

# Oswaldo E Sala

## List of Publications by Year in descending order

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Version: 2024-02-01

122  
papers

18,074  
citations

20817

60  
h-index

19190

118  
g-index

124  
all docs

124  
docs citations

124  
times ranked

19374  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ecological maturity and stability of nematode communities in response to precipitation manipulations in grasslands. <i>Applied Soil Ecology</i> , 2022, 170, 104263.	4.3	4
2	Precipitation effects on nematode diversity and carbon footprint across grasslands. <i>Global Change Biology</i> , 2022, 28, 2124-2132.	9.5	11
3	Woody plant encroachment: Precipitation, herbivory, and grass competition interact to affect shrub recruitment. <i>Ecological Applications</i> , 2022, 32, e2536.	3.8	10
4	Open access is a misnomer. <i>Frontiers in Ecology and the Environment</i> , 2022, 20, 71-71.	4.0	1
5	Expanding the Pulse-Reserve Paradigm to Microorganisms on the Basis of Differential Reserve Management Strategies. <i>BioScience</i> , 2022, 72, 638-650.	4.9	3
6	Temporal Effects of Monsoon Rainfall Pulses on Plant Available Nitrogen in a Chihuahuan Desert Grassland. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	3.0	10
7	Precipitation versus temperature as phenology controls in drylands. <i>Ecology</i> , 2022, 103, .	3.2	17
8	Connectivity: insights from the U.S. Long Term Ecological Research Network. <i>Ecosphere</i> , 2021, 12, e03432.	2.2	4
9	Why Coordinated Distributed Experiments Should Go Global. <i>BioScience</i> , 2021, 71, 918-927.	4.9	12
10	Plant Species Richness in Multiyear Wet and Dry Periods in the Chihuahuan Desert. <i>Climate</i> , 2021, 9, 130.	2.8	8
11	Leveraging the anthropause. <i>Frontiers in Ecology and the Environment</i> , 2021, 19, 315-315.	4.0	1
12	Body size structure of soil fauna along geographic and temporal gradients of precipitation in grasslands. <i>Soil Biology and Biochemistry</i> , 2020, 140, 107638.	8.8	28
13	Traversing the Wasteland: A Framework for Assessing Ecological Threats to Drylands. <i>BioScience</i> , 2020, 70, 35-47.	4.9	74
14	Sensitivity of primary production to precipitation across the United States. <i>Ecology Letters</i> , 2020, 23, 527-536.	6.4	109
15	Ecto- and endoparasitic nematodes respond differently across sites to changes in precipitation. <i>Oecologia</i> , 2020, 193, 761-771.	2.0	14
16	Root herbivory controls the effects of water availability on the partitioning between above- and below-ground grass biomass. <i>Functional Ecology</i> , 2020, 34, 2403-2410.	3.6	17
17	Global patterns and climatic controls of belowground net carbon fixation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 20038-20043.	7.1	61
18	Woody Plant Encroachment has a Larger Impact than Climate Change on Dryland Water Budgets. <i>Scientific Reports</i> , 2020, 10, 8112.	3.3	31

