Susana Bernal

List of Publications by Year in descending order

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70 papers

2,297 citations

236925 25 h-index 243625 44 g-index

84 all docs

84 docs citations

84 times ranked 2842 citing authors

#	Article	IF	CITATIONS
1	Water table elevation controls on soil nitrogen cycling in riparian wetlands along a European climatic gradient. Biogeochemistry, 2004, 67, 113-134.	3.5	253
2	Complex response of the forest nitrogen cycle to climate change. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 3406-3411.	7.1	130
3	Influences of the stream groundwater hydrology on nitrate concentration in unsaturated riparian area bounded by an intermittent Mediterranean stream. Water Resources Research, 2003, 39, .	4.2	102
4	Seasonal Variations of Dissolved Nitrogen and DOC:DON Ratios in an Intermittent Mediterranean Stream. Biogeochemistry, 2005, 75, 351-372.	3.5	100
5	River network saturation concept: factors influencing the balance of biogeochemical supply and demand of river networks. Biogeochemistry, 2018, 141, 503-521.	3.5	96
6	Diversity and temporal sequences of forms of DOC and NO ₃ â€discharge responses in an intermittent stream: Predictable or random succession?. Journal of Geophysical Research, 2008, 113, .	3.3	92
7	Hydrological extremes modulate nutrient dynamics in mediterranean climate streams across different spatial scales. Hydrobiologia, 2013, 719, 31-42.	2.0	84
8	Variability of DOC and nitrate responses to storms in a small Mediterranean forested catchment. Hydrology and Earth System Sciences, 2002, 6, 1031-1041.	4.9	69
9	Temperature controls production but hydrology regulates export of dissolved organic carbon at the catchment scale. Hydrology and Earth System Sciences, 2020, 24, 945-966.	4.9	64
10	The influence of riparian-hyporheic zone on the hydrological responses in an intermittent stream. Hydrology and Earth System Sciences, 2002, 6, 515-526.	4.9	62
11	Watershed â€~chemical cocktails': forming novel elemental combinations in Anthropocene fresh waters. Biogeochemistry, 2018, 141, 281-305.	3.5	62
12	Riparian Corridors: A New Conceptual Framework for Assessing Nitrogen Buffering Across Biomes. Frontiers in Environmental Science, 2018, 6, .	3.3	62
13	A conceptual framework for understanding the biogeochemistry of dry riverbeds through the lens of soil science. Earth-Science Reviews, 2019, 188, 441-453.	9.1	54
14	Nutrient and Organic Matter Dynamics in Intermittent Rivers and Ephemeral Streams., 2017,, 135-160.		52
15	Spatial variability of the relationships of runoff and sediment yield with weather types throughout the Mediterranean basin. Journal of Hydrology, 2019, 571, 390-405.	5.4	49
16	Contribution of Hydrologic Opportunity and Biogeochemical Reactivity to the Variability of Nutrient Retention in River Networks. Global Biogeochemical Cycles, 2018, 32, 376-388.	4.9	44
17	Riparian and in-stream controls on nutrient concentrations and fluxes in a headwater forested stream. Biogeosciences, 2015, 12, 1941-1954.	3.3	41
18	Inferring nitrate sources through end member mixing analysis in an intermittent Mediterranean stream. Biogeochemistry, 2006, 81, 269-289.	3.5	40

