statistics and forecasting in the Niger River basin. Physics and Chemistry of the Earth, 2017, 100, 3-12.	2.9	19
66	Climate change impact on water quality: model results from southern Sweden. Ambio, 2005, 34, 559-66.	5.5	19
67	Nitrogen Concentrations Simulated with HBV-N: New Response Function and Calibration Strategy. Hydrology Research, 2001, 32, 227-248.	2.7	18
68	A large sample analysis of European rivers on seasonal river flow correlation and its physical drivers. Hydrology and Earth System Sciences, 2019, 23, 73-91.	4.9	18
69	BALTEXâ€"an interdisciplinary research network for the Baltic Sea region. Environmental Research Letters, 2011, 6, 045205.	5.2	17
70	Hydrological modeling of freshwater discharge into Hudson Bay using HYPE. Elementa, 2020, 8, .	3.2	17
71	Subannual models for catchment management: evaluating model performance on three European catchments. Journal of Environmental Monitoring, 2009, 11, 526.	2.1	16
72	Streamflow prediction in â€œgeopolitically ungaugedâ€• basins using satellite observations and regionalization at subcontinental scale. Journal of Hydrology, 2020, 588, 125016.	5.4	16

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73	Integrated Water Management for Eutrophication Control: Public Participation, Pricing Policy, and Catchment Modeling. Ambio, 2005, 34, 482-488.	5.5	15
74	Parameter Precision in the HBV-NP Model and Impacts on Nitrogen Scenario Simulations in the RÃ¶nneÃ¥ River, Southern Sweden. Ambio, 2005, 34, 533-537.	5.5	15
75	Uncertainty in the Swedish Operational Hydrological Forecasting Systems. , 2014, , .		15
76	Effect of model calibration strategy on climate projections of hydrological indicators at a continental scale. Climatic Change, 2020, 163, 1287-1306.	3.6	14
77	Modelling of human and climatic impact on nitrogen load in a Swedish river 1885-1994. Hydrobiologia, 2003, 497, 63-77.	2.0	13
78	Evaluation of diffuse pollution model applications in EUROHARP catchments with limited data. Journal of Environmental Monitoring, 2009, 11, 554.	2.1	13
79	Detecting Changes in River Flow Caused by Wildfires, Storms, Urbanization, Regulation, and Climate Across Sweden. Water Resources Research, 2019, 55, 8990-9005.	4.2	13
80	Experimenting with Coupled Hydro-Ecological Models to Explore Measure Plans and Water Quality Goals in a Semi-Enclosed Swedish Bay. Water (Switzerland), 2015, 7, 3906-3924.	2.7	12
81	Remote sensing-aided rainfallâ€"runoff modeling in the tropics of Costa Rica. Hydrology and Earth System Sciences, 2022, 26, 975-999.	4.9	12
82	Evaluation of parameter sensitivity of a rainfall-runoff model over a global catchment set. Hydrological Sciences Journal, 2022, 67, 342-357.	2.6	11
83	Source apportionment of riverine nitrogen transport based on catchment modelling. Water Science and Technology, 1996, 33, 109.	2.5	10
84	Using catchment models to establish measure plans according to the Water Framework Directive. Water Science and Technology, 2007, 56, 21-28.	2.5	10
85	<scp>Arctic Mackenzie Delta</scp> channel planform evolution during 1983â€"2013 utilising <scp>Landsat</scp> data and hydrological time series. Hydrological Processes, 2017, 31, 3979-3995.	2.6	10
86	E-HypeWeb: Service for Water and Climate Information - and Future Hydrological Collaboration across Europe?. IFIP Advances in Information and Communication Technology, 2011, , 657-666.	0.7	10
87	Electricity vs Ecosystems â€" understanding and predicting hydropower impact on Swedish river flow. Proceedings of the International Association of Hydrological Sciences, 0, 364, 313-319.	1.0	10
88	A model-supported participatory process for nutrient management: a socio-legal analysis of a bottom-up implementation of the EU Water Framework Directive. International Journal of Agricultural Sustainability, 2011, 9, 379-389.	3.5	9
89	Quantifying multi-year hydrological memory with Catchment Forgetting Curves. Hydrology and Earth System Sciences, 2022, 26, 2715-2732.	4.9	9
90	Hydrological impacts of a wildfire in a Boreal region: The VÃstmanland fire 2014 (Sweden). Science of the Total Environment, 2021, 756, 143519.	8.0	8

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91	Large-Scale Hydrological and Sediment Modeling in Nested Domains under Current and Changing Climate. Journal of Hydrologic Engineering - ASCE, 2021, 26, .	1.9	8
92	A geostatistical data-assimilation technique for enhancing macro-scale rainfallâ€“runoff simulations. Hydrology and Earth System Sciences, 2018, 22, 4633-4648.	4.9	7
93	Consequences of changed wetness on riverine nitrogen â€“ human impact on retention vs. natural climatic variability. Regional Environmental Change, 2001, 2, 93-105.	2.9	6
94	Designing a Climate Service for Planning Climate Actions in Vulnerable Countries. Atmosphere, 2021, 12, 121.	2.3	6
95	Artificially Induced Floods to Manage Forest Habitats Under Climate Change. Frontiers in Environmental Science, 2018, 6, .	3.3	6
96	Comparison of open access global climate services for hydrological data. Hydrological Sciences Journal, 2020, , 1-17.	2.6	4
97	Integrated catchment modeling for nutrient reduction: scenarios showing impacts, potential, and cost of measures. Ambio, 2005, 34, 513-20.	5.5	4
98	Reply to comment by Melsen et al. on â€œMost computational hydrology is not reproducible, so is it really science?â€• Water Resources Research, 2017, 53, 2570-2571.	4.2	2
99	Reply to comment by AÃ±el on â€œMost computational hydrology is not reproducible, so is it really science?â€• Water Resources Research, 2017, 53, 2575-2576.	4.2	1
100	From local measures to regional impacts: Modelling changes in nutrient loads to the Baltic Sea. Journal of Hydrology: Regional Studies, 2021, 36, 100867.	2.4	1
101	Ensemble Modeling of the Baltic Sea Ecosystem to Provide Scenarios for Management. , 2014, 43, 37.		1
102	An integrated biogeochemical model system for the Baltic Sea. , 1999, , 45-56.		0