Ann Carla Staver

List of Publications by Year
in descending order

62	4,407	172457 29	138484 58
papers	citations	h-index	g-index

67	67	67	5115
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Global Extent and Determinants of Savanna and Forest as Alternative Biome States. Science, 2011, 334, 230-232.	12.6	1,039
2	Tree cover in sub-Saharan Africa: Rainfall and fire constrain forest and savanna as alternative stable states. Ecology, 2011, 92, 1063-1072.	3.2	342
3	Fire frequency drives decadal changes in soil carbon and nitrogen and ecosystem productivity. Nature, 2018, 553, 194-198.	27.8	325
4	Evolution of human-driven fire regimes in Africa. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 847-852.	7.1	293
5	Browsing and fire interact to suppress tree density in an African savanna. Ecological Applications, 2009, 19, 1909-1919.	3.8	234
6	Comment on â€œThe global tree restoration potentialâ€• Science, 2019, 366, .	12.6	185
7	Is there a â€˜browse trapâ€™? Dynamics of herbivore impacts on trees and grasses in an African savanna. Journal of Ecology, 2014, 102, 595-602.	4.0	139
8	Integrating Theoretical Climate and Fire Effects on Savanna and Forest Systems. American Naturalist, 2012, 180, 211-224.	2.1	126
9	Forest extent and deforestation in tropical Africa since 1900. Nature Ecology and Evolution, 2018, 2, 26-33.	7.8	97
10	Enhanced activity of soil nutrientâ€•releasing enzymes after plant invasion: a metaâ€•analysis. Ecology, 2019, 100, e02830.	3.2	89
11	Fire alters ecosystem carbon and nutrients but not plant nutrient stoichiometry or composition in tropical savanna. Ecology, 2015, 96, 1275-1285.	3.2	83
12	Topâ€•down determinants of niche structure and adaptation among African Acacias. Ecology Letters, 2012, 15, 673-679.	6.4	80
13	Simply the best: the transition of savanna saplings to trees. Oikos, 2011, 120, 1448-1451.	2.7	79
14	Fire prevents woody encroachment only at higherâ€•than†historical frequencies in a South African savanna. Journal of Applied Ecology, 2017, 54, 955-962.	4.0	68
15	Soils and fire jointly determine vegetation structure in an African savanna. New Phytologist, 2017, 216, 1151-1160.	7.3	62
16	Tree cover in sub-Saharan Africa: Rainfall and fire constrain forest and savanna as alternative stable states. Ecology, 2011, 92, 1063-1072.	3.2	60
17	Droughtâ€•response strategies of savanna herbivores. Ecology and Evolution, 2019, 9, 7047-7056.	1.9	57
18	Aridity, not fire, favors nitrogenâ€•fixing plants across tropical savanna and forest biomes. Ecology, 2016, 97, 2177-2183.	3.2	55

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19	On the complex dynamics of savanna landscapes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E1336-E1345.	7.1	54
20	Analysis of stable states in global savannas: is the <scp>CART</scp> pulling the horse? â€“ a comment. Global Ecology and Biogeography, 2015, 24, 985-987.	5.8	51
21	Prediction and scale in savanna ecosystems. New Phytologist, 2018, 219, 52-57.	7.3	49
22	Rooting depth as a key woody functional trait in savannas. New Phytologist, 2020, 227, 1350-1361.	7.3	47
23	Historical and future global burned area with changing climate and human demography. One Earth, 2021, 4, 517-530.	6.8	43
24	Soil texture mediates tree responses to rainfall intensity in African savannas. New Phytologist, 2018, 219, 1363-1372.	7.3	42
25	Decadal changes in fire frequencies shift tree communities and functional traits. Nature Ecology and Evolution, 2021, 5, 504-512.	7.8	41
26	Thinner bark increases sensitivity of wetter Amazonian tropical forests to fire. Ecology Letters, 2020, 23, 99-106.	6.4	40
27	Severe drought limits trees in a semiâ€arid savanna. Ecology, 2019, 100, e02842.	3.2	37
28	Grazer movements exacerbate grass declines during drought in an African savanna. Journal of Ecology, 2019, 107, 1482-1491.	4.0	37
29	The past, present, and future of herbivore impacts on savanna vegetation. Journal of Ecology, 2021, 109, 2804-2822.	4.0	36
30	Limited increases in savanna carbon stocks over decades of fire suppression. Nature, 2022, 603, 445-449.	27.8	36
31	Spatial patterns in the global distributions of savanna and forest. Global Ecology and Biogeography, 2018, 27, 792-803.	5.8	33
32	Global response of fire activity to late Quaternary grazer extinctions. Science, 2021, 374, 1145-1148.	12.6	32
33	Rootâ€niche separation between savanna trees and grasses is greater on sandier soils. Journal of Ecology, 2020, 108, 2298-2308.	4.0	31
34	Spatial patterning among savanna trees in high-resolution, spatially extensive data. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10681-10685.	7.1	30
35	History matters: tree establishment variability and species turnover in an African savanna. Ecosphere, 2011, 2, art49.	2.2	25
36	Spatial feedbacks and the dynamics of savanna and forest. Theoretical Ecology, 2019, 12, 237-262.	1.0	20

