Mark A Cochrane

List of Publications by Year
in descending order

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98 papers	14,297 citations	70961 41 h-index	43802 91 g-index
102 all docs	102 docs citations	102 times ranked	12516 citing authors

#	Article	IF	Citations
1	Fire in the Earth System. Science, 2009, 324, 481-484.	6.0	2,330
2	Climate-induced variations in global wildfire danger from 1979 to 2013. Nature Communications, 2015, 6, 7537.	5.8	1,224
3	Large-scale impoverishment of Amazonian forests by logging and fire. Nature, 1999, 398, 505-508.	13.7	1,137
4	Fire science for rainforests. Nature, 2003, 421, 913-919.	13.7	922
5	Positive Feedbacks in the Fire Dynamic of Closed Canopy Tropical Forests. Science, 1999, 284, 1832-1835.	6.0	847
6	The human dimension of fire regimes on Earth. Journal of Biogeography, 2011, 38, 2223-2236.	1.4	845
7	ENVIRONMENT: The Future of the Brazilian Amazon. Science, 2001, 291, 438-439.	6.0	715
8	Roads, deforestation, and the mitigating effect of protected areas in the Amazon. Biological Conservation, 2014, 177, 203-209.	1.9	412
9	Fire as a large-scale edge effect in Amazonian forests. Journal of Tropical Ecology, 2002, 18, 311-325.	0.5	398
10	Human exposure and sensitivity to globally extreme wildfire events. Nature Ecology and Evolution, 2017, 1, 58.	3.4	359
11	Fire as a Recurrent Event in Tropical Forests of the Eastern Amazon: Effects on Forest Structure, Biomass, and Species Composition1. Biotropica, 1999, 31, 2-16.	0.8	313
12	Combining spectral and spatial information to map canopy damage from selective logging and forest fires. Remote Sensing of Environment, 2005, 98, 329-343.	4.6	304
13	Fire as a Recurrent Event in Tropical Forests of the Eastern Amazon: Effects on Forest Structure, Biomass, and Species Composition. Biotropica, 1999, 31, 2.	0.8	286
14	Synergistic Interactions between Habitat Fragmentation and Fire in Evergreen Tropical Forests. Conservation Biology, 2001, 15, 1515-1521.	2.4	243
15	Fire regimes of <scp>A</scp>ustralia: a pyrogeographic model system. Journal of Biogeography, 2013, 40, 1048-1058.	1.4	215
16	Climate change, human land use and future fires in the Amazon. Global Change Biology, 2009, 15, 601-612.	4.2	202
17	Ten-Year Landsat Classification of Deforestation and Forest Degradation in the Brazilian Amazon. Remote Sensing, 2013, 5, 5493-5513.	1.8	198
18	Synergisms among Fire, Land Use, and Climate Change in the Amazon. Ambio, 2008, 37, 522-527.	2.8	187

