

Paolo D'Odorico

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2398003/publications.pdf>

Version: 2024-02-01

291
papers

18,306
citations

9264

74
h-index

18647

119
g-index

300
all docs

300
docs citations

300
times ranked

16938
citing authors

#	ARTICLE	IF	CITATIONS
1	Global desertification: Drivers and feedbacks. <i>Advances in Water Resources</i> , 2013, 51, 326-344.	3.8	656
2	Global land and water grabbing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 892-897.	7.1	480
3	The Global Food-Energy-Water Nexus. <i>Reviews of Geophysics</i> , 2018, 56, 456-531.	23.0	446
4	Global agricultural economic water scarcity. <i>Science Advances</i> , 2020, 6, eaaz6031.	10.3	334
5	On the spatial and temporal links between vegetation, climate, and soil moisture. <i>Water Resources Research</i> , 1999, 35, 3709-3722.	4.2	314
6	A synthetic review of feedbacks and drivers of shrub encroachment in arid grasslands. <i>Ecohydrology</i> , 2012, 5, 520-530.	2.4	313
7	Land degradation in drylands: Interactions among hydrologic-aeolian erosion and vegetation dynamics. <i>Geomorphology</i> , 2010, 116, 236-245.	2.6	306
8	Feeding humanity through global food trade. <i>Earth's Future</i> , 2014, 2, 458-469.	6.3	300
9	Positive feedback between microclimate and shrub encroachment in the northern Chihuahuan desert. <i>Ecosphere</i> , 2010, 1, 1-11.	2.2	290
10	Meeting future food demand with current agricultural resources. <i>Global Environmental Change</i> , 2016, 39, 125-132.	7.8	277
11	Observed increasing water constraint on vegetation growth over the last three decades. <i>Nature Communications</i> , 2021, 12, 3777.	12.8	246
12	Mathematical models of vegetation pattern formation in ecohydrology. <i>Reviews of Geophysics</i> , 2009, 47, .	23.0	244
13	Robustness of variance and autocorrelation as indicators of critical slowing down. <i>Ecology</i> , 2012, 93, 264-271.	3.2	243
14	Ecohydrology of water-controlled ecosystems. <i>Advances in Water Resources</i> , 2002, 25, 1335-1348.	3.8	242
15	Dryland ecohydrology and climate change: critical issues and technical advances. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 2585-2603.	4.9	241
16	Increased food production and reduced water use through optimized crop distribution. <i>Nature Geoscience</i> , 2017, 10, 919-924.	12.9	238
17	AEOLIAN PROCESSES AND THE BIOSPHERE. <i>Reviews of Geophysics</i> , 2011, 49, .	23.0	230
18	The water-land-food nexus of first-generation biofuels. <i>Scientific Reports</i> , 2016, 6, 22521.	3.3	226

#	ARTICLE	IF	CITATIONS
19	Hydrologic controls on soil carbon and nitrogen cycles. I. Modeling scheme. <i>Advances in Water Resources</i> , 2003, 26, 45-58.	3.8	217
20	The Tragedy of the Grabbed Commons: Coercion and Dispossession in the Global Land Rush. <i>World Development</i> , 2017, 92, 1-12.	4.9	216
21	Interdependence of climate, soil, and vegetation as constrained by the Budyko curve. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	210
22	On soil moistureâ€“vegetation feedbacks and their possible effects on the dynamics of dryland ecosystems. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	202
23	Resilience and reactivity of global food security. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6902-6907.	7.1	179
24	Preferential states in soil moisture and climate dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 8848-8851.	7.1	176
25	Accelerated deforestation driven by large-scale land acquisitions in Cambodia. <i>Nature Geoscience</i> , 2015, 8, 772-775.	12.9	164
26	A Multiscale, Hierarchical Model of Pulse Dynamics in Arid-Land Ecosystems. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2014, 45, 397-419.	8.3	153
27	Noise-induced stability in dryland plant ecosystems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 10819-10822.	7.1	150
28	The nexus between forest fragmentation in Africa and Ebola virus disease outbreaks. <i>Scientific Reports</i> , 2017, 7, 41613.	3.3	145
29	Environmental impact food labels combining carbon, nitrogen, and water footprints. <i>Food Policy</i> , 2016, 61, 213-223.	6.0	144
30	Vegetationâ€“microclimate feedbacks in woodlandâ€“grassland ecotones. <i>Global Ecology and Biogeography</i> , 2013, 22, 364-379.	5.8	142
31	Stability and bistability of seagrass ecosystems in shallow coastal lagoons: Role of feedbacks with sediment resuspension and light attenuation. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	140
32	A Probabilistic Analysis of Fireâ€“Induced Treeâ€“Grass Coexistence in Savannas. <i>American Naturalist</i> , 2006, 167, E79-E87.	2.1	139
33	The Global Water Grabbing Syndrome. <i>Ecological Economics</i> , 2018, 143, 276-285.	5.7	134
34	Preferential states of seasonal soil moisture: The impact of climate fluctuations. <i>Water Resources Research</i> , 2000, 36, 2209-2219.	4.2	132
35	Manage water in a green way. <i>Science</i> , 2015, 349, 584-585.	12.6	130
36	Closing the yield gap while ensuring water sustainability. <i>Environmental Research Letters</i> , 2018, 13, 104002.	5.2	127

