Sally E Thompson

List of Publications by Year
in descending order

114 papers	5,155 citations	87723 38 h-index	102304 66 g-index
122 all docs	122 docs citations	122 times ranked	6924 citing authors

#	Article	IF	Citations
1	Quantifying the Uncertainty Created by Nonâ€Transferable Model Calibrations Across Climate and Land Cover Scenarios: A Case Study With SWMM. Water Resources Research, 2022, 58, .	1.7	10
2	Bridge to the future: Important lessons from 20Âyears of ecosystem observations made by the OzFlux network. Global Change Biology, 2022, 28, 3489-3514.	4.2	14
3	Crusts and seals: Structural. , 2022, , .		0
4	Intraâ€Specific Variability in Plant Hydraulic Parameters Inferred From Model Inversion of Sap Flux Data. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	1.3	4
5	Arc Hydro Hillslope and Critical Duration: New tools for hillslope-scale runoff analysis. Environmental Modelling and Software, 2022, 153, 105408.	1.9	1
6	Hydrological benefits of restoring wildfire regimes in the Sierra Nevada persist in a warming climate. Journal of Hydrology, 2021, 593, 125808.	2.3	13
7	Interannual variability of ecosystem iso/anisohydry is regulated by environmental dryness. New Phytologist, 2021, 229, 2562-2575.	3.5	23
8	Detecting the short term impact of soil and water conservation practices using stage as a proxy for dischargeâ€"A caseâ€study from the Tana subâ€basin, Ethiopia. Land Degradation and Development, 2021, 32, 867-880.	1.8	4
9	Sensitivity of dryland vegetation patterns to storm characteristics. Ecohydrology, 2021, 14, e2269.	1.1	5
10	Saturation excess overland flow accelerates the spread of a generalist soil-borne pathogen. Journal of Hydrology, 2021, 593, 125821.	2.3	4
11	Quantifying Shallow Overland Flow Patterns Under Laboratory Simulations Using Thermal and LiDAR Imagery. Water Resources Research, 2021, 57, e2020WR028857.	1.7	7
12	Undesirable outcomes in seasonally dry forests. Frontiers in Ecology and the Environment, 2021, 19, 87-88.	1.9	1
13	A MODIS-based scalable remote sensing method to estimate sowing and harvest dates of soybean crops in Mato Grosso, Brazil. Heliyon, 2021, 7, e07436.	1.4	11
14	Fire, water, and biodiversity in the Sierra Nevada: a possible triple win. Environmental Research Communications, 2021, 3, 081004.	0.9	23
15	Soil moisture influences on Sierra Nevada dead fuel moisture content and fire risks. Forest Ecology and Management, 2021, 496, 119379.	1.4	17
16	Rational Method Time of Concentration Can Underestimate Peak Discharge for Hillslopes. Journal of Hydraulic Engineering, 2021, 147, .	0.7	1
17	Analytical solutions to runoff on hillslopes with curvature: numerical and laboratory verification. Hydrological Processes, 2020, 34, 4640-4659.	1.1	4
18	Freezeâ€“thaw processes degrade postâ€fire water repellency in wet soils. Hydrological Processes, 2020, 34, 5229-5241.	1.1	4