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19	Global change effects on plant communities are magnified by time and the number of global change factors imposed. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 17867-17873.	7.1	141
20	The sustainability publication gap and its implications. <i>Current Opinion in Environmental Sustainability</i> , 2019, 39, 39-43.	6.3	1
21	A Concept Map of Evolutionary Biology to Promote Meaningful Learning in Biology. <i>American Biology Teacher</i> , 2019, 81, 79-87.	0.2	10
22	Drought suppresses soil predators and promotes root herbivores in mesic, but not in xeric grasslands. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 12883-12888.	7.1	57
23	Changes in belowground biodiversity during ecosystem development. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6891-6896.	7.1	151
24	Foundations and Frontiers of Ecosystem Science: Legacy of a Classic Paper (Odum 1969). <i>Ecosystems</i> , 2019, 22, 1160-1172.	3.4	13
25	Effect of interannual precipitation variability on dryland productivity: A global synthesis. <i>Global Change Biology</i> , 2019, 25, 269-276.	9.5	126
26	Regional grassland productivity responses to precipitation during multiyear above- and below-average rainfall periods. <i>Global Change Biology</i> , 2018, 24, 1935-1951.	9.5	71
27	Groundwater recharge in desert playas: current rates and future effects of climate change. <i>Environmental Research Letters</i> , 2018, 13, 014025.	5.2	30
28	An Integrated View of Complex Landscapes: A Big Data-Model Integration Approach to Transdisciplinary Science. <i>BioScience</i> , 2018, 68, 653-669.	4.9	38
29	The Interactive Role of Wind and Water in Functioning of Drylands: What Does the Future Hold?. <i>BioScience</i> , 2018, 68, 670-677.	4.9	42
30	Playa Wetlands Effects on Dryland Biogeochemistry: Space and Time Interactions. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 1879-1887.	3.0	3
31	Nematode exclusion and recovery in experimental soil microcosms. <i>Soil Biology and Biochemistry</i> , 2017, 108, 78-83.	8.8	17
32	Asynchrony among local communities stabilises ecosystem function of metacommunities. <i>Ecology Letters</i> , 2017, 20, 1534-1545.	6.4	136
33	Global change drivers of ecosystem functioning modulated by natural variability and saturating responses. <i>Global Change Biology</i> , 2017, 23, 503-511.	9.5	25
34	Pushing precipitation to the extremes in distributed experiments: recommendations for simulating wet and dry years. <i>Global Change Biology</i> , 2017, 23, 1774-1782.	9.5	132
35	Rangeland Ecosystem Services: Nature's Supply and Humans' Demand. <i>Springer Series on Environmental Management</i> , 2017, , 467-489.	0.3	43
36	Few multiyear precipitation reduction experiments find a shift in the productivity-precipitation relationship. <i>Global Change Biology</i> , 2016, 22, 2570-2581.	9.5	105

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37	Biophysical controls over concentration and depth distribution of soil organic carbon and nitrogen in desert playas. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 3019-3029.	3.0	12
38	Peer review report 1 on "Drought manipulation and its direct and legacy effects on productivity of a monodominant and mixed-species semi-arid grassland". <i>Agricultural and Forest Meteorology</i> , 2016, 217, 250.	4.8	0
39	How Scientists Can Help End the Land-Use Conflict. <i>BioScience</i> , 2016, 66, 915-915.	4.9	1
40	Enhanced interannual precipitation variability increases plant functional diversity that in turn ameliorates negative impact on productivity. <i>Ecology Letters</i> , 2015, 18, 1293-1300.	6.4	109
41	Rangeland ecosystem services: shifting focus from supply to reconciling supply and demand. <i>Frontiers in Ecology and the Environment</i> , 2015, 13, 44-51.	4.0	139
42	Characterizing differences in precipitation regimes of extreme wet and dry years: implications for climate change experiments. <i>Global Change Biology</i> , 2015, 21, 2624-2633.	9.5	233
43	Responses of a desert nematode community to changes in water availability. <i>Ecosphere</i> , 2015, 6, 1-15.	2.2	47
44	Legacy effects in linked ecological "soil" geomorphic systems of drylands. <i>Frontiers in Ecology and the Environment</i> , 2015, 13, 13-19.	4.0	92
45	Beyond desertification: new paradigms for dryland landscapes. <i>Frontiers in Ecology and the Environment</i> , 2015, 13, 4-12.	4.0	60
46	Enhanced precipitation variability effects on water losses and ecosystem functioning: differential response of arid and mesic regions. <i>Climatic Change</i> , 2015, 131, 213-227.	3.6	62
47	Enhanced precipitation variability decreases grass- and increases shrub-productivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12735-12740.	7.1	212
48	Effect of woody-plant encroachment on livestock production in North and South America. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12948-12953.	7.1	145
49	Grasses have larger response than shrubs to increased nitrogen availability: A fertilization experiment in the Patagonian steppe. <i>Journal of Arid Environments</i> , 2014, 102, 17-20.	2.4	18
50	Interactions among resource partitioning, sampling effect, and facilitation on the biodiversity effect: a modeling approach. <i>Oecologia</i> , 2014, 174, 559-566.	2.0	11
51	Differential sensitivities of grassland structural components to changes in precipitation mediate productivity response in a desert ecosystem. <i>Functional Ecology</i> , 2014, 28, 1292-1298.	3.6	54
52	Climate change will increase savannas at the expense of forests and treeless vegetation in tropical and subtropical Americas. <i>Journal of Ecology</i> , 2014, 102, 1363-1373.	4.0	107
53	Grass "woodland transitions: determinants and consequences for ecosystem functioning and provisioning of services. <i>Journal of Ecology</i> , 2014, 102, 1357-1362.	4.0	77
54	Soil animal responses to moisture availability are largely scale, not ecosystem dependent: insight from a cross-site study. <i>Global Change Biology</i> , 2014, 20, 2631-2643.	9.5	75

