Thomas Meixner

List of Publications by Year
in descending order

103 papers	5,271 citations	109321 35 h-index	88630 70 g-index
107 all docs	107 docs citations	107 times ranked	6802 citing authors

#	Article	IF	Citations
1	Tandem Use of Multiple Tracers and Metrics to Identify Dynamic and Slow Hydrological Flowpaths. Frontiers in Water, 2022, 4, .	2.3	1
2	How Soil Freezes and Thaws at a Snow-Dominated Forest Site in the U.S.â€"A Synthetic Approach Using the Soil and Cold Regions Model (SCRM). Soil Systems, 2022, 6, 52.	2.6	1
3	An improved practical approach for estimating catchmentâ€scale response functions through wavelet analysis. Hydrological Processes, 2021, 35, e14082.	2.6	1
4	Net Zero Urban Water from Concept to Applications: Integrating Natural, Built, and Social Systems for Responsive and Adaptive Solutions. ACS ES&T Water, 2021, 1, 518-529.	4.6	10
5	Rapid Assessment and Long-Term Monitoring of Green Stormwater Infrastructure with Citizen Scientists. Sustainability, 2021, 13, 12520.	3.2	3
6	Vegetation source water identification using isotopic and hydrometric observations from a subhumid mountain catchment. Ecohydrology, 2020, 13, e2167.	2.4	9
7	Groundwater Isotopes in the Sonoyta River Watershed, USA-Mexico: Implications for Recharge Sources and Management of the Quitobaquito Springs. Water (Switzerland), 2020, 12, 3307.	2.7	7
8	Ubiquitous Fractal Scaling and Filtering Behavior of Hydrologic Fluxes and Storages from A Mountain Headwater Catchment. Water (Switzerland), 2020, 12, 613.	2.7	2
9	Influence of Climate and Duration of Stream Water Presence on Rates of Litter Decomposition and Nutrient Dynamics in Temporary Streams and Surrounding Environments of Southwestern USA. Frontiers in Water, 2020, 2, .	2.3	4
10	Estimating Surface Water Presence and Infiltration in Ephemeral to Intermittent Streams in the Southwestern US. Frontiers in Water, 2020, 2, .	2.3	7
11	Selfâ€Affine Fractal Spatial and Temporal Variability of the San Pedro River, Southern Arizona. Journal of Geophysical Research F: Earth Surface, 2019, 124, 1540-1558.	2.8	4
12	Distinct stores and the routing of water in the deep critical zone of a snow-dominated volcanic catchment. Hydrology and Earth System Sciences, 2019, 23, 4661-4683.	4.9	17
13	Hydrologic functioning of the deep critical zone and contributions to streamflow in a highâ€elevation catchment: Testing of multiple conceptual models. Hydrological Processes, 2019, 33, 476-494.	2.6	22
14	EDDIE modules are effective learning tools for developing quantitative literacy and seismological understanding. Journal of Geoscience Education, 2018, 66, 97-108.	1.4	4
15	A net ecosystem carbon budget for snow dominated forested headwater catchments: linking water and carbon fluxes to critical zone carbon storage. Biogeochemistry, 2018, 138, 225-243.	3.5	17
16	Event-Response Ellipses: A Method to Quantify and Compare the Role of Dynamic Storage at the Catchment Scale in Snowmelt-Dominated Systems. Water (Switzerland), 2018, 10, 1824.	2.7	1
17	Why Do Largeâ€Scale Land Surface Models Produce a Low Ratio of Transpiration to Evapotranspiration?. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9109-9130.	3.3	47
18	Post-secondary Science Studentsâ€™ Explanations of Randomness and Variation and Implications for Science Learning. International Journal of Science and Mathematics Education, 2017, 15, 1039-1056.	2.5	9