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19	Resistance Formulations in Shallow Overland Flow Along a Hillslope Covered With Patchy Vegetation. Water Resources Research, 2020, 56, e2020WR027194.	1.7	10
20	Tributary confluences are dynamic thermal refuges for a juvenile salmonid in a warming river network. River Research and Applications, 2020, 36, 1076-1086.	0.7	19
21	Fire and climate change: conserving seasonally dry forests is still possible. Frontiers in Ecology and the Environment, 2020, 18, 354-360.	1.9	102
22	Forest Vegetation Change and Its Impacts on Soil Water Following 47 Years of Managed Wildfire. Ecosystems, 2020, 23, 1547-1565.	1.6	20
23	Weather underground: Subsurface hydrologic processes mediate tree vulnerability to extreme climatic drought. Global Change Biology, 2020, 26, 3091-3107.	4.2	35
24	A processâ€based approach to attribution of historical streamflow decline in a dataâ€scarce and humanâ€dominated watershed. Hydrological Processes, 2020, 34, 1981-1995.	1.1	9
25	Plants as sensors: vegetation response to rainfall predicts root-zone water storage capacity in Mediterranean-type climates. Environmental Research Letters, 2020, 15, 104074.	2.2	20
26	Emulation of the Saint Venant Equations Enables Rapid and Accurate Predictions of Infiltration and Overland Flow Velocity on Spatially Heterogeneous Surfaces. Water Resources Research, 2019, 55, 7108-7129.	1.7	19
27	Forest loss in Brazil increases maximum temperatures within 50 km. Environmental Research Letters, 2019, 14, 084047.	2.2	38
28	Restoring a Natural Fire Regime Alters the Water Balance of a Sierra Nevada Catchment. Water Resources Research, 2019, 55, 5751-5769.	1.7	38
29	Low Subsurface Water Storage Capacity Relative to Annual Rainfall Decouples Mediterranean Plant Productivity and Water Use From Rainfall Variability. Geophysical Research Letters, 2019, 46, 6544-6553.	1.5	63
30	No local adaptation in leaf or stem xylem vulnerability to embolism, but consistent vulnerability segmentation in a North American oak. New Phytologist, 2019, 223, 1296-1306.	3.5	52
31	Evaluating definitions of salmonid thermal refugia using in situ measurements in the Eel River, Northern California. Ecohydrology, 2019, 12, e2101.	1.1	9
32	A Valueâ€Based Model Selection Approach for Environmental Random Variables. Water Resources Research, 2019, 55, 270-283.	1.7	7
33	Quantifying Asynchronicity of Precipitation and Potential Evapotranspiration in Mediterranean Climates. Geophysical Research Letters, 2019, 46, 14692-14701.	1.5	31
34	Beyond isohydricity: The role of environmental variability in determining plant drought responses. Plant, Cell and Environment, 2019, 42, 1104-1111.	2.8	47
35	Estimating the price (in)elasticity of off-grid electricity demand. Development Engineering, 2018, 3, 12-22.	1.4	22
36	Hydrologic responses to restored wildfire regimes revealed by soil moisture-vegetation relationships. Advances in Water Resources, 2018, 112, 124-146.	1.7	23

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37	Land Use Change Increases Streamflow Across the Arc of Deforestation in Brazil. Geophysical Research Letters, 2018, 45, 3520-3530.	1.5	69
38	Drag coefficient estimation using flume experiments in shallow non-uniform water flow within emergent vegetation during rainfall. Ecological Indicators, 2018, 92, 367-378.	2.6	26
39	Measurement and simulation of water-use by canola and camelina under cool-season conditions in California. Agricultural Water Management, 2018, 196, 15-23.	2.4	22
40	Reconstructing Early Hydrologic Change in the California Delta and its Watersheds. Water Resources Research, 2018, 54, 7767-7790.	1.7	4
41	The ecohydrological context of drought and classification of plant responses. Ecology Letters, 2018, 21, 1723-1736.	3.0	38
42	Low Vulnerability to Xylem Embolism in Leaves and Stems of North American Oaks. Plant Physiology, 2018, 177, 1066-1077.	2.3	117
43	Quantification of the seasonal hillslope water storage that does not drive streamflow. Hydrological Processes, 2018, 32, 1978-1992.	1.1	66
44	Spatial characterization of long-term hydrological change in the Arkavathy watershed adjacent to Bangalore, India. Hydrology and Earth System Sciences, 2018, 22, 595-610.	1.9	11
45	Dew deposition suppresses transpiration and carbon uptake in leaves. Agricultural and Forest Meteorology, 2018, 259, 305-316.	1.9	54
46	Reconciling seasonal hydraulic risk and plant water use through probabilistic soilâ€“plant dynamics. Global Change Biology, 2017, 23, 3758-3769.	4.2	35
47	Hydrologic refugia, plants, and climate change. Global Change Biology, 2017, 23, 2941-2961.	4.2	257
48	A Stochastic Water Balance Framework for Lowland Watersheds. Water Resources Research, 2017, 53, 9564-9579.	1.7	10
49	How much does dryâ€season fog matter? Quantifying fog contributions to water balance in a coastal California watershed. Hydrological Processes, 2017, 31, 3948-3961.	1.1	19
50	How competitive is drought deciduousness in tropical forests? A combined eco-hydrological and eco-evolutionary approach. Environmental Research Letters, 2017, 12, 065006.	2.2	35
51	Addressing rainfall data selection uncertainty using connections between rainfall and streamflow. Scientific Reports, 2017, 7, 219.	1.6	16
52	Vegetation change during 40 years of repeated managed wildfires in the Sierra Nevada, California. Forest Ecology and Management, 2017, 402, 241-252.	1.4	48
53	Managed Wildfire Effects on Forest Resilience and Water in the Sierra Nevada. Ecosystems, 2017, 20, 717-732.	1.6	81
54	Stochastic modeling of interannual variation of hydrologic variables. Geophysical Research Letters, 2017, 44, 7285-7294.	1.5	9

