Jennifer K Balch

List of Publications by Year
in descending order

68 papers	10,130 citations	109264 35 h-index	95218 68 g-index
71 all docs	71 docs citations	71 times ranked	10932 citing authors

#	Article	IF	Citations
1	Fire in the Earth System. Science, 2009, 324, 481-484.	6.0	2,330
2	The Amazon basin in transition. Nature, 2012, 481, 321-328.	13.7	922
3	The human dimension of fire regimes on Earth. Journal of Biogeography, 2011, 38, 2223-2236.	1.4	845
4	Human-started wildfires expand the fire niche across the United States. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2946-2951.	3.3	607
5	Abrupt increases in Amazonian tree mortality due to droughtâ€"fire interactions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6347-6352.	3.3	576
6	Observed Impacts of Anthropogenic Climate Change on Wildfire in California. Earth's Future, 2019, 7, 892-910.	2.4	540
7	Adapt to more wildfire in western North American forests as climate changes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4582-4590.	3.3	536
8	Introduced annual grass increases regional fire activity across the arid western <scp>USA</scp> (1980â€"2009). Global Change Biology, 2013, 19, 173-183.	4.2	521
9	Fire as a fundamental ecological process: Research advances and frontiers. Journal of Ecology, 2020, 108, 2047-2069.	1.9	281
10	Understanding and managing connected extreme events. Nature Climate Change, 2020, 10, 611-621.	8.1	273
11	Fireâ€induced tree mortality in a neotropical forest: the roles of bark traits, tree size, wood density and fire behavior. Global Change Biology, 2012, 18, 630-641.	4.2	225
12	Cheatgrass (Bromus tectorum) distribution in the intermountain Western United States and its relationship to fire frequency, seasonality, and ignitions. Biological Invasions, 2018, 20, 1493-1506.	1.2	189
13	Negative fire feedback in a transitional forest of southeastern Amazonia. Global Change Biology, 2008, 14, 2276-2287.	4.2	162
14	Testing the Amazon savannization hypothesis: fire effects on invasion of a neotropical forest by native cerrado and exotic pasture grasses. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120427.	1.8	148
15	Invasive grasses increase fire occurrence and frequency across US ecoregions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23594-23599.	3.3	141
16	Droughts, Wildfires, and Forest Carbon Cycling: A Pantropical Synthesis. Annual Review of Earth and Planetary Sciences, 2019, 47, 555-581.	4.6	131
17	Size, species, and fire behavior predict tree and liana mortality from experimental burns in the Brazilian Amazon. Forest Ecology and Management, 2011, 261, 68-77.	1.4	96
18	The Susceptibility of Southeastern Amazon Forests to Fire: Insights from a Large-Scale Burn Experiment. BioScience, 2015, 65, 893-905.	2.2	89

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19	Human-Related Ignitions Increase the Number of Large Wildfires across U.S. Ecoregions. Fire, 2018, 1, 4.	1.2	82
20	Anthropogenic and lightningâ€started fires are becoming larger and more frequent over a longer season length in the U.S.A.. Global Ecology and Biogeography, 2020, 29, 668-681.	2.7	77
21	U.S. fires became larger, more frequent, and more widespread in the 2000s. Science Advances, 2022, 8, eabc0020.	4.7	75
22	Repeated fires reduce plant diversity in lowâ€elevation Wyoming big sagebrush ecosystems (1984â€“2014). Ecosphere, 2019, 10, e02591.	1.0	66
23	Warming weakens the night-time barrier to global fire. Nature, 2022, 602, 442-448.	13.7	66
24	Switching on the Big Burn of 2017. Fire, 2018, 1, 17.	1.2	65
25	Quantifying the human influence on fire ignition across the western <scp>USA</scp>. Ecological Applications, 2016, 26, 2390-2401.	1.8	60
26	Two centuries of settlement and urban development in the United States. Science Advances, 2020, 6, eaba2937.	4.7	60
27	Human-related ignitions concurrent with high winds promote large wildfires across the USA. International Journal of Wildland Fire, 2018, 27, 377.	1.0	57
28	In the Line of Fire: Consequences of Human-Ignited Wildfires to Homes in the U.S. (1992â€“2015). Fire, 2020, 3, 50.	1.2	55
29	Effects of high-frequency understorey fires on woody plant regeneration in southeastern Amazonian forests. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120157.	1.8	49
30	Pyrogeography, historical ecology, and the human dimensions of fire regimes. Journal of Biogeography, 2014, 41, 833-836.	1.4	47
31	Assessing extinction risk in the absence of species-level data: quantitative criteria for terrestrial ecosystems. Biodiversity and Conservation, 2007, 16, 183-209.	1.2	46
32	Spatiotemporal prediction of wildfire size extremes with Bayesian finite sample maxima. Ecological Applications, 2019, 29, e01898.	1.8	45
33	Prolonged tropical forest degradation due to compounding disturbances: Implications for CO₂ and H₂O fluxes. Global Change Biology, 2019, 25, 2855-2868.	4.2	43
34	Ecosystem productivity and carbon cycling in intact and annually burnt forest at the dry southern limit of the Amazon rainforest (Mato Grosso, Brazil). Plant Ecology and Diversity, 2014, 7, 25-40.	1.0	41
35	Risky Development: Increasing Exposure to Natural Hazards in the United States. Earth's Future, 2021, 9, e2020EF001795.	2.4	40
36	Interactions between repeated fire, nutrients, and insect herbivores affect the recovery of diversity in the southern Amazon. Oecologia, 2013, 172, 219-229.	0.9	35