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19	Field measurements of trace gases and aerosols emitted by peat fires in Central Kalimantan, Indonesia, during the 2015 El NiÃ±o. Atmospheric Chemistry and Physics, 2016, 16, 11711-11732.	1.9	161
20	The Science of Firescapes: Achieving Fire-Resilient Communities. BioScience, 2016, 66, 130-146.	2.2	157
21	Denial of longâ€term issues with agriculture on tropical peatlands will have devastating consequences. Global Change Biology, 2017, 23, 977-982.	4.2	114
22	Forest Fires in the Brazilian Amazon. Conservation Biology, 1998, 12, 948-950.	2.4	107
23	Forest fire management, climate change, and the risk of catastrophic carbon losses. Frontiers in Ecology and the Environment, 2013, 11, 66-67.	1.9	104
24	Tropical Fire Ecology. , 2009, , .		102
25	The critical importance of considering fire in REDD+ programs. Biological Conservation, 2012, 154, 1-8.	1.9	95
26	Quantification of MODIS fire radiative power (FRP) measurement uncertainty for use in satellite-based active fire characterization and biomass burning estimation. Geophysical Research Letters, 2014, 41, 1988-1994.	1.5	94
27	Conservation Threat of Increasing Fire Frequencies in the Western Ghats, India. Conservation Biology, 2004, 18, 1553-1561.	2.4	87
28	A comparative analysis of spatial, temporal, and ecological characteristics of forest fires in seasonally dry tropical ecosystems in the Western Ghats, India. Forest Ecology and Management, 2008, 256, 607-617.	1.4	82
29	ECOLOGY: National Forests in the Amazon. Science, 2002, 297, 1478-1478.	6.0	80
30	Assessing fuel treatment effectiveness using satellite imagery and spatial statistics. Ecological Applications, 2009, 19, 1377-1384.	1.8	75
31	Chemical characterization of fine particulate matter emitted by peat fires in Central Kalimantan, Indonesia, during the 2015 El NiÃ±o. Atmospheric Chemistry and Physics, 2018, 18, 2585-2600.	1.9	66
32	In the line of Fire Understanding the Impacts of Tropical Forest Fires. Environment, 2001, 43, 28-38.	0.8	62
33	Effects of distance from canal and degradation history on peat bulk density in a degraded tropical peatland. Science of the Total Environment, 2020, 699, 134199.	3.9	56
34	Carbon emissions from deforestation and forest fragmentation in the Brazilian Amazon. Environmental Research Letters, 2011, 6, 044003.	2.2	54
35	Assessment of Tropical Forest Degradation with Canopy Fractional Cover from Landsat ETM+ and IKONOS Imagery. Earth Interactions, 2005, 9, 1-18.	0.7	53
36	Pyrogeographic models, feedbacks and the future of global fire regimes. Global Ecology and Biogeography, 2014, 23, 821-824.	2.7	51

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37	Fire Frequency and Related Land-Use and Land-Cover Changes in Indonesiaâ€™s Peatlands. Remote Sensing, 2020, 12, 5.	1.8	50
38	Measurement of inter- and intra-annual variability of landscape fire activity at a continental scale: the Australian case. Environmental Research Letters, 2016, 11, 035003.	2.2	49
39	Pyrogeography, historical ecology, and the human dimensions of fire regimes. Journal of Biogeography, 2014, 41, 833-836.	1.4	47
40	Dynamic performance assessment of protected areas. Biological Conservation, 2012, 149, 6-14.	1.9	45
41	Fire and edge effects in a fragmented tropical forest landscape in the southwestern Amazon. Forest Ecology and Management, 2017, 401, 135-146.	1.4	44
42	Manage fire regimes, not fires. Nature Geoscience, 2021, 14, 455-457.	5.4	44
43	Future changes in climatic water balance determine potential for transformational shifts in Australian fire regimes. Environmental Research Letters, 2016, 11, 065002.	2.2	43
44	Evaluation of Landsat-Based METRIC Modeling to Provide High-Spatial Resolution Evapotranspiration Estimates for Amazonian Forests. Remote Sensing, 2017, 9, 46.	1.8	42
45	FIRE IN THE BRAZILIAN AMAZON: A SPATIALLY EXPLICIT MODEL FOR POLICY IMPACT ANALYSIS*. Journal of Regional Science, 2007, 47, 541-567.	2.1	41
46	Quantifying the influence of previously burned areas on suppression effectiveness and avoided exposure: a case study of the Las Conchas Fire. International Journal of Wildland Fire, 2016, 25, 167.	1.0	40
47	Biomass consumption by surface fires across Earth's most fire prone continent. Global Change Biology, 2019, 25, 254-268.	4.2	39
48	Quantifying Responses of Dung Beetles to Fire Disturbance in Tropical Forests: The Importance of Trapping Method and Seasonality. PLoS ONE, 2011, 6, e26208.	1.1	38
49	Does inherent flammability of grass and litter fuels contribute to continental patterns of landscape fire activity?. Journal of Biogeography, 2017, 44, 1225-1238.	1.4	38
50	Wildfires in Bamboo-Dominated Amazonian Forest: Impacts on Above-Ground Biomass and Biodiversity. PLoS ONE, 2012, 7, e33373.	1.1	36
51	Priority Areas for Establishing National Forests in the Brazilian Amazon. Ecology and Society, 2002, 6, .	0.9	33
52	Biomass collapse and carbon emissions from forest fragmentation in the Brazilian Amazon. Journal of Geophysical Research, 2010, 115, .	3.3	31
53	Estimating California ecosystem carbon change using process model and land cover disturbance data: 1951â€“2000. Ecological Modelling, 2011, 222, 2333-2341.	1.2	31
54	A Multiâ€Taxa Assessment of Biodiversity Change After Single and Recurrent Wildfires in a Brazilian Amazon Forest. Biotropica, 2016, 48, 170-180.	0.8	31

