Andreas Hartmann

List of Publications by Year
in descending order

58	2,963	186265 28	168389 53
papers	citations	h-index	g-index

108	108	108	3214
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Hydrology of Groundwater Systems - From Recharge to Discharge. , 2022, , 324-330.		3
2	Integrating field work and large-scale modeling to improve assessment of karst water resources. Hydrogeology Journal, 2021, 29, 315-329.	2.1	14
3	Assessing Streamflow Sensitivity to Precipitation Variability in Karstâ€Influenced Catchments With Unclosed Water Balances. Water Resources Research, 2021, 57, e2020WR028598.	4.2	13
4	Quantifying temporal variability and spatial heterogeneity in rainfall recharge thresholds in a montane karst environment. Journal of Hydrology, 2021, 594, 125965.	5.4	9
5	Identifying More Realistic Model Structures by Electrical Conductivity Observations of the Karst Spring. Water Resources Research, 2021, 57, e2020WR028587.	4.2	15
6	The Properties of Annually Laminated Stalagmitesâ€A Global Synthesis. Reviews of Geophysics, 2021, 59, e2020RG000722.	23.0	23
7	Risk of groundwater contamination widely underestimated because of fast flow into aquifers. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	53
8	On doing hydrology with dragons: Realizing the value of perceptual models and knowledge accumulation. Wiley Interdisciplinary Reviews: Water, 2021, 8, e1550.	6.5	26
9	Karst modelling challenge 1: Results of hydrological modelling. Journal of Hydrology, 2021, 600, 126508.	5.4	31
10	GMD perspective: The quest to improve the evaluation of groundwater representation in continental- to global-scale models. Geoscientific Model Development, 2021, 14, 7545-7571.	3.6	38
11	The Shallow Subsurface of Karst Systems: Review and Directions. Advances in Karst Science, 2020, , 61-68.	0.3	6
12	Simplified VarKarst Semi-distributed Model Applied to Joint Simulations of Discharge and Piezometric Variations in Villanueva Del Rosario Karst System (Malaga, Southern Spain). Advances in Karst Science, 2020, , 145-150.	0.3	1
13	An integrated hydrogeological approach to evaluate the leakage potential from a complex and fractured karst aquifer, example of Abolabbas Dam (Iran). Environmental Earth Sciences, 2020, 79, 1.	2.7	5
14	Long- and Short-Term Inorganic Nitrogen Runoff from a Karst Catchment in Austria. Forests, 2020, 11, 1112.	2.1	2
15	Rainfall recharge thresholds in a subtropical climate determined using a regional cave drip water monitoring network. Journal of Hydrology, 2020, 587, 125001.	5.4	19
16	A soil moisture monitoring network to characterize karstic recharge and evapotranspiration at five representative sites across the globe. Geoscientific Instrumentation, Methods and Data Systems, 2020, 9, 11-23.	1.6	17
17	Global karst springs hydrograph dataset for research and management of the worldâ€™s fastest-flowing groundwater. Scientific Data, 2020, 7, 59.	5.3	45
18	Moving beyond the catchment scale: Value and opportunities in largeâ€scale hydrology to understand our changing world. Hydrological Processes, 2020, 34, 2292-2298.	2.6	19

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19	Informationâ€Based Machine Learning for Tracer Signature Prediction in Karstic Environments. Water Resources Research, 2020, 56, e2018WR024558.	4.2	12
20	What is the hydrologically effective area of a catchment?. Environmental Research Letters, 2020, 15, 104024.	5.2	33
21	Global analysis reveals climatic controls on the oxygen isotope composition of cave drip water. Nature Communications, 2019, 10, 2984.	12.8	81
22	Combining Experimental Methods and Modeling to Quantify the Complex Recharge Behavior of Karst Aquifers. Water Resources Research, 2019, 55, 1384-1404.	4.2	37
23	The Demographics of Water: A Review of Water Ages in the Critical Zone. Reviews of Geophysics, 2019, 57, 800-834.	23.0	197
24	How can we model subsurface stormflow at the catchment scale if we cannot measure it?. Hydrological Processes, 2019, 33, 1378-1385.	2.6	19
25	Hillslope Hydrology in Global Change Research and Earth System Modeling. Water Resources Research, 2019, 55, 1737-1772.	4.2	281
26	Experiences in calibrating and evaluating lumped karst hydrological models. Geological Society Special Publication, 2018, 466, 331-340.	1.3	8
27	V2Karst V1.1: a parsimonious large-scale integrated vegetationâ€“recharge model to simulate the impact of climate and land cover change in karst regions. Geoscientific Model Development, 2018, 11, 4933-4964.	3.6	34
28	Groundwater Pumping Impacts on Real Stream Networks: Testing the Performance of Simple Management Tools. Water Resources Research, 2018, 54, 5471-5486.	4.2	26
29	Process-based modelling to evaluate simulated groundwater levels and frequencies in aÂChalk catchment in south-western England. Natural Hazards and Earth System Sciences, 2018, 18, 445-461.	3.6	22
30	Characterization, modeling, and remediation of karst in a changing environment. Environmental Earth Sciences, 2018, 77, 1.	2.7	10
31	Dynamics of water fluxes and storages in an Alpine karst catchment under current and potential future climate conditions. Hydrology and Earth System Sciences, 2018, 22, 3807-3823.	4.9	46
32	A new approach to evaluate spatiotemporal dynamics of controlling parameters in distributed environmental models. Environmental Modelling and Software, 2017, 87, 1-16.	4.5	28
33	Improved Assessment of Groundwater Recharge in a Mediterranean Karst Region: Andalusia, Spain. Advances in Karst Science, 2017, , 117-125.	0.3	9
34	Enhanced groundwater recharge rates and altered recharge sensitivity to climate variability through subsurface heterogeneity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2842-2847.	7.1	128
35	The relevance of sewer deterioration modelling to support asset management strategies. Urban Water Journal, 2017, 14, 1007-1015.	2.1	34
36	A step-wise semi-distributed simulation approach to characterize a karst aquifer and to support dam construction in a data-scarce environment. Journal of Hydrology, 2017, 554, 470-481.	5.4	17