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19	Modelling the nonâ€linear hydrological behaviour of a small Mediterranean forested catchment. Hydrological Processes, 2008, 22, 3814-3828.	2.6	35
20	Green light: gross primary production influences seasonal stream NÂexport by controlling fineâ€scale N dynamics. Ecology, 2016, 97, 133-144.	3.2	35
21	Leaf Litter Dynamics and Nitrous Oxide Emission in a Mediterranean Riparian Forest. Journal of Environmental Quality, 2003, 32, 191-197.	2.0	34
22	Calibration of the INCA model in a Mediterranean forested catchment: the effect of hydrological inter-annual variability in an intermittent stream. Hydrology and Earth System Sciences, 2004, 8, 729-741.	4.9	33
23	Wood and leaf debris input in a Mediterranean stream: The influence of riparian vegetation. Fundamental and Applied Limnology, 2001, 153, 91-102.	0.7	33
24	Inâ€stream net uptake regulates inorganic nitrogen export from catchments under base flow conditions. Journal of Geophysical Research, 2012, 117, .	3.3	32
25	A round-trip ticket: the importance of release processes for in-stream nutrient spiraling. Freshwater Science, 2015, 34, 20-30.	1.8	28
26	Linking in-stream nutrient uptake to hydrologic retention in two headwater streams. Freshwater Science, 2016, 35, 1176-1188.	1.8	27
27	Organizational Principles of Hyporheic Exchange Flow and Biogeochemical Cycling in River Networks Across Scales. Water Resources Research, 2022, 58, .	4.2	26
28	Modeling storm events to investigate the influence of the stream-catchment interface zone on stream biogeochemistry. Water Resources Research, 2005, 41 , .	4.2	24
29	Technical Note: A comparison of two empirical approaches to estimate in-stream net nutrient uptake. Biogeosciences, 2011, 8, 875-882.	3.3	24
30	Decoupling of dissolved organic matter patterns between stream and riparian groundwater in a headwater forested catchment. Hydrology and Earth System Sciences, 2018, 22, 1897-1910.	4.9	24
31	Supply, Demand, and In-Stream Retention of Dissolved Organic Carbon and Nitrate During Storms in Mediterranean Forested Headwater Streams. Frontiers in Environmental Science, 2019, 7, .	3.3	24
32	Towards an improved understanding of biogeochemical processes across surface-groundwater interactions in intermittent rivers and ephemeral streams. Earth-Science Reviews, 2021, 220, 103724.	9.1	24
33	Factors limiting denitrification in a Mediterranean riparian forest. Soil Biology and Biochemistry, 2007, 39, 2685-2688.	8.8	23
34	Gradients of Anthropogenic Nutrient Enrichment Alter N Composition and DOM Stoichiometry in Freshwater Ecosystems. Global Biogeochemical Cycles, 2021, 35, e2021GB006953.	4.9	22
35	Shifting stoichiometry: Longâ€term trends in streamâ€dissolved organic matter reveal altered C:N ratios due to history of atmospheric acid deposition. Global Change Biology, 2022, 28, 98-114.	9.5	22
36	Changes in discharge and solute dynamics between hillslope and valley-bottom intermittent streams. Hydrology and Earth System Sciences, 2012, 16, 1595-1605.	4.9	21

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37	The influence of riparian evapotranspiration on stream hydrology and nitrogen retention in a subhumid Mediterranean catchment. Hydrology and Earth System Sciences, 2016, 20, 3831-3842.	4.9	21
38	Photoinhibition on natural ammonia oxidizers biofilm populations and implications for nitrogen uptake in stream biofilms. Limnology and Oceanography, 2017, 62, 364-375.	3.1	21
39	Stepping Out of the Ivory Tower for Ocean Literacy. Frontiers in Marine Science, 2019, 6, .	2.5	20
40	Leachates from Helophyte Leaf-Litter Enhance Nitrogen Removal from Wastewater Treatment Plant Effluents. Environmental Science & Environmental Science	10.0	19
41	Diverse water quality responses to extreme climate events: an introduction. Biogeochemistry, 2018, 141, 273-279.	3.5	17
42	Leaf Litter Dynamics and Nitrous Oxide Emission in a Mediterranean Riparian Forest. Journal of Environmental Quality, 2003, 32, 191.	2.0	16
43	Enhancement of carbon and nitrogen removal by helophytes along subsurface water flowpaths receiving treated wastewater. Science of the Total Environment, 2017, 599-600, 1667-1676.	8.0	16
44	Wastewater treatment plant effluent inputs induce large biogeochemical changes during low flows in an intermittent stream but small changes in day-night patterns. Science of the Total Environment, 2020, 714, 136733.	8.0	16
45	Contribution of pulses of soil nitrogen mineralization and nitrification to soil nitrogen availability in three Mediterranean forests. European Journal of Soil Science, 2016, 67, 303-313.	3.9	15
46	The role of lithology, catchment size and the alluvial zone on the hydrogeochemistry of two intermittent Mediterranean streams. Hydrological Processes, 2008, 22, 1407-1418.	2.6	14
47	Climate response of the soil nitrogen cycle in three forest types of a headwater Mediterranean catchment. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 859-875.	3.0	13
48	Relationship of Weather Types on the Seasonal and Spatial Variability of Rainfall, Runoff, and Sediment Yield in the Western Mediterranean Basin. Atmosphere, 2020, 11, 609.	2.3	13
49	Riparian evapotranspiration is essential to simulate streamflow dynamics and water budgets in a Mediterranean catchment. Hydrology and Earth System Sciences, 2018, 22, 4033-4045.	4.9	11
50	Modelling the inorganic nitrogen behaviour in a small Mediterranean forested catchment, Fuirosos (Catalonia). Hydrology and Earth System Sciences, 2010, 14, 223-237.	4.9	10
51	The role of helophyte species on nitrogen and phosphorus retention from wastewater treatment plant effluents. Journal of Environmental Management, 2019, 252, 109585.	7.8	10
52	Towards women-inclusive ecology: Representation, behavior, and perception of women at an international conference. PLoS ONE, 2021, 16, e0260163.	2.5	10
53	Interactions between microplastics and benthic biofilms in fluvial ecosystems: Knowledge gaps and future trends. Freshwater Science, 2022, 41, 442-458.	1.8	10
54	Exploring the long-term response of undisturbed Mediterranean catchments to changes in atmospheric inputs through time series analysis. Science of the Total Environment, 2013, 458-460, 535-545.	8.0	9