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55	Fire and fire ecology: Concepts and principles. , 2009, , 25-62.		30
56	Beyond slashâ€andâ€burn: The roles of human activities, altered hydrology and fuels in peat fires in Central Kalimantan, Indonesia. Singapore Journal of Tropical Geography, 2020, 41, 190-208.	0.6	29
57	Monitoring Selective Logging in Tropical Evergreen Forests Using Landsat: Multitemporal Regional Analyses in Mato Grosso, Brazil. Earth Interactions, 2005, 9, 1-24.	0.7	28
58	Longâ€term Changes in Bird Communities after Wildfires in the Central Brazilian Amazon. Biotropica, 2013, 45, 480-488.	0.8	28
59	Evaluating accuracy of four MODIS-derived burned area products for tropical peatland and non-peatland fires. Environmental Research Letters, 2021, 16, 035015.	2.2	28
60	Fire intensity impacts on post-fire temperate coniferous forest net primary productivity. Biogeosciences, 2018, 15, 1173-1183.	1.3	27
61	Tropical forest fires and biodiversity: dung beetle community and biomass responses in a northern Brazilian Amazon forest. Journal of Insect Conservation, 2014, 18, 1097-1104.	0.8	26
62	Forest degradation promotes fire during drought in moist tropical forests of Ghana. Forest Ecology and Management, 2019, 440, 158-168.	1.4	26
63	Landsat still contributing to environmental research. Trends in Ecology and Evolution, 2008, 23, 182-183.	4.2	25
64	Prescribed burning protects endangered tropical heathlands of the Arnhem Plateau, northern Australia. Journal of Applied Ecology, 2015, 52, 980-991.	1.9	25
65	The responses of leaf litter ant communities to wildfires in the Brazilian Amazon: a multi-region assessment. Biodiversity and Conservation, 2013, 22, 513-529.	1.2	24
66	Critical land change information enhances the understanding of carbon balance in the United States. Global Change Biology, 2020, 26, 3920-3929.	4.2	24
67	Analyzing the Impacts of Frequency and Severity of Forest Fire on the Recovery of Disturbed Forest using Landsat Time Series and EO-1 Hyperion in the Southern Brazilian Amazon. Earth Interactions, 2011, 15, 1-17.	0.7	21
68	Biotic congruence in humid tropical forests: A multi-taxa examination of spatial distribution and responses to forest disturbance. Ecological Indicators, 2014, 36, 572-581.	2.6	21
69	A Decade Long, Multi-Scale Map Comparison of Fire Regime Parameters Derived from Three Publically Available Satellite-Based Fire Products: A Case Study in the Central African Republic. Remote Sensing, 2014, 6, 4061-4089.	1.8	20
70	Wildfires in Amazonia: A pilot study examining the role of farming systems, social capital, and fire contagion. Journal of Latin American Geography, 2004, 3, 81-95.	0.0	19
71	Sustainability: A Touchstone Concept for University Operations, Education, and Research. Conservation Biology, 1996, 10, 1308-1311.	2.4	18
72	A hybrid visual estimation method for the collection of ground truth fractional coverage data in a humid tropical environment. International Journal of Applied Earth Observation and Geoinformation, 2012, 18, 504-514.	1.4	17