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55	Land degradation and climate change: a sin of omission?. <i>Frontiers in Ecology and the Environment</i> , 2013, 11, 283-283.	4.0	18
56	Preference for different inorganic nitrogen forms among plant functional types and species of the Patagonian steppe. <i>Oecologia</i> , 2013, 173, 1075-1081.	2.0	41
57	Precipitation legacies in desert grassland primary production occur through previous year tiller density. <i>Ecology</i> , 2013, 94, 435-443.	3.2	169
58	Water controls on nitrogen transformations and stocks in an arid ecosystem. <i>Ecosphere</i> , 2013, 4, 1-17.	2.2	67
59	Automated rainfall manipulation system: a reliable and inexpensive tool for ecologists. <i>Ecosphere</i> , 2013, 4, 1-10.	2.2	49
60	Effects of plant species traits on ecosystem processes: experiments in the Patagonian steppe. <i>Ecology</i> , 2012, 93, 227-234.	3.2	15
61	Legacies of precipitation fluctuations on primary production: theory and data synthesis. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2012, 367, 3135-3144.	4.0	471
62	Managed Relocation: Integrating the Scientific, Regulatory, and Ethical Challenges. <i>BioScience</i> , 2012, 62, 732-743.	4.9	212
63	Response of dominant grass and shrub species to water manipulation: an ecophysiological basis for shrub invasion in a Chihuahuan Desert Grassland. <i>Oecologia</i> , 2012, 169, 373-383.	2.0	79
64	Directional climate change and potential reversal of desertification in arid and semiarid ecosystems. <i>Global Change Biology</i> , 2012, 18, 151-163.	9.5	140
65	Understory bamboo flowering provides a very narrow light window of opportunity for canopy-tree recruitment in a neotropical forest of Misiones, Argentina. <i>Forest Ecology and Management</i> , 2011, 262, 1360-1369.	3.2	62
66	Size of Precipitation Pulses Controls Nitrogen Transformation and Losses in an Arid Patagonian Ecosystem. <i>Ecosystems</i> , 2010, 13, 575-585.	3.4	77
67	The Origins of C <sub>4</sub> Grasslands: Integrating Evolutionary and Ecosystem Science. <i>Science</i> , 2010, 328, 587-591.	12.6	899
68	Now is the Time for Action: Transitions and Tipping Points in Complex Environmental Systems. <i>Environment</i> , 2010, 52, 38-45.	1.4	20
69	Sheep Grazing Decreases Organic Carbon and Nitrogen Pools in the Patagonian Steppe: Combination of Direct and Indirect Effects. <i>Ecosystems</i> , 2009, 12, 686-697.	3.4	98
70	Solar UVB and warming affect decomposition and earthworms in a fen ecosystem in Tierra del Fuego, Argentina. <i>Global Change Biology</i> , 2009, 15, 2493-2502.	9.5	19
71	Ecological consequences of a massive flowering event of bamboo ( <i>Chusquea culeou</i> ) in a temperate forest of Patagonia, Argentina. <i>Journal of Vegetation Science</i> , 2009, 20, 424-432.	2.2	46
72	Multidimensional evaluation of managed relocation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 9721-9724.	7.1	339