#	ARTICLE	IF	CITATIONS
37	Ecological feedbacks following deforestation create the potential for a catastrophic ecosystem shift in tropical dry forest. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 20696-20701.	7.1	124
38	On the effect of air humidity on soil susceptibility to wind erosion: The case of air-dry soils. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	4.0	120
39	Land grabbing: a preliminary quantification of economic impacts on rural livelihoods. <i>Population and Environment</i> , 2014, 36, 180-192.	3.0	120
40	On the effect of moisture bonding forces in air-dry soils on threshold friction velocity of wind erosion. <i>Sedimentology</i> , 2006, 53, 597-609.	3.1	119
41	An analytical model to relate the vertical root distribution to climate and soil properties. <i>Geophysical Research Letters</i> , 2006, 33, n/a-n/a.	4.0	119
42	Global virtual water trade and the hydrological cycle: patterns, drivers, and socio-environmental impacts. <i>Environmental Research Letters</i> , 2019, 14, 053001.	5.2	118
43	Recent History and Geography of Virtual Water Trade. <i>PLoS ONE</i> , 2013, 8, e55825.	2.5	115
44	The global value of water in agriculture. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 21985-21993.	7.1	112
45	Threats to sustainable development posed by land and water grabbing. <i>Current Opinion in Environmental Sustainability</i> , 2017, 26-27, 120-128.	6.3	111
46	Understanding the role of ecohydrological feedbacks in ecosystem state change in drylands. <i>Ecohydrology</i> , 2012, 5, 174-183.	2.4	110
47	Challenges in humid land ecohydrology: Interactions of water table and unsaturated zone with climate, soil, and vegetation. <i>Water Resources Research</i> , 2007, 43, .	4.2	109
48	Ecohydrology of Terrestrial Ecosystems. <i>BioScience</i> , 2010, 60, 898-907.	4.9	109
49	Water-controlled wealth of nations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 4230-4233.	7.1	108
50	Global unsustainable virtual water flows in agricultural trade. <i>Environmental Research Letters</i> , 2019, 14, 114001.	5.2	108
51	Hydrologic controls on soil carbon and nitrogen cycles. II. A case study. <i>Advances in Water Resources</i> , 2003, 26, 59-70.	3.8	106
52	Potential for sustainable irrigation expansion in a 3 Â°C warmer climate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 29526-29534.	7.1	106
53	Post-Fire Resource Redistribution in Desert Grasslands: A Possible Negative Feedback on Land Degradation. <i>Ecosystems</i> , 2009, 12, 434-444.	3.4	104
54	Local food crop production can fulfil demand for less than one-third of the population. <i>Nature Food</i> , 2020, 1, 229-237.	14.0	102

#	ARTICLE	IF	CITATIONS
55	Resilience in the global food system. <i>Environmental Research Letters</i> , 2017, 12, 025010.	5.2	100
56	Making ecological models adequate. <i>Ecology Letters</i> , 2018, 21, 153-166.	6.4	100
57	Global food self-sufficiency in the 21st century under sustainable intensification of agriculture. <i>Environmental Research Letters</i> , 2020, 15, 095004.	5.2	100
58	Effect of vegetation-water table feedbacks on the stability and resilience of plant ecosystems. <i>Water Resources Research</i> , 2006, 42, .	4.2	94
59	Interdependencies and telecoupling of oil palm expansion at the expense of Indonesian rainforest. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 105, 499-512.	16.4	92
60	Stochastic soil moisture dynamics along a hillslope. <i>Journal of Hydrology</i> , 2003, 272, 264-275.	5.4	91
61	Tidal influences on carbon assimilation by a salt marsh. <i>Environmental Research Letters</i> , 2008, 3, 044010.	5.2	91
62	Global sensitivity of high-resolution estimates of crop water footprint. <i>Water Resources Research</i> , 2015, 51, 8257-8272.	4.2	91
63	Hydrologic and aeolian controls on vegetation patterns in arid landscapes. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	90
64	Global Spatio-Temporal Patterns in Human Migration: A Complex Network Perspective. <i>PLoS ONE</i> , 2013, 8, e53723.	2.5	90
65	Biogeochemistry of Kalahari sands. <i>Journal of Arid Environments</i> , 2007, 71, 259-279.	2.4	89
66	Reserves and trade jointly determine exposure to food supply shocks. <i>Environmental Research Letters</i> , 2016, 11, 095009.	5.2	88
67	Hillslope and channel contributions to the hydrologic response. <i>Water Resources Research</i> , 2003, 39, .	4.2	87
68	Hydrologic variability in dryland regions: impacts on ecosystem dynamics and food security. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2012, 367, 3145-3157.	4.0	87
69	Tropical forest loss enhanced by large-scale land acquisitions. <i>Nature Geoscience</i> , 2020, 13, 482-488.	12.9	87
70	Physical and biological feedbacks of deforestation. <i>Reviews of Geophysics</i> , 2012, 50, .	23.0	86
71	Tree-grass coexistence in Savannas: The role of spatial dynamics and climate fluctuations. <i>Geophysical Research Letters</i> , 1999, 26, 247-250.	4.0	84
72	Does globalization of water reduce societal resilience to drought?. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	83