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73	Relationships between fire danger and the daily number and daily growth of active incidents burning in the northern Rocky Mountains, USA. International Journal of Wildland Fire, 2015, 24, 900.	1.0	17
74	Dynamics of a humanâ€modified tropical peat swamp forest revealed by repeat lidar surveys. Global Change Biology, 2020, 26, 3947-3964.	4.2	17
75	A quantitative study of the proximity of satellite detected active fires to roads and rivers in the Brazilian tropical moist forest biome. International Journal of Wildland Fire, 2014, 23, 532.	1.0	16
76	Impacts of changing fire weather conditions on reconstructed trends in U.S. wildland fire activity from 1979 to 2014. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2856-2876.	1.3	16
77	Forest Fragmentation and Its Potential Implications in the Brazilian Amazon between 2001 and 2010. Open Journal of Forestry, 2012, 02, 265-271.	0.1	16
78	The Forests Are Bleeding: How Land Use Change Is Creating a New Fire Regime in the Ecuadorian Amazon. Journal of Latin American Geography, 2007, 6, 85-100.	0.0	15
79	Detection of Fire Smoke Plumes Based on Aerosol Scattering Using VIIRS Data over Global Fire-Prone Regions. Remote Sensing, 2021, 13, 196.	1.8	15
80	17. Selective Logging, Forest Fragmentation, and Fire Disturbance. , 2004, , 310-324.		15
81	Determining dynamics of spatial and temporal structures of forest edges in South Western Amazonia. Forest Ecology and Management, 2009, 258, 2547-2555.	1.4	14
82	Fire, land use, land cover dynamics, and climate change in the Brazilian Amazon. , 2009, , 389-426.		14
83	Fire in the tropics. , 2009, , 1-23.		13
84	Longâ€term, highâ€spatial resolution carbon balance monitoring of the Amazonian frontier: Predisturbance and postdisturbance carbon emissions and uptake. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 400-411.	1.3	13
85	Large wildfire driven increases in nighttime fire activity observed across CONUS from 2003â€“2020. Remote Sensing of Environment, 2022, 268, 112777.	4.6	13
86	Investigating Smoke Aerosol Emission Coefficients Using MODIS Active Fire and Aerosol Products: A Case Study in the CONUS and Indonesia. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1413-1429.	1.3	12
87	A Field Study of Tropical Peat Fire Behaviour and Associated Carbon Emissions. Fire, 2022, 5, 62.	1.2	11
88	Fire Scars on Amazonian Trees: Exploring the Cryptic Fire History of the Ilha de MaracÃ¡. Biotropica, 2010, 42, 405-409.	0.8	9
89	Forest fire regimes and their ecological effects in seasonally dry tropical ecosystems in the Western Ghats, India. , 2009, , 335-354.		8
90	Responses of leaf-litter ant communities to tropical forest wildfires vary with season. Journal of Tropical Ecology, 2012, 28, 515-518.	0.5	8

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91	Forest evapotranspiration dynamics over a fragmented forest landscape under drought in southwestern Amazonia. Agricultural and Forest Meteorology, 2021, 306, 108446.	1.9	8
92	Burning questions about ecosystems. Nature Geoscience, 2019, 12, 86-87.	5.4	6
93	Forest and Peatland Fire Dynamics in South Sumatra Province. Forest and Society, 0, , 591-603.	0.3	6
94	Why estimates of the peat burned in fires in Sumatra and Kalimantan are unreliable and why it matters. Singapore Journal of Tropical Geography, 2022, 43, 7-25.	0.6	6
95	Integrating Disparate Lidar Data at the National Scale to Assess the Relationships between Height Above Ground, Land Cover and Ecoregions. Photogrammetric Engineering and Remote Sensing, 2014, 80, 59-70.	0.3	5
96	Drainage canal impacts on smoke aerosol emissions for Indonesian peatland and non-peatland fires. Environmental Research Letters, 2021, 16, 095008.	2.2	5
97	Footprints in the Jungle: Natural Resource Industries, Infrastructure and Biodiversity Conservation EDITED BY IAN A. BOWLES AND GLENN T. PRICKETT xix + 331 pp., 18 figs., 13 tables, 24 Ã— 16 Ã— 3.5 cm, ISBN 0 19 512578 9 hardback, US$ 45.00/ GBÂ£ 35.00, Oxford, UK: Oxford University Press, 2001. Environmental Conservation, 2002, 29, 108-114.	0.7	0
98	Introduction to A.M.A. AubrÃ©villeâ€™s Article. Fire Ecology, 2013, 9, 1-2.	1.1	0