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73	Structural heterogeneity and productivity of a tall fescue pasture grazed rotationally by cattle at four stocking densities. <i>Grassland Science</i> , 2008, 54, 9-16.	1.1	10
74	Higher effect of plant species diversity on productivity in natural than artificial ecosystems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 6087-6090.	7.1	123
75	Climate Change Impacts on South American Rangelands. <i>Rangelands</i> , 2008, 30, 34-39.	1.9	21
76	Cascading events in linked ecological and socioeconomic systems. <i>Frontiers in Ecology and the Environment</i> , 2007, 5, 221-224.	4.0	42
77	Bridging historical and ecological approaches in biogeography. <i>Australian Systematic Botany</i> , 2006, 19, 1.	0.9	35
78	HABITAT LOSS, TROPHIC COLLAPSE, AND THE DECLINE OF ECOSYSTEM SERVICES. <i>Ecology</i> , 2006, 87, 1915-1924.	3.2	458
79	Differential Controls of Water Input on Litter Decomposition and Nitrogen Dynamics in the Patagonian Steppe. <i>Ecosystems</i> , 2006, 9, 128-141.	3.4	137
80	Inhibition of Nitrification Alters Carbon Turnover in the Patagonian Steppe. <i>Ecosystems</i> , 2006, 9, 1257-1265.	3.4	43
81	VEGETATION STRUCTURE CONSTRAINS PRIMARY PRODUCTION RESPONSE TO WATER AVAILABILITY IN THE PATAGONIAN STEPPE. <i>Ecology</i> , 2006, 87, 952-962.	3.2	213
82	Determinants of Biodiversity Change: Ecological Tools for Building Scenarios1. <i>Ecology</i> , 2006, 87, 1875-1876.	3.2	5
83	VEGETATION STRUCTURE CONSTRAINS PRIMARY PRODUCTION RESPONSE TO WATER AVAILABILITY IN THE PATAGONIAN STEPPE. , 2006, 87, 952.		1
84	Direct and indirect effects of solar ultraviolet-B radiation on long-term decomposition. <i>Global Change Biology</i> , 2005, 11, 051006062331002-???	9.5	22
85	Are Existing Global Scenarios Consistent with Ecological Feedbacks?. <i>Ecosystems</i> , 2005, 8, 143-152.	3.4	40
86	Aggregate measures of ecosystem services: can we take the pulse of nature?. <i>Frontiers in Ecology and the Environment</i> , 2005, 3, 56-59.	4.0	34
87	Functional traits of graminoids in semi-arid steppes: a test of grazing histories. <i>Journal of Applied Ecology</i> , 2004, 41, 653-663.	4.0	145
88	Convergence across biomes to a common rain-use efficiency. <i>Nature</i> , 2004, 429, 651-654.	27.8	968
89	Growth responses to ultraviolet-B radiation of two <i>Carex</i> species dominating an Argentinian fen ecosystem. <i>Basic and Applied Ecology</i> , 2004, 5, 153-162.	2.7	10
90	Hierarchy of responses to resource pulses in arid and semi-arid ecosystems. <i>Oecologia</i> , 2004, 141, 211-220.	2.0	772