#	ARTICLE	IF	CITATIONS
73	Ecohydrology of groundwaterâ€dependent ecosystems: 1. Stochastic water table dynamics. <i>Water Resources Research</i> , 2009, 45, .	4.2	80
74	Changing Seasons: An Effect of the North Atlantic Oscillation?. <i>Journal of Climate</i> , 2002, 15, 435-445.	3.2	78
75	On the temporal variability of the virtual water network. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	78
76	An Analysis of the Soil Moisture Feedback on Convective and Stratiform Precipitation. <i>Journal of Hydrometeorology</i> , 2008, 9, 280-291.	1.9	76
77	Relation Between the North-Atlantic Oscillation and Hydroclimatic Conditions in Mediterranean Areas. <i>Water Resources Management</i> , 2011, 25, 1269-1279.	3.9	76
78	Geomorphic structure of tidal hydrodynamics in salt marsh creeks. <i>Water Resources Research</i> , 2008, 44, .	4.2	75
79	Fertility Island Formation and Evolution in Dryland Ecosystems. <i>Ecology and Society</i> , 2008, 13, .	2.3	75
80	Virtual water transfers unlikely to redress inequality in global water use. <i>Environmental Research Letters</i> , 2011, 6, 024017.	5.2	75
81	Coastal regime shifts: rapid responses of coastal wetlands to changes in mangrove cover. <i>Ecology</i> , 2017, 98, 762-772.	3.2	74
82	Impact of globalization on the resilience and sustainability of natural resources. <i>Nature Sustainability</i> , 2019, 2, 283-289.	23.7	74
83	Trends and fluctuations in the dates of ice break-up of lakes and rivers in Northern Europe: the effect of the North Atlantic Oscillation. <i>Journal of Hydrology</i> , 2002, 268, 100-112.	5.4	69
84	A field-scale analysis of the dependence of wind erosion threshold velocity on air humidity. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	68
85	Potential for landsliding: Dependence on hyetograph characteristics. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	67
86	On the ecohydrology of structurally heterogeneous semiarid landscapes. <i>Water Resources Research</i> , 2006, 42, .	4.2	64
87	Interannual variability of winter precipitation in the European Alps: relations with the North Atlantic Oscillation.. <i>Hydrology and Earth System Sciences</i> , 2009, 13, 17-25.	4.9	64
88	Hydraulic lift as a determinant of treeâ€grass coexistence on savannas. <i>New Phytologist</i> , 2015, 207, 1038-1051.	7.3	63
89	Hydrological limits to carbon capture and storage. <i>Nature Sustainability</i> , 2020, 3, 658-666.	23.7	63
90	Quantitative assessment of agricultural sustainability reveals divergent priorities among nations. <i>One Earth</i> , 2021, 4, 1262-1277.	6.8	63

#	ARTICLE	IF	CITATIONS
91	Modeling the effects of climate change on eelgrass stability and resilience: future scenarios and leading indicators of collapse. <i>Marine Ecology - Progress Series</i> , 2012, 448, 289-301.	1.9	62
92	Feedbacks between fires and wind erosion in heterogeneous arid lands. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	61
93	Form and function of grass ring patterns in arid grasslands: the role of abiotic controls. <i>Oecologia</i> , 2008, 158, 545-555.	2.0	61
94	The Water-Energy Nexus of Hydraulic Fracturing: A Global Hydrologic Analysis for Shale Oil and Gas Extraction. <i>Earth's Future</i> , 2018, 6, 745-756.	6.3	61
95	The Southern Kalahari: a potential new dust source in the Southern Hemisphere?. <i>Environmental Research Letters</i> , 2012, 7, 024001.	5.2	60
96	Moderating diets to feed the future. <i>Earth's Future</i> , 2014, 2, 559-565.	6.3	59
97	Land-use change and the livestock revolution increase the risk of zoonotic coronavirus transmission from rhinolophid bats. <i>Nature Food</i> , 2021, 2, 409-416.	14.0	59
98	Impact of feedbacks on Chihuahuan desert grasslands: Transience and metastability. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	58
99	Food appropriation through large scale land acquisitions. <i>Environmental Research Letters</i> , 2014, 9, 064030.	5.2	58
100	The interactive effects of press/pulse intensity and duration on regime shifts at multiple scales. <i>Ecological Monographs</i> , 2017, 87, 198-218.	5.4	58
101	Water limits to closing yield gaps. <i>Advances in Water Resources</i> , 2017, 99, 67-75.	3.8	58
102	Enhancement of wind erosion by fire-induced water repellency. <i>Water Resources Research</i> , 2006, 42, .	4.2	57
103	Dust-rainfall feedbacks in the West African Sahel. <i>Water Resources Research</i> , 2008, 44, .	4.2	57
104	Nonlinear Dynamics and Alternative Stable States in Shallow Coastal Systems. <i>Oceanography</i> , 2013, 26, 220-231.	1.0	57
105	On the impact of shrub encroachment on microclimate conditions in the northern Chihuahuan desert. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	56
106	Patterns and implications of Plant-soil ^{13}C and ^{15}N values in African savanna ecosystems. <i>Quaternary Research</i> , 2010, 73, 77-83.	1.7	55
107	A probabilistic model of rainfall-triggered shallow landslides in hollows: A long-term analysis. <i>Water Resources Research</i> , 2003, 39, .	4.2	54
108	The water footprint of carbon capture and storage technologies. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 138, 110511.	16.4	54