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55	Stream network variation in dissolved oxygen: Metabolism proxies and biogeochemical controls. Ecological Indicators, 2021, 131, 108233.	6.3	9
56	The influence of the invasive alien nitrogen-fixing Robinia pseudoacacia L. on soil nitrogen availability in a mixed Mediterranean riparian forest. European Journal of Forest Research, 2019, 138, 1083-1093.	2.5	8
57	Effect of Three Emergent Macrophyte Species on Nutrient Retention in Aquatic Environments under Excess Nutrient Loading. Environmental Science & Excess Nutrient Loading. Environmental Science & Excess Nutrient Loading.	10.0	8
58	Residence Time in Hyporheic Bioactive Layers Explains Nitrate Uptake in Streams. Water Resources Research, 2021, 57, e2020WR027646.	4.2	8
59	Differences in ammonium oxidizer abundance and N uptake capacity between epilithic and epipsammic biofilms in an urban stream. Freshwater Science, 2018, 37, 13-22.	1.8	7
60	Microbial uptake of nitrogen and carbon from the water column by litterâ€associated microbes differs among litter species. Limnology and Oceanography, 2020, 65, 1891-1902.	3.1	7
61	Advancing river corridor science beyond disciplinary boundaries with an inductive approach to catalyse hypothesis generation. Hydrological Processes, 2022, 36, .	2.6	7
62	Influence of Dissolved Organic Matter Sources on In-Stream Net Dissolved Organic Carbon Uptake in a Mediterranean Stream. Water (Switzerland), 2020, 12, 1722.	2.7	6
63	Day–night ammonium oxidation in an urban stream: the influence of irradiance on ammonia oxidizers. Freshwater Science, 2017, 36, 272-283.	1.8	4
64	Future changes in the Dominant Source Layer of riparian lateral water fluxes in a subhumid Mediterranean catchment. Journal of Hydrology, 2021, 595, 126014.	5.4	4
65	Nitrous Oxide Emissions From Drying Streams and Rivers. Geophysical Research Letters, 2021, 48, .	4.0	4
66	Wastewater treatment plant effluent inputs influence the temporal variability of nutrient uptake in an intermittent stream. Urban Ecosystems, 2022, 25, 1313-1326.	2.4	4
67	Hydrological responses to rainfall events including the extratropical cyclone <i>Gloria</i> in two contrasting Mediterranean headwaters in Spain; the perennial font del RegAs and the intermittent Fuirosos. Hydrological Processes, 2021, 35, .	2.6	3
68	The influence of Mediterranean riparian forests on stream nitrogen dynamics: a review from a catchment perspective., 2017,, 507-523.		2
69	Hydromorphologic Control of Streambed Fine Particle Standing Stocks Influences In-stream Aerobic Respiration. Frontiers in Water, 2021, 3, .	2.3	1
70	Stream Hydrology Controls the Longitudinal Bioreactive Footprint of Urban-Sourced Fine Particles. Environmental Science & Envi	10.0	1