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91	Reduction of solar UV-B mediates changes in the Sphagnum capitulum microenvironment and the peatland microfungal community. <i>Oecologia</i> , 2004, 140, 480-490.	2.0	36
92	Thresholds, memory, and seasonality: understanding pulse dynamics in arid/semi-arid ecosystems. <i>Oecologia</i> , 2004, 141, 191-193.	2.0	309
93	Solar UV-B decreases decomposition in herbaceous plant litter in Tierra del Fuego, Argentina: potential role of an altered decomposer community. <i>Global Change Biology</i> , 2003, 9, 1465-1474.	9.5	99
94	Six years of solar UV-B manipulations affect growth of Sphagnum and vascular plants in a Tierra del Fuego peatland. <i>New Phytologist</i> , 2003, 160, 379-389.	7.3	91
95	Controls on nitrification in a water-limited ecosystem: experimental inhibition of ammonia-oxidising bacteria in the Patagonian steppe. <i>Soil Biology and Biochemistry</i> , 2003, 35, 1609-1613.	8.8	22
96	PATTERNS AND CONTROLS OF PRIMARY PRODUCTION IN THE PATAGONIAN STEPPE: A REMOTE SENSING APPROACH*. <i>Ecology</i> , 2002, 83, 307-319.	3.2	198
97	A rainout shelter design for intercepting different amounts of rainfall. <i>Oecologia</i> , 2002, 133, 95-101.	2.0	328
98	Granivory rates by rodents, insects, and birds at different microsites in the Patagonian steppe. <i>Ecography</i> , 2002, 25, 417-427.	4.5	22
99	Carbon and nitrogen dynamics across a natural precipitation gradient in Patagonia, Argentina. <i>Journal of Vegetation Science</i> , 2002, 13, 351-360.	2.2	132
100	Ecological Forecasts: An Emerging Imperative. <i>Science</i> , 2001, 293, 657-660.	12.6	774
101	Current Distribution of Ecosystem Functional Types in Temperate South America. <i>Ecosystems</i> , 2001, 4, 683-698.	3.4	135
102	Responses to solar ultraviolet-B radiation in a shrub-dominated natural ecosystem of Tierra del Fuego (southern Argentina). <i>Global Change Biology</i> , 2001, 7, 467-478.	9.5	61
103	Impacts of solar ultraviolet-B radiation on terrestrial ecosystems of Tierra del Fuego (southern) Tj ETQq1 1 0.784314 rgBT /Overlock 1 3.85 140	3.85	140
104	Inter-annual variation in primary production of a semi-arid grassland related to previous year production. <i>Journal of Vegetation Science</i> , 2001, 12, 137-142.	2.2	163
105	Price put on biodiversity. <i>Nature</i> , 2001, 412, 34-36.	27.8	37
106	Consequences of changing biodiversity. <i>Nature</i> , 2000, 405, 234-242.	27.8	3,209
107	Effects of Global Changes on Above- and Belowground Biodiversity in Terrestrial Ecosystems: Implications for Ecosystem Functioning. <i>BioScience</i> , 2000, 50, 1089.	4.9	165
108	Methods of Estimating Aboveground Net Primary Productivity. , 2000, , 31-43.		92

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109	Grassland Precipitation-Use Efficiency Varies Across a Resource Gradient. <i>Ecosystems</i> , 1999, 2, 64-68.	3.4	264
110	Patch structure, dynamics and implications for the functioning of arid ecosystems. <i>Trends in Ecology and Evolution</i> , 1999, 14, 273-277.	8.7	579
111	Ecosystem Consequences of Changing Biodiversity. <i>BioScience</i> , 1998, 48, 45-52.	4.9	319
112	FUNCTIONAL AND STRUCTURAL CONVERGENCE OF TEMPERATE GRASSLAND AND SHRUBLAND ECOSYSTEMS. , 1998, 8, 194-206.		131
113	SEED DISTRIBUTION CONSTRAINS THE DYNAMICS OF THE PATAGONIAN STEPPE. <i>Ecology</i> , 1997, 78, 93-100.	3.2	150
114	Biotic Control over the Functioning of Ecosystems. <i>Science</i> , 1997, 277, 500-504.	12.6	948
115	Ecosystem responses to changes in plant functional type composition: An example from the Patagonian steppe. <i>Journal of Vegetation Science</i> , 1996, 7, 381-390.	2.2	146
116	Water Losses in the Patagonian Steppe: A Modelling Approach. <i>Ecology</i> , 1995, 76, 510-520.	3.2	115
117	Patch structure and dynamics in a Patagonian arid steppe. <i>Plant Ecology</i> , 1994, 111, 127-135.	1.2	101
118	Competition, Facilitation, Seed Distribution and the Origin of Patches in a Patagonian Steppe. <i>Oikos</i> , 1994, 70, 26.	2.7	189
119	Plant functional types and ecological strategies in Patagonian forbs. <i>Journal of Vegetation Science</i> , 1993, 4, 839-846.	2.2	87
120	Achieving a sustainable biosphere: An international endeavour. <i>Trends in Ecology and Evolution</i> , 1992, 7, 324-326.	8.7	6
121	Effects of grazing on seedling establishment: the role of seed and safe-site availability. <i>Journal of Vegetation Science</i> , 1990, 1, 353-358.	2.2	96
122	Seedling responses to soil moisture amount versus pulse frequency in a successfully encroaching semi-arid shrub. <i>Oecologia</i> , 0, , .	2.0	2