#	ARTICLE	IF	CITATIONS
109	Vegetation patterns induced by random climate fluctuations. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	53
110	Soil carbon and nitrogen dynamics in southern African savannas: the effect of vegetation-induced patch-scale heterogeneities and large scale rainfall gradients. <i>Climatic Change</i> , 2009, 94, 63-76.	3.6	53
111	New frontiers of land and water commodification: socio-environmental controversies of large-scale land acquisitions. <i>Land Degradation and Development</i> , 2017, 28, 2234-2244.	3.9	52
112	Ecohydrological feedbacks between salt accumulation and vegetation dynamics: Role of vegetation-groundwater interactions. <i>Water Resources Research</i> , 2010, 46, .	4.2	51
113	The water footprint of land grabbing. <i>Geophysical Research Letters</i> , 2013, 40, 6130-6135.	4.0	51
114	Impact of transnational land acquisitions on local food security and dietary diversity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	51
115	An Assessment of ENSO-Induced Patterns of Rainfall Erosivity in the Southwestern United States. <i>Journal of Climate</i> , 2001, 14, 4230-4242.	3.2	50
116	Spatial and temporal controls on watershed ecohydrology in the northern Rocky Mountains. <i>Water Resources Research</i> , 2010, 46, .	4.2	50
117	Patterns as indicators of productivity enhancement by facilitation and competition in dryland vegetation. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	49
118	Feedbacks between phosphorus deposition and canopy cover: The emergence of multiple stable states in tropical dry forests. <i>Global Change Biology</i> , 2008, 14, 154-160.	9.5	49
119	Post-fire resource redistribution and fertility island dynamics in shrub encroached desert grasslands: a modeling approach. <i>Landscape Ecology</i> , 2009, 24, 325-335.	4.2	49
120	Ecohydrology of groundwater-dependent ecosystems: 2. Stochastic soil moisture dynamics. <i>Water Resources Research</i> , 2009, 45, .	4.2	49
121	Globalization of agricultural pollution due to international trade. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 503-510.	4.9	45
122	The green and blue crop water requirement WATNEEDS model and its global gridded outputs. <i>Scientific Data</i> , 2020, 7, 273.	5.3	45
123	Phase Transitions Driven by State-Dependent Poisson Noise. <i>Physical Review Letters</i> , 2004, 92, 110601.	7.8	44
124	Spatial organization and drivers of the virtual water trade: a community-structure analysis. <i>Environmental Research Letters</i> , 2012, 7, 034007.	5.2	44
125	The fourth food revolution. <i>Nature Geoscience</i> , 2013, 6, 417-418.	12.9	44
126	Socio-Environmental Effects of Large-Scale Land Acquisition in Mozambique. <i>Research for Development</i> , 2018, , 377-389.	0.4	44

#	ARTICLE	IF	CITATIONS
127	On space-time scaling of cumulated rainfall fields. <i>Water Resources Research</i> , 1998, 34, 3461-3469.	4.2	43
128	Vegetation dynamics induced by phreatophyte-aquifer interactions. <i>Journal of Theoretical Biology</i> , 2007, 248, 301-310.	1.7	43
129	Environmental consequences of oil production from oil sands. <i>Earth's Future</i> , 2017, 5, 158-170.	6.3	43
130	Food Inequality, Injustice, and Rights. <i>BioScience</i> , 2019, 69, 180-190.	4.9	43
131	Stability and resilience of seagrass meadows to seasonal and interannual dynamics and environmental stress. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	42
132	Early Warning Signs in Social-Ecological Networks. <i>PLoS ONE</i> , 2014, 9, e101851.	2.5	42
133	Effect of rainfall interannual variability on the stability and resilience of dryland plant ecosystems. <i>Water Resources Research</i> , 2007, 43, .	4.2	41
134	Coupled stochastic dynamics of water table and soil moisture in bare soil conditions. <i>Water Resources Research</i> , 2008, 44, .	4.2	41
135	Historical trade-offs of livestock's environmental impacts. <i>Environmental Research Letters</i> , 2015, 10, 125013.	5.2	41
136	Changes in spatial variance during a grassland to shrubland state transition. <i>Journal of Ecology</i> , 2017, 105, 750-760.	4.0	41
137	Can biological invasions induce desertification?. <i>New Phytologist</i> , 2009, 181, 512-515.	7.3	40
138	European large-scale farmland investments and the land-water-energy-food nexus. <i>Advances in Water Resources</i> , 2017, 110, 579-590.	3.8	40
139	The water-land-food nexus of natural rubber production. <i>Journal of Cleaner Production</i> , 2018, 172, 1739-1747.	9.3	40
140	Livestock intensification and the influence of dietary change: A calorie-based assessment of competition for crop production. <i>Science of the Total Environment</i> , 2015, 538, 817-823.	8.0	39
141	Spatially explicit feedbacks between seagrass meadow structure, sediment and light: Habitat suitability for seagrass growth. <i>Advances in Water Resources</i> , 2016, 93, 315-325.	3.8	39
142	Duration and frequency of water stress in vegetation: An analytical model. <i>Water Resources Research</i> , 2000, 36, 2297-2307.	4.2	38
143	Climate, vegetation, and soil controls on hydraulic redistribution in shallow tree roots. <i>Advances in Water Resources</i> , 2014, 66, 70-80.	3.8	38
144	Biodiversity enhancement induced by environmental noise. <i>Journal of Theoretical Biology</i> , 2008, 255, 332-337.	1.7	37