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55	Robot-Assisted Measurement for Hydrologic Understanding in Data Sparse Regions. Water (Switzerland), 2017, 9, 494.	1.2	10
56	Event-scale power law recession analysis: quantifying methodological uncertainty. Hydrology and Earth System Sciences, 2017, 21, 65-81.	1.9	54
57	Modeling identifies optimal fall planting times and irrigation requirements for canola and camelina at locations across California. California Agriculture, 2017, 71, 214-220.	0.5	5
58	Comparing statistical and process-based flow duration curve models in ungauged basins and changing rain regimes. Hydrology and Earth System Sciences, 2016, 20, 669-683.	1.9	45
59	Spiral and Rotor Patterns Produced by Fairy Ring Fungi. PLoS ONE, 2016, 11, e0149254.	1.1	13
60	Human Impacts on Stream Hydrology and Water Quality. , 2016, , 441-490.		3
61	A minimal probabilistic model for soil moisture in seasonally dry climates. Water Resources Research, 2016, 52, 1507-1517.	1.7	21
62	Bridging the information gap: A webGIS tool for rural electrification in data-scarce regions. Applied Energy, 2016, 171, 277-286.	5.1	28
63	Dry season streamflow persistence in seasonal climates. Water Resources Research, 2016, 52, 90-107.	1.7	21
64	The dual role of soil crusts in desertification. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2108-2119.	1.3	41
65	Steady nonuniform shallow flow within emergent vegetation. Water Resources Research, 2015, 51, 10047-10064.	1.7	43
66	a, b careful: The challenge of scale invariance for comparative analyses in power law models of the streamflow recession. Geophysical Research Letters, 2015, 42, 9285-9293.	1.5	44
67	Why is the Arkavathy River drying? A multiple-hypothesis approach in a data-scarce region. Hydrology and Earth System Sciences, 2015, 19, 1905-1917.	1.9	54
68	Obtaining the Thermal Structure of Lakes from the Air. Water (Switzerland), 2015, 7, 6467-6482.	1.2	21
69	TopREML: a topological restricted maximum likelihood approach to regionalize trended runoff signatures in stream networks. Hydrology and Earth System Sciences, 2015, 19, 2925-2942.	1.9	20
70	Moving sociohydrology forward: a synthesis across studies. Hydrology and Earth System Sciences, 2015, 19, 3667-3679.	1.9	70
71	High Time for Conservation: Adding the Environment to the Debate on Marijuana Liberalization. BioScience, 2015, 65, 822-829.	2.2	61
72	Contrasting leaf phenological strategies optimize carbon gain under droughts of different duration. Advances in Water Resources, 2015, 84, 37-51.	1.7	34

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73	Climatic, ecophysiological, and phenological controls on plant ecohydrological strategies in seasonally dry ecosystems. Ecohydrology, 2015, 8, 660-681.	1.1	79
74	Rainfall and temperatures changes have confounding impacts on <scp>P</scp>hytophthora cinnamomi occurrence risk in the southwestern <scp>USA</scp> under climate change scenarios. Global Change Biology, 2014, 20, 1299-1312.	4.2	43
75	Analytical model for flow duration curves in seasonally dry climates. Water Resources Research, 2014, 50, 5510-5531.	1.7	67
76	Correction: Secondary dispersal driven by overland flow in drylands: Review and mechanistic model development. Movement Ecology, 2014, 2, 14.	1.3	3
77	Secondary dispersal driven by overland flow in drylands: Review and mechanistic model development. Movement Ecology, 2014, 2, 7.	1.3	22
78	Spatially variable water table recharge and the hillslope hydrologic response: Analytical solutions to the linearized hillslope Boussinesq equation. Water Resources Research, 2014, 50, 8515-8530.	1.7	18
79	Linking Plant Disease Risk and Precipitation Drivers: A Dynamical Systems Framework. American Naturalist, 2013, 181, E1-E16.	1.0	25
80	Bias adjustment of satellite rainfall data through stochastic modeling: Methods development and application to Nepal. Advances in Water Resources, 2013, 60, 121-134.	1.7	65
81	â€œPanta Rheiâ€”Everything Flowsâ€: Change in hydrology and societyâ€”The IAHS Scientific Decade 2013â€“2022. Hydrological Sciences Journal, 2013, 58, 1256-1275.	1.2	569
82	Local properties of patterned vegetation: quantifying endogenous and exogenous effects. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120359.	1.6	30
83	Dynamical behaviour of superconducting microresonators with readout-power heating. Superconductor Science and Technology, 2013, 26, 095009.	1.8	10
84	Implications of nonrandom seed abscission and global stilling for migration of windâ€dispersed plant species. Global Change Biology, 2013, 19, 1720-1735.	4.2	25
85	Prediction of annual runoff in ungauged basins. , 2013, , 70-101.		14
86	Developing predictive insight into changing water systems: use-inspired hydrologic science for the Anthropocene. Hydrology and Earth System Sciences, 2013, 17, 5013-5039.	1.9	119
87	Local properties of patterned vegetation: quantifying endogenous and exogenous effects. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120359.	1.6	0
88	Hydraulic determinism as a constraint on the evolution of organisms and ecosystems. Journal of Hydraulic Research/De Recherches Hydrauliques, 2012, 50, 547-557.	0.7	6
89	Multiple mechanisms generate Lorentzian and 1/fÎ± power spectra in daily stream-flow time series. Advances in Water Resources, 2012, 37, 94-103.	1.7	19
90	A phenomenological model for the flow resistance over submerged vegetation. Water Resources Research, 2012, 48, .	1.7	40