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19	Comparing potential recharge estimates from three Land Surface Models across the western US. Journal of Hydrology, 2017, 545, 410-423.	5.4	22
20	Framework for incorporating climate change on flood magnitude and frequency analysis in the upper Santa Cruz River. Journal of Hydrology, 2017, 549, 194-207.	5.4	16
21	Geochemical evolution of the <scp>C</scp>ritical <scp>Z</scp>one across variable time scales informs concentrationâ€discharge relationships: <scp>J</scp>emez <scp>R</scp>iver <scp>B</scp>asin <scp>C</scp>ritical <scp>Z</scp>one <scp>O</scp>bservatory. Water Resources Research, 2017, 53, 4169-4196.	4.2	57
22	Riparian vegetation of ephemeral streams. Journal of Arid Environments, 2017, 138, 27-37.	2.4	28
23	How Might Recharge Change Under Projected Climate Change in the Western U.S.?. Geophysical Research Letters, 2017, 44, 10407-10418.	4.0	38
24	Using Large Data Sets for Open-Ended Inquiry in Undergraduate Science Classrooms. BioScience, 2017, 67, 1052-1061.	4.9	25
25	Annual and monthly runoff analysis in the Elqui River, Chile, a semi-arid snow-glacier fed basin. Tecnologia Y Ciencias Del Agua, 2017, 08, 23-35.	0.3	5
26	Seasonal glacial meltwater contributions to surface water in the Bolivian Andes: A case study using environmental tracers. Journal of Hydrology: Regional Studies, 2016, 8, 260-273.	2.4	11
27	Identifying the sources and geochemical evolution of groundwater using stable isotopes and hydrogeochemistry in the Quaternary aquifer in the area between Ismailia and El Kassara canals, Northeastern Egypt. Arabian Journal of Geosciences, 2016, 9, 1.	1.3	9
28	Valuing instream-related services of wastewater. Ecosystem Services, 2016, 21, 59-71.	5.4	11
29	Riparian zones attenuate nitrogen loss following bark beetleâ€induced lodgepole pine mortality. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 933-948.	3.0	9
30	Implications of projected climate change for groundwater recharge in the western United States. Journal of Hydrology, 2016, 534, 124-138.	5.4	299
31	Students, Meet Data. Eos, 2016, 97, .	0.1	5
32	The role of biodiversity in the hydrological cycle. IHE Delft Lecture Note Series, 2016, , 249-288.	0.0	0
33	Critical Zone Services: Expanding Context, Constraints, and Currency beyond Ecosystem Services. Vadose Zone Journal, 2015, 14, vzj2014.10.0142.	2.2	60
34	Combined impact of catchment size, land cover, and precipitation on streamflow and total dissolved nitrogen: A global comparative analysis. Global Biogeochemical Cycles, 2015, 29, 1109-1121.	4.9	27
35	Determining the importance of model calibration for forecasting absolute/relative changes in streamflow from LULC and climate changes. Journal of Hydrology, 2015, 522, 439-451.	5.4	96
36	Use of Combined Biogeochemical Model Approaches and Empirical Data to Assess Critical Loads of Nitrogen. Environmental Pollution, 2015, , 269-295.	0.4	0

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37	Influences of topographic index distribution on hydrologically sensitive areas in agricultural watershed. Stochastic Environmental Research and Risk Assessment, 2014, 28, 2235-2242.	4.0	8
38	High Atmospheric Nitrate Inputs and Nitrogen Turnover in Semi-arid Urban Catchments. Ecosystems, 2014, 17, 1309-1325.	3.4	46
39	Evaluation of the importance of clay confining units on groundwater flow in alluvial basins using solute and isotope tracers: the case of Middle San Pedro Basin in southeastern Arizona (USA). Hydrogeology Journal, 2014, 22, 829-849.	2.1	16
40	Stream water carbon controls in seasonally snow-covered mountain catchments: impact of inter-annual variability of water fluxes, catchment aspect and seasonal processes. Biogeochemistry, 2014, 118, 273-290.	3.5	60
41	Physical and biological controls on trace gas fluxes in semi-arid urban ephemeral waterways. Biogeochemistry, 2014, 121, 189-207.	3.5	58
42	Assessing Nitrogen-Saturation in a Seasonally Dry Chaparral Watershed: Limitations of Traditional Indicators of N-Saturation. Ecosystems, 2014, 17, 1286-1305.	3.4	55
43	A Comparison of Empirical and Modelled Nitrogen Critical Loads for Mediterranean Forests and Shrublands in California. , 2014, , 357-368.		3
44	The influence of local hydrogeologic forcings on nearâ€stream event water recharge and retention (Upper San Pedro River, Arizona). Hydrological Processes, 2013, 27, 617-627.	2.6	7
45	The role of flood size and duration on streamflow and riparian groundwater composition in a semi-arid basin. Journal of Hydrology, 2013, 488, 126-135.	5.4	20
46	Interactive Effects of Air Pollution and Climate Change on Forest Ecosystems in the United States. Developments in Environmental Science, 2013, 13, 333-369.	0.5	13
47	Towards a unified thresholdâ€based hydrological theory: necessary components and recurring challenges. Hydrological Processes, 2013, 27, 313-318.	2.6	63
48	Dryland Riparian Ecosystems in the American Southwest: Sensitivity and Resilience to Climatic Extremes. Ecosystems, 2013, 16, 411-415.	3.4	36
49	Aerosol and precipitation chemistry in the southwestern United States: spatiotemporal trends and interrelationships. Atmospheric Chemistry and Physics, 2013, 13, 7361-7379.	4.9	49
50	Framing Scenarios of Binational Water Policy with a Tool to Visualize, Quantify and Valuate Changes in Ecosystem Services. Water (Switzerland), 2013, 5, 852-874.	2.7	20
51	Multi-gauge Calibration for Modeling the Semi-Arid Santa Cruz Watershed in Arizona-Mexico Border Area Using SWAT. Air, Soil and Water Research, 2012, 5, ASWR.S9410.	2.5	46
52	Using ¹⁷O to Investigate Nitrate Sources and Sinks in a Semi-Arid Groundwater System. Environmental Science & Technology, 2012, 46, 745-751.	10.0	36
53	Carbon and Nitrogen Export from Semiarid Uplands to Perennial Rivers: Connections and Missing Links, San Pedro River, Arizona, USA. Geography Compass, 2012, 6, 546-559.	2.7	3
54	Modeling effects of floods on streambed hydraulic conductivity and groundwaterâ€surface water interactions. Water Resources Research, 2012, 48, .	4.2	50