#	ARTICLE	IF	CITATIONS
145	Combined effects of soil moisture and nitrogen availability variations on grass productivity in African savannas. <i>Plant and Soil</i> , 2010, 328, 95-108.	3.7	37
146	Impact of land use change on atmospheric P inputs in a tropical dry forest. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	37
147	The global land rush and climate change. <i>Earth's Future</i> , 2015, 3, 298-311.	6.3	37
148	Stochastic Flow Analysis for Predicting River Scour of Cohesive Soils. <i>Journal of Hydraulic Engineering</i> , 2006, 132, 493-500.	1.5	36
149	Interactions Between Soil Erosion Processes and Fires: Implications for the Dynamics of Fertility Islands. <i>Rangeland Ecology and Management</i> , 2010, 63, 267-274.	2.3	35
150	Water Savings of Crop Redistribution in the United States. <i>Water (Switzerland)</i> , 2017, 9, 83.	2.7	35
151	Desiccation crisis of saline lakes: A new decision-support framework for building resilience to climate change. <i>Science of the Total Environment</i> , 2020, 703, 134718.	8.0	35
152	Resilience and recovery potential of duneland vegetation in the southern Kalahari. <i>Ecosphere</i> , 2014, 5, 1-14.	2.2	33
153	Evaluating Ecohydrological Theories of Woody Root Distribution in the Kalahari. <i>PLoS ONE</i> , 2012, 7, e33996.	2.5	32
154	Weak and Strong Sustainability of Irrigation: A Framework for Irrigation Practices Under Limited Water Availability. <i>Frontiers in Sustainable Food Systems</i> , 2020, 4, .	3.9	32
155	The role of vegetationâ€™ microclimate feedback in promoting shrub encroachment in the northern Chihuahuan desert. <i>Global Change Biology</i> , 2015, 21, 2141-2154.	9.5	31
156	Noise-induced vegetation patterns in fire-prone savannas. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	30
157	The effect of fire-induced soil hydrophobicity on wind erosion in a semiarid grassland: Experimental observations and theoretical framework. <i>Geomorphology</i> , 2009, 105, 80-86.	2.6	30
158	A possible bistable evolution of soil thickness. <i>Journal of Geophysical Research</i> , 2000, 105, 25927-25935.	3.3	29
159	An ecohydrological framework for grass displacement by woody plants in savannas. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 192-206.	3.0	29
160	Freshwater savings from marine protein consumption. <i>Environmental Research Letters</i> , 2014, 9, 014005.	5.2	29
161	Past and present biophysical redundancy of countries as a buffer to changes in food supply. <i>Environmental Research Letters</i> , 2016, 11, 055008.	5.2	29
162	The water-energy-food nexus of unconventional oil and gas extraction in the Vaca Muerta Play, Argentina. <i>Journal of Cleaner Production</i> , 2019, 207, 743-750.	9.3	29

#	ARTICLE	IF	CITATIONS
163	Treeâ€“Grass Coexistence in the Everglades Freshwater System. <i>Ecosystems</i> , 2011, 14, 298-310.	3.4	28
164	Potential dust emissions from the southern Kalahari's dunelands. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 307-314.	2.8	28
165	Examining the linkage between shrub encroachment and recent greening in waterâ€“limited southern Africa. <i>Ecosphere</i> , 2015, 6, 1-16.	2.2	28
166	Nonâ€“linear shift from grassland to shrubland in temperate barrier islands. <i>Ecology</i> , 2018, 99, 1671-1681.	3.2	28
167	Energy implications of the 21st century agrarian transition. <i>Nature Communications</i> , 2021, 12, 2319.	12.8	28
168	Potential of grass invasions in desert shrublands to create novel ecosystem states under variable climate. <i>Ecohydrology</i> , 2016, 9, 1496-1506.	2.4	27
169	A new dataset of global irrigation areas from 2001 to 2015. <i>Advances in Water Resources</i> , 2021, 152, 103910.	3.8	27
170	Space-time self-organization of mesoscale rainfall and soil moisture. <i>Advances in Water Resources</i> , 2000, 23, 349-357.	3.8	25
171	The geomorphic structure of the runoff peak. <i>Hydrology and Earth System Sciences</i> , 2011, 15, 1853-1863.	4.9	24
172	Ecosystem-scale spatial heterogeneity of stable isotopes of soil nitrogen in African savannas. <i>Landscape Ecology</i> , 2013, 28, 685-698.	4.2	24
173	The Effects of Interannual Rainfall Variability on Treeâ€“Grass Composition Along Kalahari Rainfall Gradient. <i>Ecosystems</i> , 2017, 20, 975-988.	3.4	24
174	Simulating the Cascading Effects of an Extreme Agricultural Production Shock: Global Implications of a Contemporary US Dust Bowl Event. <i>Frontiers in Sustainable Food Systems</i> , 2020, 4, .	3.9	24
175	Competition for water induced by transnational land acquisitions for agriculture. <i>Nature Communications</i> , 2022, 13, 505.	12.8	24
176	Isotope composition and anion chemistry of soil profiles along the Kalahari Transect. <i>Journal of Arid Environments</i> , 2009, 73, 480-486.	2.4	22
177	Effect of repeated deforestation on vegetation dynamics for phosphorusâ€“limited tropical forests. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	22
178	On the use of neural networks for dendroclimatic reconstructions. <i>Geophysical Research Letters</i> , 2000, 27, 791-794.	4.0	21
179	The influence of stochastic soil moisture dynamics on gaseous emissions of NO, N2O, and N2. <i>Hydrological Sciences Journal</i> , 2003, 48, 781-798.	2.6	21
180	Probabilistic modeling of nitrogen and carbon dynamics in water-limited ecosystems. <i>Ecological Modelling</i> , 2004, 179, 205-219.	2.5	21