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37	Modelling karst vadose zone hydrology and its relevance for paleoclimate reconstruction. Earth-Science Reviews, 2017, 172, 178-192.	9.1	49
38	On the value of water quality data and informative flow states in karst modelling. Hydrology and Earth System Sciences, 2017, 21, 5971-5985.	4.9	28
39	Model-aided quantification of dissolved carbon and nitrogen release after windthrow disturbance in an Austrian karst system. Biogeosciences, 2016, 13, 159-174.	3.3	44
40	Streamflow sensitivity to water storage changes across Europe. Geophysical Research Letters, 2016, 43, 1980-1987.	4.0	59
41	A tracerâ€based simulation approach to quantify seasonal dynamics of surfaceâ€groundwater interactions in the Pantanal wetland. Hydrological Processes, 2016, 30, 2590-2602.	2.6	8
42	Putting the cat in the box: why our models should consider subsurface heterogeneity at all scales. Wiley Interdisciplinary Reviews: Water, 2016, 3, 478-486.	6.5	16
43	A large-scale simulation model to assess karstic groundwater recharge over Europe and the Mediterranean. Geoscientific Model Development, 2015, 8, 1729-1746.	3.6	89
44	Model signatures and aridity indices enhance the accuracy of water balance estimations in a data-scarce Eastern Mediterranean catchment. Journal of Hydrology: Regional Studies, 2015, 4, 487-501.	2.4	25
45	Optimal hydrograph separation filter to evaluate transport routines of hydrological models. Journal of Hydrology, 2014, 514, 249-257.	5.4	33
46	Karst water resources in a changing world: Review of hydrological modeling approaches. Reviews of Geophysics, 2014, 52, 218-242.	23.0	610
47	Modeling spatiotemporal impacts of hydroclimatic extremes on groundwater recharge at a Mediterranean karst aquifer. Water Resources Research, 2014, 50, 6507-6521.	4.2	82
48	Progress in the hydrologic simulation of time variant recharge areas of karst systems â€“ Exemplified at a karst spring in Southern Spain. Advances in Water Resources, 2013, 54, 149-160.	3.8	93
49	Testing the realism of model structures to identify karst system processes using water quality and quantity signatures. Water Resources Research, 2013, 49, 3345-3358.	4.2	81
50	Process-based karst modelling to relate hydrodynamic and hydrochemical characteristics to system properties. Hydrology and Earth System Sciences, 2013, 17, 3305-3321.	4.9	70
51	A multi-model approach for improved simulations of future water availability at a large Eastern Mediterranean karst spring. Journal of Hydrology, 2012, 468-469, 130-138.	5.4	76
52	A new approach to model the spatial and temporal variability of recharge to karst aquifers. Hydrology and Earth System Sciences, 2012, 16, 2219-2231.	4.9	82
53	Identification of a karst systemâ€™s intrinsic hydrodynamic parameters: upscaling from single springs to the whole aquifer. Environmental Earth Sciences, 2012, 65, 2377-2389.	2.7	45
54	Climate Change Impacts on Jordan River Flow: Downscaling Application from a Regional Climate Model. Journal of Hydrometeorology, 2010, 11, 860-879.	1.9	55

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55	Hydrological Modeling of an Alpine Dolomite Karst System. Environmental Earth Sciences, 2010, , 223-229.	0.2	2
56	Simplified Conceptual Structures and Analytical Solutions for Groundwater Discharge Using Reservoir Equations. , 0, , .		19
57	Using soil moisture observations to characterize groundwater recharge processes at five contrasting climate regions. , 0, , .		0
58	Understanding and predicting large-scale hydrological variability in a changing environment. Proceedings of the International Association of Hydrological Sciences, 0, 383, 141-149.	1.0	3