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55	Quantifying the effects of stream channels on storm water quality in a semi-arid urban environment. Journal of Hydrology, 2012, 470-471, 98-110.	5.4	13
56	It takes a community to raise a hydrologist: the Modular Curriculum for Hydrologic Advancement (MOCHA). Hydrology and Earth System Sciences, 2012, 16, 3405-3418.	4.9	31
57	RIPGISâ€NET: A GIS Tool for Riparian Groundwater Evapotranspiration in MODFLOW. Ground Water, 2012, 50, 154-158.	1.3	14
58	Seasonalizing Mountain System Recharge in Semiâ€Arid Basinsâ€Climate Change Impacts. Ground Water, 2012, 50, 585-597.	1.3	26
59	Quantifying mountain block recharge by means of catchmentâ€scale storageâ€discharge relationships. Water Resources Research, 2011, 47, .	4.2	88
60	Impact of transient soil water simulation to estimated nitrogen leaching and emission at high- and low-deposition forest sites in Southern California. Journal of Geophysical Research, 2011, 116, .	3.3	13
61	Effects of measurement resolution on the analysis of temperature time series for streamâ€aquifer flux estimation. Water Resources Research, 2011, 47, .	4.2	20
62	Impact of land-surface elevation and riparian evapotranspiration seasonality on groundwater budget in MODFLOW models. Hydrogeology Journal, 2011, 19, 1181-1188.	2.1	15
63	How Water, Carbon, and Energy Drive Critical Zone Evolution: The Jemezâ€“Santa Catalina Critical Zone Observatory. Vadose Zone Journal, 2011, 10, 884-899.	2.2	111
64	Overland flow generation in chaparral ecosystems: temporal and spatial variability. Hydrological Processes, 2010, 24, 65-75.	2.6	9
65	Riskâ€based determination of critical nitrogen deposition loads for fire spread in southern California deserts. Ecological Applications, 2010, 20, 1320-1335.	3.8	59
66	Nitrogen critical loads and management alternatives for N-impacted ecosystems in California. Journal of Environmental Management, 2010, 91, 2404-2423.	7.8	192
67	Adding an empirical factor to better represent the rewetting pulse mechanism in a soil biogeochemical model. Geoderma, 2010, 159, 440-451.	5.1	25
68	Seasonal variation in nitrogen uptake and turnover in two high-elevation soils: mineralization responses are site-dependent. Biogeochemistry, 2009, 93, 253-270.	3.5	40
69	Clogging of an Effluent Dominated Semiarid River: A Conceptual Model of Streamâ€Aquifer Interactions¹. Journal of the American Water Resources Association, 2009, 45, 1047-1062.	2.4	36
70	Interactions Between Biogeochemistry and Hydrologic Systems. Annual Review of Environment and Resources, 2009, 34, 65-96.	13.4	138
71	Estimating stream chemistry during the snowmelt pulse using a spatially distributed, coupled snowmelt and hydrochemical modeling approach. Water Resources Research, 2008, 44, .	4.2	15
72	Empirical and simulated critical loads for nitrogen deposition in California mixed conifer forests. Environmental Pollution, 2008, 155, 492-511.	7.5	120