#	ARTICLE	IF	CITATIONS
181	A dynamic soil water threshold for vegetation water stress derived from stomatal conductance models. <i>Water Resources Research</i> , 2007, 43, .	4.2	21
182	The Limits of Water Pumps. <i>Science</i> , 2008, 321, 36-37.	12.6	21
183	Hydrologic controls on phosphorus dynamics: A modeling framework. <i>Advances in Water Resources</i> , 2012, 35, 94-109.	3.8	21
184	The land and its people. <i>Nature Geoscience</i> , 2014, 7, 324-325.	12.9	21
185	A quantitative description of the interspecies diversity of belowground structure in savanna woody plants. <i>Ecosphere</i> , 2015, 6, 1-15.	2.2	21
186	Climate change and large-scale land acquisitions in Africa: Quantifying the future impact on acquired water resources. <i>Advances in Water Resources</i> , 2016, 94, 231-237.	3.8	21
187	Hydrological consequences of natural rubber plantations in Southeast Asia. <i>Land Degradation and Development</i> , 2020, 31, 2060-2073.	3.9	21
188	Ecohydrological feedbacks between permafrost and vegetation dynamics. <i>Advances in Water Resources</i> , 2012, 49, 1-12.	3.8	20
189	Possible self-organizing dynamics for land-atmosphere interaction. <i>Journal of Geophysical Research</i> , 1998, 103, 23071-23077.	3.3	19
190	Coupled land-atmosphere modeling of the effects of shrub encroachment on nighttime temperatures. <i>Agricultural and Forest Meteorology</i> , 2011, 151, 1690-1697.	4.8	19
191	Positive feedbacks between phosphorus deposition and forest canopy trapping, evidence from Southern Mexico. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013, 118, 1521-1531.	3.0	19
192	Antarctica's Dry Valleys: A potential source of soluble iron to the Southern Ocean?. <i>Geophysical Research Letters</i> , 2015, 42, 1912-1918.	4.0	19
193	Dimensionality reduction of complex dynamical systems. <i>IScience</i> , 2021, 24, 101912.	4.1	19
194	Climatic oscillations influence the flooding of Venice. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	4.0	18
195	Vertical attributes of precipitation systems in West Africa and adjacent Atlantic Ocean. <i>Theoretical and Applied Climatology</i> , 2008, 92, 181-193.	2.8	18
196	Physiological responses of <i>Spartina alterniflora</i> to varying environmental conditions in Virginia marshes. <i>Hydrobiologia</i> , 2011, 669, 167-181.	2.0	18
197	On the feedback between water turbidity and microphytobenthos growth in shallow tidal environments. <i>Earth Surface Processes and Landforms</i> , 2019, 44, 1192-1206.	2.5	18
198	Water limitations to large-scale desert agroforestry projects for carbon sequestration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 24925-24926.	7.1	18

#	ARTICLE	IF	CITATIONS
199	Spatial pattern formation induced by Gaussian white noise. <i>Mathematical Biosciences</i> , 2011, 229, 174-184.	1.9	17
200	An analysis of structure: biomass structure relationships for characteristic species of the western <sc>K</sc>alahari, <sc>B</sc>otswana. <i>African Journal of Ecology</i> , 2014, 52, 20-29.	0.9	17
201	Inequality or injustice in water use for food?. <i>Environmental Research Letters</i> , 2015, 10, 024013.	5.2	17
202	The past and future of food stocks. <i>Environmental Research Letters</i> , 2016, 11, 035010.	5.2	17
203	Suppression of rainfall by fires in African drylands. <i>Geophysical Research Letters</i> , 2016, 43, 8527-8533.	4.0	17
204	Does phenology play a role in the feedbacks underlying shrub encroachment?. <i>Science of the Total Environment</i> , 2019, 657, 1064-1073.	8.0	17
205	Configuration entropy of fractal landscapes. <i>Geophysical Research Letters</i> , 1998, 25, 1015-1018.	4.0	16
206	Carbon and nitrogen parasitism by a xylem-tapping mistletoe (<i>Tapinanthus oleifolius</i>) along the Kalahari Transect: a stable isotope study. <i>African Journal of Ecology</i> , 2008, 46, 540-546.	0.9	16
207	Inequalities in the networks of virtual water flow. <i>Eos</i> , 2012, 93, 309-310.	0.1	16
208	The impact of changing moisture conditions on short-term P availability in weathered soils. <i>Plant and Soil</i> , 2013, 365, 201-209.	3.7	16
209	Soil organic C and total N pools in the Kalahari: potential impacts of climate change on C sequestration in savannas. <i>Plant and Soil</i> , 2015, 396, 27-44.	3.7	16
210	Total vertical sediment flux and PM10 emissions from disturbed Chihuahuan Desert surfaces. <i>Geoderma</i> , 2017, 293, 19-25.	5.1	16
211	Stochastic resonance and coherence resonance in groundwater-dependent plant ecosystems. <i>Journal of Theoretical Biology</i> , 2012, 293, 65-73.	1.7	15
212	Bistable dynamics between forest removal and landslide occurrence. <i>Water Resources Research</i> , 2014, 50, 1112-1130.	4.2	15
213	Albedo changes after fire as an explanation of fire-induced rainfall suppression. <i>Geophysical Research Letters</i> , 2017, 44, 3916-3923.	4.0	15
214	A Spatial Model for Soil-Atmosphere Interaction: Model Construction and Linear Stability Analysis. <i>Journal of Hydrometeorology</i> , 2000, 1, 61-74.	1.9	14
215	Evidence of optimal water use by vegetation across a range of North American ecosystems. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	14
216	Transient growth induces unexpected deterministic spatial patterns in the Turing process. <i>Europhysics Letters</i> , 2011, 95, 18003.	2.0	14