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37	The role of browsers in maintaining the openness of savanna grazing lawns. Journal of Ecology, 2021, 109, 913-926.	4.0	20
38	A 2000-year sediment record reveals rapidly changing sedimentation and land use since the 1960s in the Upper Mara-Serengeti Ecosystem. Science of the Total Environment, 2019, 664, 148-160.	8.0	19
39	Could drought constrain woody encroachers in savannas?. African Journal of Range and Forage Science, 2020, 37, 19-29.	1.4	18
40	Seasonal dietary changes increase the abundances of savanna herbivore species. Science Advances, 2020, 6, .	10.3	16
41	Root trait variation in African savannas. Plant and Soil, 2019, 441, 555-565.	3.7	15
42	Tree clusters in savannas result from islands of soil moisture. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6679-6683.	7.1	15
43	Pathways of savannization in a mesic African savannaâ€“forest mosaic following an extreme fire. Journal of Ecology, 2022, 110, 902-915.	4.0	15
44	Interactions between Fire and Ecosystem Processes. , 2017, , 233-262.		14
45	Dispersal Increases the Resilience of Tropical Savanna and Forest Distributions. American Naturalist, 2020, 195, 833-850.	2.1	13
46	Reduced global fire activity due to human demography slows global warming by enhanced land carbon uptake. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2101186119.	7.1	12
47	Palaeo-trajectories of forest savannization in the southern Congo. Biology Letters, 2019, 15, 20190284.	2.3	11
48	Disease and fire interact to influence transitions between savannaâ€“forest ecosystems over a multiâ€decadal experiment. Ecology Letters, 2021, 24, 1007-1017.	6.4	11
49	Heterogeneity in African savanna elephant distributions and their impacts on trees in Kruger National Park, South Africa. Ecology and Evolution, 2021, 11, 5624-5634.	1.9	11
50	Determinants of tree cover in tropical floodplains. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191755.	2.6	10
51	Dispersal limitation and fire feedbacks maintain mesic savannas in Madagascar. Ecology, 2020, 101, e03177.	3.2	10
52	Probabilistic Foundations of Spatial Mean-Field Models in Ecology and Applications. SIAM Journal on Applied Dynamical Systems, 2020, 19, 2682-2719.	1.6	10
53	Unifying deterministic and stochastic ecological dynamics via a landscape-flux approach. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	10
54	Seasonal strategies differ between tropical and extratropical herbivores. Journal of Animal Ecology, 2022, 91, 681-692.	2.8	10

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55	Fire spread and the issue of community-level selection in the evolution of flammability. Journal of the Royal Society Interface, 2018, 15, 20180444.	3.4	9
56	Woody encroachment happens via intensification, not extensification, of species ranges in an African savanna. Ecological Applications, 2021, 31, e02437.	3.8	9
57	The environmental drivers of tree cover and forestâ€“savanna mosaics in Southeast Asia. Ecography, 2022, 2022, .	4.5	9
58	Quantifying the environmental limits to fire spread in grassy ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	7
59	Demographic Bottlenecks and Savanna Tree Abundance. , 2017, , 161-188.		5
60	Forecasting semiâ€arid biome shifts in the Anthropocene. New Phytologist, 2020, 226, 351-361.	7.3	5
61	Long-Term Vegetation Dynamics within the Hluhluwe iMfolozi Park. , 0, , 56-79.		3
62	Lessons from a century of evidence-based fire management in grassy ecosystems. African Journal of Range and Forage Science, 2022, 39, v-vii.	1.4	0