William H Schlesinger

List of Publications by Citations

72 papers	15,524 citations	43 h-index	78 g-index
78 ext. papers	17,714 ext. citations	9.4 avg, IF	6.59 L-index

#	Paper	IF	Citations
72	Forecasting agriculturally driven global environmental change. *Science*, **2001**, 292, 281-4	33.3	2520
71	A blueprint for blue carbon: toward an improved understanding of the role of vegetated coastal habitats in sequestering CO2. *Frontiers in Ecology and the Environment*, **2011**, 9, 552-560	5.5	1631
70	Soil respiration and the global carbon cycle **2000**, 48, 7-20		1124
69	Natural climate solutions. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 11645-11650	11.5	921
68	On the Spatial Pattern of Soil Nutrients in Desert Ecosystems. *Ecology*, **1995**, 77, 364-374	4.6	891
67	Forest response to elevated CO2 is conserved across a broad range of productivity. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 18052-6	11.5	773
66	HUMAN ALTERATION OF THE GLOBAL NITROGEN CYCLE: SOURCES AND CONSEQUENCES **1997**, 7, 737-750		763
65	Nitrogen fixation: Anthropogenic enhancement-environmental response. *Global Biogeochemical Cycles*, **1995**, 9, 235-252	5.9	679
64	On the fate of anthropogenic nitrogen. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 203-8	11.5	653
63	Evidence from chronosequence studies for a low carbon-storage potential of soils. *Nature*, **1990**, 348, 232-234	50.4	564
62	Net primary production of a forest ecosystem with experimental CO2 enrichment. *Science*, **1999**, 284, 1177-9	33.3	403
61	Plant-soil Interactions in Deserts. *Biogeochemistry*, **1998**, 42, 169-187	3.8	402
60	Carbon sequestration in soils: some cautions amidst optimism. *Agriculture, Ecosystems and Environment*, **2000**, 82, 121-127	5.7	233
59	Primary productivity of planet earth: biological determinants and physical constraints in terrestrial and aquatic habitats. *Global Change Biology*, **2001**, 7, 849-882	11.4	220
58	Centennial-scale analysis of the creation and fate of reactive nitrogen in China (1910-2010). *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 2052-7	11.5	211
57	The formation of caliche in soils of the Mojave Desert, California. *Geochimica Et Cosmochimica Acta*, **1985**, 49, 57-66	5.5	188
56	Desertification alters patterns of aboveground net primary production in Chihuahuan ecosystems. *Global Change Biology*, **2002**, 8, 247-264	11.4	185

55	Effects of elevated atmospheric CO2 on fine root production and activity in an intact temperate forest ecosystem. *Global Change Biology*, **2000**, 6, 967-979	11.4	173
54	Separation of Root Respiration from Total Soil Respiration Using Carbon-13 Labeling during Free-Air Carbon Dioxide Enrichment (FACE). *Soil Science Society of America Journal*, **1999**, 63, 1429-1435	2.5	169
53	Natural climate solutions for the United States. *Science Advances*, **2018**, 4, eaat1869	14.3	166
52	Effects of agriculture upon the air quality and climate: research, policy, and regulations. *Environmental Science & Technology*, **2009**, 43, 4234-40	10.3	164
51	Transport of organic carbon in the world rivers. *Tellus*, **1981**, 33, 172-187		145
50	Nitrogen loss from deserts in the southwestern United States. *Biogeochemistry*, **1990**, 10, 67	3.8	138
49	The nitrogen budget of a pine forest under free air CO enrichment. *Oecologia*, **2002**, 132, 567-578	2.9	137
48	Nutrient losses in runoff from grassland and shrubland habitats in Southern New Mexico: I. rainfall simulation experiments. *Biogeochemistry*, **1999**, 45, 21-34	3.8	122
47	Is nitrogen the next carbon?. *Earth's Future*, **2017**, 5, 894-904	7.9	110
46	Factors Controlling Denitrification in a Chihuahuan Desert Ecosystem. *Soil Science Society of America Journal*, **1991**, 55, 1694-1701	2.5	108
45	Plant regulation of soil nutrient distribution in the northern Chihuahuan Desert. *Plant Ecology*, **1999**, 145, 11-25	1.7	104
44	Biological and geochemical controls on phosphorus fractions in semiarid soils. *Biogeochemistry*, **2001**, 52, 155-172	3.8	101
43	Global biogeochemical cycle of vanadium. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E11092-E11100	11.5	99
42	CHANGES IN SOIL PHOSPHORUS DURING 200 YEARS OF SHIFTING CULTIVATION IN INDONESIA. *Ecology*, **2001**, 82, 2769-2780	4.6	96
41	Nutrient losses in runoff from grasslandand shrubland habitats in southern New Mexico: II. Field plots. *Biogeochemistry*, **2000**, 49, 69-86	3.8	95
40	Plant response to variations in nitrogen availability in a desert shrubland community. *Biogeochemistry*, **1986**, 2, 29-37	3.8	85
39	The biogeochemistry of phosphorus after the first century of soil development on Rakata Island, Krakatau, Indonesia. *Biogeochemistry*, **1998**, 40, 37-55	3.8	77
38	Biomass, Production, and Changes in the Availability of Light, Water, and Nutrients During the Development of Pure Stands of the Chaparral Shrub, Ceanothus Megacarpus, After Fire. *Ecology*, **1980**, 61, 781-789	4.6	66