#	ARTICLE	IF	CITATIONS
217	Phosphorus input through fog deposition in a dry tropical forest. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 2493-2504.	3.0	14
218	Pathways to sustainable intensification through crop water management. <i>Environmental Research Letters</i> , 2016, 11, 091001.	5.2	14
219	Ecomorphodynamic approaches to river anabranching patterns. <i>Advances in Water Resources</i> , 2016, 93, 156-165.	3.8	14
220	The Enemy of My Enemy Hypothesis: Why Coexisting with Grasses May Be an Adaptive Strategy for Savanna Trees. <i>Ecosystems</i> , 2017, 20, 1278-1295.	3.4	14
221	Climate seasonality as an essential predictor of global fire activity. <i>Global Ecology and Biogeography</i> , 2019, 28, 198-210.	5.8	14
222	Spatio-temporal stochastic resonance induces patterns in wetland vegetation dynamics. <i>Ecological Complexity</i> , 2012, 10, 93-101.	2.9	13
223	The science of evidence: the value of global studies on land rush. <i>Journal of Peasant Studies</i> , 2013, 40, 907-909.	4.5	13
224	Biogeochemistry of dust sources in Southern Africa. <i>Journal of Arid Environments</i> , 2015, 117, 18-27.	2.4	13
225	Direct and Indirect Facilitation of Plants with Crassulacean Acid Metabolism (CAM). <i>Ecosystems</i> , 2015, 18, 985-999.	3.4	13
226	The competitive advantage of a constitutive CAM species over a C ₄ grass species under drought and CO ₂ enrichment. <i>Ecosphere</i> , 2019, 10, e02721.	2.2	13
227	The interactive nutrient and water effects on vegetation biomass at two African savannah sites with different mean annual precipitation. <i>African Journal of Ecology</i> , 2012, 50, 446-454.	0.9	12
228	Dust-rainfall feedback in West African Sahel. <i>Geophysical Research Letters</i> , 2015, 42, 7563-7571.	4.0	12
229	Land Degradation and Environmental Change. , 2016, , 219-227.		12
230	Soluble ferrous iron (Fe (II)) enrichment in airborne dust. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 10,153.	3.3	12
231	Hydrological implications of large-scale afforestation in tropical biomes for climate change mitigation. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2022, 377, .	4.0	12
232	SOIL MOISTURE DYNAMICS IN WATER-LIMITED ECOSYSTEMS. , 2006, , 31-46.		11
233	Noise-induced transitions in state-dependent dichotomous processes. <i>Physical Review E</i> , 2008, 78, 031137.	2.1	11
234	Effects of competition on induction of crassulacean acid metabolism in a facultative CAM plant. <i>Oecologia</i> , 2017, 184, 351-361.	2.0	11

#	ARTICLE	IF	CITATIONS
235	The neglected costs of water peace. <i>Wiley Interdisciplinary Reviews: Water</i> , 2018, 5, e1316.	6.5	11
236	A probabilistic approach to the analysis of contraction scour. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2006, 44, 654-662.	1.7	10
237	The relative importance of climate change and shrub encroachment on nocturnal warming in the southwestern United States. <i>International Journal of Climatology</i> , 2015, 35, 475-480.	3.5	10
238	The effect of nitrogen availability and water conditions on competition between a facultative CAM plant and an invasive grass. <i>Ecology and Evolution</i> , 2017, 7, 7739-7749.	1.9	10
239	Desertification and Land Degradation. , 2019, , 573-602.		10
240	Positive feedbacks and bistability associated with phosphorus-vegetation-microbial interactions. <i>Advances in Water Resources</i> , 2013, 52, 151-164.	3.8	9
241	Can land use intensification in the Mallee, Australia increase the supply of soluble iron to the Southern Ocean?. <i>Scientific Reports</i> , 2014, 4, 6009.	3.3	9
242	Ancient water supports today's energy needs. <i>Earth's Future</i> , 2017, 5, 515-519.	6.3	9
243	Critical transition to woody plant dominance through microclimate feedbacks in North American coastal ecosystems. <i>Ecology</i> , 2020, 101, e03107.	3.2	9
244	Ecosystem complexity enhances the resilience of plant-pollinator systems. <i>One Earth</i> , 2021, 4, 1286-1296.	6.8	9
245	ECOHYDROLOGY OF ARID AND SEMIARID ECOSYSTEMS: AN INTRODUCTION. , 2006, , 1-10.		8
246	Experimental evidence for limited leaching of phosphorus from canopy leaves in a tropical dry forest. <i>Ecohydrology</i> , 2013, 6, 806-817.	2.4	8
247	What commodities and countries impact inequality in the global food system?. <i>Environmental Research Letters</i> , 2016, 11, 095013.	5.2	8
248	Food, trade, and the environment. <i>Environmental Research Letters</i> , 2018, 13, 100201.	5.2	8
249	Kalahari Wildfires Drive Continental Post-Fire Brightening in Sub-Saharan Africa. <i>Remote Sensing</i> , 2019, 11, 1090.	4.0	8
250	Critical Transitions in Plant-Pollinator Systems Induced by Positive Inbreeding-Reward-Pollinator Feedbacks. <i>IScience</i> , 2020, 23, 100819.	4.1	8
251	A growing produce bubble: United States produce tied to Mexico's unsustainable agricultural water use. <i>Environmental Research Letters</i> , 0, , .	5.2	8
252	Precursors of state transitions in stochastic systems with delay. <i>Theoretical Ecology</i> , 2013, 6, 265-270.	1.0	7