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37	Scenarios in tropical forest degradation: carbon stock trajectories for REDD+. Carbon Balance and Management, 2017, 12, 6.	1.4	34
38	Detection rates and biases of fire observations from MODIS and agency reports in the conterminous United States. Remote Sensing of Environment, 2019, 220, 30-40.	4.6	34
39	FIRED (Fire Events Delineation): An Open, Flexible Algorithm and Database of US Fire Events Derived from the MODIS Burned Area Product (2001â€"2019). Remote Sensing, 2020, 12, 3498.	1.8	30
40	Integrating National Ecological Observatory Network (NEON) Airborne Remote Sensing and In-Situ Data for Optimal Tree Species Classification. Remote Sensing, 2020, 12, 1414.	1.8	30
41	Socialâ€Environmental Extremes: Rethinking Extraordinary Events as Outcomes of Interacting Biophysical and Social Systems. Earth's Future, 2020, 8, e2019EF001319.	2.4	29
42	A synthesis of the effects of cheatgrass invasion on US Great Basin carbon storage. Journal of Applied Ecology, 2021, 58, 327-337.	1.9	26
43	The impacts of recurrent fires on diversity of fruit-feeding butterflies in a south-eastern Amazon forest. Journal of Tropical Ecology, 2017, 33, 22-32.	0.5	25
44	All-hazards dataset mined from the US National Incident Management System 1999â€"2014. Scientific Data, 2020, 7, 64.	2.4	25
45	Impacts of fire on sources of soil <scp>CO</scp>₂ efflux in a dry Amazon rain forest. Global Change Biology, 2018, 24, 3629-3641.	4.2	23
46	Using large public datasets in the undergraduate ecology classroom. Frontiers in Ecology and the Environment, 2014, 12, 362-363.	1.9	22
47	Drought and fire change sink to source. Nature, 2014, 506, 41-42.	13.7	16
48	Harnessing the NEON data revolution to advance open environmental science with a diverse and dataâ€capable community. Ecosphere, 2021, 12, .	1.0	15
49	Effects of experimental fires on litter decomposition in a seasonally dry Amazonian forest. Journal of Tropical Ecology, 2009, 25, 657-663.	0.5	14
50	Early recruitment responses to interactions between frequent fires, nutrients, and herbivory in the southern Amazon. Oecologia, 2015, 178, 807-817.	0.9	14
51	Effects of Fire Frequency on Seed Sources and Regeneration in Southeastern Amazonia. Frontiers in Forests and Global Change, 2020, 3, .	1.0	14
52	A Computationally Efficient Method for Updating Fuel Inputs for Wildfire Behavior Models Using Sentinel Imagery and Random Forest Classification. Remote Sensing, 2022, 14, 1447.	1.8	14
53	Fires that matter: reconceptualizing fire risk to include interactions between humans and the natural environment. Environmental Research Letters, 2022, 17, 045014.	2.2	14
54	<scp>NEON</scp> is seeding the next revolution in ecology. Frontiers in Ecology and the Environment, 2020, 18, 3-3.	1.9	13

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55	The role of leaf traits in determining litter flammability of south-eastern Amazon tree species. International Journal of Wildland Fire, 2015, 24, 1143.	1.0	12
56	Global combustion: the connection between fossil fuel and biomass burning emissions (1997â€“2010). Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150177.	1.8	12
57	Best Practices for Virtual Participation in Meetings: Experiences from Synthesis Centers. Bulletin of the Ecological Society of America, 2017, 98, 57-63.	0.2	12
58	Fusion neural networks for plant classification: learning to combine RGB, hyperspectral, and lidar data. PeerJ, 2021, 9, e11790.	0.9	11
59	Comment on â€œThe Incidence of Fire in Amazonian Forests with Implications for REDDâ€• Science, 2010, 330, 1627-1627.	6.0	10
60	Fire threatens the diversity and structure of tropical gallery forests. Ecosphere, 2021, 12, e03347.	1.0	10
61	Interannual climate variability mediates changes in carbon and nitrogen pools caused by annual grass invasion in a semiarid shrubland. Global Change Biology, 2022, 28, 267-284.	4.2	10
62	The humanâ€“grassâ€“fire cycle: how people and invasives coâ€•occur to drive fire regimes. Frontiers in Ecology and the Environment, 2022, 20, 117-126.	1.9	9
63	InfluÃªncias de Atta spp. (Hymenoptera: Formicidae) na recuperaÃ§Ã£o da vegetaÃ§Ã£o pÃ³s-fogo em floresta de transiÃ§Ã£o amazÃ´nica. Acta Amazonica, 2012, 42, 81-88.	0.3	8
64	Response to Comment on â€œThe Incidence of Fire in Amazonian Forests with Implications for REDDâ€• Science, 2010, 330, 1627-1627.	6.0	7
65	Recognizing Women Leaders in Fire Science. Fire, 2018, 1, 30.	1.2	4
66	Cover-based allometric estimate of aboveground biomass of a non-native, invasive annual grass (Bromus tectorum L.) in the Great Basin, USA. Journal of Arid Environments, 2021, 193, 104582.	1.2	2
67	Modern Pyromes: Biogeographical Patterns of Fire Characteristics across the Contiguous United States. Fire, 2022, 5, 95.	1.2	2
68	Weather Research and Forecastingâ€"Fire Simulated Burned Area and Propagation Direction Sensitivity to Initiation Point Location and Time. Fire, 2022, 5, 58.	1.2	0