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73	Fit-for-purpose analysis of uncertainty using split-sampling evaluations. Hydrological Sciences Journal, 2008, 53, 1090-1103.	2.6	42
74	Chapter 19 Management Options for Mitigating Nitrogen (N) Losses from N-Saturated Mixed-Conifer Forests in California. Developments in Environmental Science, 2008, 8, 425-455.	0.5	2
75	A global and efficient multi-objective auto-calibration and uncertainty estimation method for water quality catchment models. Journal of Hydroinformatics, 2007, 9, 277-291.	2.4	105
76	Changes in N cycling and microbial N with elevated N in exotic annual grasslands of southern California. Applied Soil Ecology, 2007, 36, 1-9.	4.3	32
77	Influence of shifting flow paths on nitrogen concentrations during monsoon floods, San Pedro River, Arizona. Journal of Geophysical Research, 2007, 112, .	3.3	23
78	Water in the desert: Introduction to special section on River and Riparian Biogeochemistry. Journal of Geophysical Research, 2007, 112, .	3.3	1
79	Smog Nitrogen and the Rapid Acidification of Forest Soil, San Bernardino Mountains, Southern California. Scientific World Journal, The, 2007, 7, 175-180.	2.1	10
80	Impacts of anthropogenic N additions on nitrogen mineralization from plant litter in exotic annual grasslands. Soil Biology and Biochemistry, 2007, 39, 24-32.	8.8	39
81	Mineralization responses at near-zero temperatures in three alpine soils. Biogeochemistry, 2007, 84, 233-245.	3.5	37
82	N Saturation Symptoms in Chaparral Catchments Are Not Reversed by Prescribed Fire. Environmental Science & Technology, 2006, 40, 2887-2894.	10.0	29
83	Modeling nitrogen transport in the Newport Bay/San Diego Creek watershed of Southern California. Agricultural Water Management, 2006, 81, 199-215.	5.6	12
84	A global sensitivity analysis tool for the parameters of multi-variable catchment models. Journal of Hydrology, 2006, 324, 10-23.	5.4	980
85	Altered Ecohydrologic Response Drives Native Shrub Loss under Conditions of Elevated Nitrogen Deposition. Journal of Environmental Quality, 2006, 35, 76-92.	2.0	40
86	Environmental and ecological hydroinformatics to support the implementation of the European Water Framework Directive for river basin management. Journal of Hydroinformatics, 2006, 8, 239-252.	2.4	23
87	Methods to quantify and identify the sources of uncertainty for river basin water quality models. Water Science and Technology, 2006, 53, 51-59.	2.5	176
88	Decadal-scale Dynamics of Water, Carbon and Nitrogen in a California Chaparral Ecosystem: DAYCENT Modeling Results. Biogeochemistry, 2006, 77, 217-245.	3.5	41
89	Episodic rewetting enhances carbon and nitrogen release from chaparral soils. Soil Biology and Biochemistry, 2005, 37, 2195-2204.	8.8	305
90	Biogeochemical Budgets in a Mediterranean Catchment with High Rates of Atmospheric N Deposition â€“ Importance of Scale and Temporal Asynchrony. Biogeochemistry, 2004, 70, 331-356.	3.5	62

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91	Temporal and spatial variability of cation and silica export in an alpine watershed, Emerald Lake, California. Hydrological Processes, 2004, 18, 1759-1776.	2.6	4
92	Tracing Atmospheric Nitrate Deposition in a Complex Semiarid Ecosystem Using Î”17O. Environmental Science & Technology, 2004, 38, 2175-2181.	10.0	134
93	Multidecadal hydrochemical response of a Sierra Nevada watershed: sensitivity to weathering rate and changes in deposition. Journal of Hydrology, 2004, 285, 272-285.	5.4	19
94	Prescribed fire, soils, and stream water chemistry in a watershed in the Lake Tahoe Basin, California. International Journal of Wildland Fire, 2004, 13, 27.	2.4	65
95	Title is missing!. Biogeochemistry, 2003, 62, 289-308.	3.5	17
96	Ecological Effects of Nitrogen Deposition in the Western United States. BioScience, 2003, 53, 404.	4.9	522
97	Estimating parameters and structure of a hydrochemical model using multiple criteria. Water Science and Application, 2003, , 213-228.	0.3	2
98	Multicriteria parameter estimation for models of stream chemical composition. Water Resources Research, 2002, 38, 9-1-9-9.	4.2	28
99	Nitrate in Polluted Mountainous Catchments with Mediterranean Climates. Scientific World Journal, The, 2001, 1, 564-571.	2.1	8
100	Stream chemistry modeling of two watersheds in the Front Range, Colorado. Water Resources Research, 2000, 36, 77-87.	4.2	31
101	Sensitivity analysis using mass flux and concentration. Hydrological Processes, 1999, 13, 2233-2244.	2.6	26
102	Federal priorities and programs in the hydrological sciences. Eos, 1999, 80, 271.	0.1	0
103	Importance of biogeochemical processes in modeling stream chemistry in two watersheds in the Sierra Nevada, California. Water Resources Research, 1998, 34, 3121-3133.	4.2	11