#	ARTICLE	IF	CITATIONS
253	Critical slowing down associated with critical transition and risk of collapse in crypto-currency. <i>Royal Society Open Science</i> , 2020, 7, 191450.	2.4	7
254	CAM plant expansion favored indirectly by asymmetric climate warming and increased rainfall variability. <i>Oecologia</i> , 2020, 193, 1-13.	2.0	7
255	Values-Based Scenarios of Water Security: Rights to Water, Rights of Waters, and Commercial Water Rights. <i>BioScience</i> , 2021, 71, 1157-1170.	4.9	7
256	Reconstructing the temporal dynamics of snow cover from observations. <i>Geophysical Research Letters</i> , 2001, 28, 2975-2978.	4.0	6
257	Statistical simulation of the influence of the NAO on European winter surface temperatures: Applications to phenological modeling. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	6
258	From facilitative to competitive interactions between woody plants and plants with crassulacean acid metabolism (CAM): The role of hydraulic descent. <i>Ecohydrology</i> , 2017, 10, e1799.	2.4	6
259	A Mechanism of Land Degradation in Turfâ€Mantled Slopes of the Tibetan Plateau. <i>Geophysical Research Letters</i> , 2018, 45, 4041-4048.	4.0	6
260	Largeâ€scale land acquisition as a potential driver of slope instability. <i>Land Degradation and Development</i> , 2021, 32, 1773-1785.	3.9	6
261	A new conceptual framework for spatial predictive modelling of land degradation in a semiarid area. <i>Land Degradation and Development</i> , 2022, 33, 3358-3374.	3.9	6
262	Transition between stable states in the dynamics of soil development. <i>Geophysical Research Letters</i> , 2001, 28, 595-598.	4.0	5
263	A stochastic model for vegetation water stress. <i>Ecohydrology</i> , 2010, 3, 177-188.	2.4	5
264	Indicators of Collapse in Systems Undergoing Unsustainable Growth. <i>Bulletin of Mathematical Biology</i> , 2015, 77, 339-347.	1.9	5
265	Response of a facultative CAM plant and its competitive relationship with a grass to changes in rainfall regime. <i>Plant and Soil</i> , 2018, 427, 321-333.	3.7	5
266	Are African irrigation dam projects for large-scale agribusiness or small-scale farmers?. <i>Environmental Research Communications</i> , 2022, 4, 015005.	2.3	5
267	The value generated by irrigation in the command areas of new agricultural dams in Africa. <i>Agricultural Water Management</i> , 2022, 264, 107517.	5.6	5
268	Noise-sustained fluctuations in stochastic dynamics with a delay. <i>Physical Review E</i> , 2012, 85, 041106.	2.1	4
269	Reply to â€The politics of evidence: a response to Rulli and D'Odoricoâ€™. <i>Journal of Peasant Studies</i> , 2013, 40, 913-914.	4.5	4
270	The economic impacts of positive feedbacks resulting from deforestation. <i>Ecological Economics</i> , 2015, 120, 93-99.	5.7	4

#	ARTICLE	IF	CITATIONS
271	Virtual Water as a Metric for Institutional Sustainability. Sustainability, 2017, 10, 237-245.	0.7	4
272	Mapping Areas of the Southern Ocean Where Productivity Likely Depends on Dust-Delivered Iron. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030926.	3.3	4
273	Soil Moisture Dynamics in Water-Limited Ecosystems. , 2019, , 31-48.		4
274	Ecosystem dynamics and aeolian sediment transport in the southern Kalahari. African Journal of Ecology, 2020, 58, 337-344.	0.9	3
275	Ecohydrology of Arid and Semiarid Ecosystems: An Introduction. , 2019, , 1-27.		3
276	Correction for Lawrence <i>et al.</i> , Land Change Science Special Feature: Ecological feedbacks following deforestation create the potential for a catastrophic ecosystem shift in tropical dry forest. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 3169-3169.	7.1	2
277	Tree island pattern formation in the Florida Everglades. Ecological Complexity, 2016, 26, 37-44.	2.9	2
278	Age distribution dynamics with stochastic jumps in mortality. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170451.	2.1	2
279	The competitive advantage of C4 grasses over CAM plants under increased rainfall variability. Plant and Soil, 2019, 442, 483-495.	3.7	2
280	Microclimate feedbacks sustain power law clustering of encroaching coastal woody vegetation. Communications Biology, 2021, 4, 745.	4.4	2
281	Ecohydrological Controls on the Deposition of Non-rainfall Water, N, and P to Dryland Ecosystems. , 2019, , 121-137.		2
282	Reply to Comment on "Water footprint of marine protein consumption" aquaculture's link to freshwater. Environmental Research Letters, 2014, 9, 109002.	5.2	1
283	Impact of feedbacks on Chihuahuan desert grasslands: Transience and metastability. Journal of Geophysical Research, 2009, 114, .	3.3	1
284	Sustaining Water Resources. , 2020, , 149-163.		1
285	Evaluation of dust production efficiencies in sandy sediments. Earth Surface Processes and Landforms, 2022, 47, 1229-1237.	2.5	1
286	Non-linear Shift from Grassland to Shrubland in Temperate Barrier Islands. Bulletin of the Ecological Society of America, 2018, 99, e01421.	0.2	0
287	Thank You to Our Peer Reviewers for 2019. Reviews of Geophysics, 2020, 58, no.	23.0	0
288	Thank You to Our Peer Reviewers for 2020. Reviews of Geophysics, 2021, 59, e2021RG000741.	23.0	0

#	ARTICLE	IF	CITATIONS
289	The Globalisation of Food and Water: The Italian Case. , 2015, , 145-158.		0
290	Modeling of Phosphorus Dynamics in Dryland Ecosystems. , 2019, , 309-333.		0
291	Thank You to Our 2021 Peer Reviewers. Reviews of Geophysics, 2022, 60, .	23.0	0