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91	Incorporating student-centered approaches into catchment hydrology teaching: a review and synthesis. Hydrology and Earth System Sciences, 2012, 16, 3263-3278.	1.9	22
92	Relative dominance of hydrologic versus biogeochemical factors on solute export across impact gradients. Water Resources Research, 2011, 47, .	1.7	217
93	Comparative hydrology across AmeriFlux sites: The variable roles of climate, vegetation, and groundwater. Water Resources Research, 2011, 47, .	1.7	96
94	Spatiotemporal scaling of hydrological and agrochemical export dynamics in a tileâ€drained Midwestern watershed. Water Resources Research, 2011, 47, .	1.7	79
95	Spatial scale dependence of ecohydrologically mediated water balance partitioning: A synthesis framework for catchment ecohydrology. Water Resources Research, 2011, 47, .	1.7	133
96	Spatiotemporal averaging of inâ€stream solute removal dynamics. Water Resources Research, 2011, 47, .	1.7	47
97	Inferring ecosystem parameters from observation of vegetation patterns. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	9
98	Hydrologic and biogeochemical functioning of intensively managed catchments: A synthesis of topâ€down analyses. Water Resources Research, 2011, 47, .	1.7	143
99	Water cycle dynamics in a changing environment: Improving predictability through synthesis. Water Resources Research, 2011, 47, .	1.7	45
100	Mechanistic models of seed dispersal by wind. Theoretical Ecology, 2011, 4, 113-132.	0.4	157
101	Estuarine Dispersion from Tidal Trapping: A New Analytical Framework. Estuaries and Coasts, 2011, 34, 45-59.	1.0	21
102	Patterns, puzzles and people: implementing hydrologic synthesis. Hydrological Processes, 2011, 25, 3256-3266.	1.1	22
103	Unsteady overland flow on flat surfaces induced by spatial permeability contrasts. Advances in Water Resources, 2011, 34, 1049-1058.	1.7	39
104	Design for resilience in coupled industrial-ecological systems: Biofuels industry as a case study. , 2011, , .		2
105	The effects of plant pathogens on tree recruitment in the Western Amazon under a projected future climate: a dynamical systems analysis. Journal of Ecology, 2010, 98, 1434-1446.	1.9	31
106	A Porous Convection Model for Grass Patterns. American Naturalist, 2010, 175, E10-E15.	1.0	9
107	Vegetationâ€infiltration relationships across climatic and soil type gradients. Journal of Geophysical Research, 2010, 115, .	3.3	130
108	Role of microtopography in rainfallâ€runoff partitioning: An analysis using idealized geometry. Water Resources Research, 2010, 46, .	1.7	86

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109	Nutrient loads exported from managed catchments reveal emergent biogeochemical stationarity. Geophysical Research Letters, 2010, 37, .	1.5	338
110	Spatial organization of vegetation arising from non-local excitation with local inhibition in tropical rainforests. Physica D: Nonlinear Phenomena, 2009, 238, 1061-1067.	1.3	10
111	Secondary seed dispersal and its role in landscape organization. Geophysical Research Letters, 2009, 36, .	1.5	36
112	Role of biomass spread in vegetation pattern formation within arid ecosystems. Water Resources Research, 2008, 44, .	1.7	47
113	Plant Propagation Fronts and Wind Dispersal: An Analytical Model to Upscale from Seconds to Decades Using Superstatistics. American Naturalist, 2008, 171, 468-479.	1.0	41
114	Recalibration of existing pedotransfer functions to estimate soil bulk density at a regional scale. European Journal of Soil Science, 0, , .	1.8	0