37	Global change: The nitrogen cycle and rivers. *Water Resources Research*, **2006**, 42,	5.4	63
36	A world of co-benefits: Solving the global nitrogen challenge. *Earth's Future*, **2019**, 7, 1-8	7.9	61
35	Environmental controls on nitric oxide emission from northern Chihuahuan desert soils. *Biogeochemistry*, **2000**, 50, 279-300	3.8	61
34	Reactive nitrogen emissions from crop and livestock farming in India. *Atmospheric Environment*, **2012**, 47, 92-103	5.3	58
33	BIOMASS, PRODUCTION, AND LITTERFALL IN THE COASTAL SAGE SCRUB OF SOUTHERN CALIFORNIA. *American Journal of Botany*, **1981**, 68, 24-33	2.7	50
32	A comparison of fractionation methods for forms of phosphorus in soils. *Biogeochemistry*, **1999**, 47, 25-38	3.8	43
31	Impacts of human alteration of the nitrogen cycle in the US on radiative forcing. *Biogeochemistry*, **2013**, 114, 25-40	3.8	41
30	Edaphic limitations to growth and photosynthesis in Sierran and Great Basin vegetation. *Oecologia*, **1989**, 78, 184-190	2.9	37
29	Effects of Overland Flow on Plant Water Relations, Erosion, and Soil Water Percolation on a Mojave Desert Landscape. *Soil Science Society of America Journal*, **1989**, 53, 1567-1572	2.5	35
28	Nutrient losses in runoff from grassland and shrubland habitats in Southern New Mexico: I. rainfall simulation experiments. *Biogeochemistry*, **1999**, 45, 21-34	3.8	32
27	BIOMASS, PRODUCTION, AND LITTERFALL IN THE COASTAL SAGE SCRUB OF SOUTHERN CALIFORNIA **1981**, 68, 24		32
26	Global change ecology. *Trends in Ecology and Evolution*, **2006**, 21, 348-51	10.9	29
25	FOREST LITTER PRODUCTION, CHEMISTRY, AND DECOMPOSITION FOLLOWING TWO YEARS OF FREE-AIR CO2 ENRICHMENT. *Ecology*, **2001**, 82, 470-484	4.6	28
24	Global boron cycle in the Anthropocene. *Global Biogeochemical Cycles*, **2016**, 30, 219-230	5.9	26
23	Archival photographs show no climate-induced changes in woody vegetation in the Sudan, 1943–1994*. *Global Change Biology*, **1996**, 2, 137-141	11.4	25
22	BETTER LIVING THROUGH BIOGEOCHEMISTRY. *Ecology*, **2004**, 85, 2402-2407	4.6	21
21	Phenology, productivity, and nutrient accumulation in the post-fire chaparral shrub Lotus scoparius. *Oecologia*, **1981**, 50, 217-224	2.9	17
20	Continent-wide tree fecundity driven by indirect climate effects. *Nature Communications*, **2021**, 12, 1242	17.4	17

19	Opinion: Reconsidering bioenergy given the urgency of climate protection. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 9642-9645	11.5	15
18	Abiotic hydrogen (H) sources and sinks near the Mid-Ocean Ridge (MOR) with implications for the subseafloor biosphere. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 13283-13293	11.5	13
17	Ion and Sulfate-Isotope Ratios in Arid Soils Subject to Wind Erosion in the Southwestern USA. *Soil Science Society of America Journal*, **1988**, 52, 54-58	2.5	12
16	Characterization of the Global Sources of Atmospheric Ammonia from Agricultural Soils. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031684	4.4	12
15	Carbon stores in vegetation. *Nature*, **1992**, 357, 447-448	50.4	10
14	HUMAN ALTERATION OF THE GLOBAL NITROGEN CYCLE: SOURCES AND CONSEQUENCES **1997**, 7, 737		9
13	Satellite Measurements of Albedo and Radiant Temperature from Semi-Desert Grassland along the Arizona/Sonora Border. *Climatic Change*, **2001**, 48, 417-425	4.5	7
12	Global Biogeochemical Cycle of Fluorine. *Global Biogeochemical Cycles*, **2020**, 34, e2020GB006722	5.9	7
11	Some thoughts on the biogeochemical cycling of potassium in terrestrial ecosystems. *Biogeochemistry*, **2021**, 154, 427-432	3.8	7
10	North American tree migration paced by climate in the West, lagging in the East.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	6
9	Global emissions of NH, NO, and NO from biomass burning and the impact of climate change. *Journal of the Air and Waste Management Association*, **2021**, 71, 102-114	2.4	4
8	CHANGES IN SOIL PHOSPHORUS DURING 200 YEARS OF SHIFTING CULTIVATION IN INDONESIA **2001**, 82, 2769		2
7	The Global Cycles of Nitrogen, Phosphorus and Potassium **2020**, 483-508		2
6	Limits to reproduction and seed size-number trade-offs that shape forest dominance and future recovery.. *Nature Communications*, **2022**, 13, 2381	17.4	2
5	Biogeochemical constraints on climate change mitigation through regenerative farming. *Biogeochemistry*,	3.8	2
4	The Atmosphere **2020**, 51-97		1
3	Global Biogeochemical Cycle of Lithium. *Global Biogeochemical Cycles*, **2021**, 35, e2021GB006999	5.9	1
2	Reply to Selin: Human impacts on the atmospheric burden of trace metals. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E2668	11.5	

1 The Oceans **2020**, 361-429