## **Christopher Carcaillet**

List of Publications by Year in descending order

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121	7,400	42 h-index	82
papers	citations		g-index
130	130	130	6619 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Climate and human influences on globalÂbiomass burning over the past twoÂmillennia. Nature Geoscience, 2008, 1, 697-702.	12.9	686
2	Changes in fire regimes since the Last Glacial Maximum: an assessment based on a global synthesis and analysis of charcoal data. Climate Dynamics, 2008, 30, 887-907.	3.8	590
3	Wildfire responses to abrupt climate change in North America. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 2519-2524.	7.1	352
4	Forest management is driving the eastern North American boreal forest outside its natural range of variability. Frontiers in Ecology and the Environment, 2009, 7, 519-524.	4.0	262
5	Change of fire frequency in the eastern Canadian boreal forests during the Holocene: does vegetation composition or climate trigger the fire regime?. Journal of Ecology, 2001, 89, 930-946.	4.0	232
6	Predictability of biomass burning in response to climate changes. Global Biogeochemical Cycles, 2012, 26, .	4.9	201
7	Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire: an expert assessment. Environmental Research Letters, 2016, 11, 034014.	5.2	199
8	Holocene biomass burning and global dynamics of the carbon cycle. Chemosphere, 2002, 49, 845-863.	8.2	198
9	Comparison of pollen-slide and sieving methods in lacustrine charcoal analyses for local and regional fire history. Holocene, 2001, $11$ , $467-476$ .	1.7	196
10	Future fire in Canada's boreal forest: paleoecology results and general circulation model - regional climate model simulations. Canadian Journal of Forest Research, 2001, 31, 854-864.	1.7	169
11	Patterns of Land-use Abandonment Control Tree-recruitment and Forest Dynamics in Mediterranean Mountains. Ecosystems, 2007, 10, 936-948.	3.4	158
12	Post-fire Mediterranean vegetation dynamics and diversity: A discussion of succession models. Forest Ecology and Management, 2008, 255, 431-439.	3.2	155
13	Are Holocene wood-charcoal fragments stratified in alpine and subalpine soils? Evidence from the Alps based on AMS 14C dates. Holocene, 2001, 11, 231-242.	1.7	144
14	Will climate change drive 21st century burn rates in Canadian boreal forest outside of its natural variability: collating global climate model experiments with sedimentary charcoal data. International Journal of Wildland Fire, 2010, 19, 1127.	2.4	141
15	Pedoanthracological contribution to the study of the evolution of the upper treeline in the Maurienne valley (North French Alps): methodology and preliminary data. Review of Palaeobotany and Palynology, 1996, 91, 399-416.	1.5	139
16	A spatially precise study of Holocene fire history, climate and human impact within the Maurienne valley, North French Alps. Journal of Ecology, 1998, 86, 384-396.	4.0	137
17	Holocene changes in seasonal precipitation highlighted by fire incidence in eastern Canada. Climate Dynamics, 2000, 16, 549-559.	3.8	114
18	Vegetation limits the impact of a warm climate on boreal wildfires. New Phytologist, 2013, 199, 1001-1011.	7.3	103

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19	Heterogeneous response of circumboreal wildfire risk to climate change since the early 1900s. Global Change Biology, 2009, 15, 2751-2769.	9.5	102
20	LONG-TERM FIRE FREQUENCY NOT LINKED TO PREHISTORIC OCCUPATIONS IN NORTHERN SWEDISH BOREAL FOREST. Ecology, 2007, 88, 465-477.	3.2	99
21	Adsorption of allelopathic compounds by wood-derived charcoal: the role of wood porosity. Plant and Soil, 2005, 272, 291-300.	3.7	91
22	Fire in managed forests of eastern Canada: Risks and options. Forest Ecology and Management, 2013, 294, 238-249.	3.2	90
23	Climatic control of the biomass-burning decline in the Americas after <scp>ad</scp> 1500. Holocene, 2013, 23, 3-13.	1.7	83
24	Tracking land-cover changes with sedimentary charcoal in the Afrotropics. Holocene, 2013, 23, 1853-1862.	1.7	77
25	Changes in landscape structure in the northwestern Alps over the last 7000 years: lessons from soil charcoal. Journal of Vegetation Science, 2000, 11, 705-714.	2.2	72
26	Fire and late-Holocene expansion of Quercus ilexand Pinus pinasteron Corsica. Journal of Vegetation Science, 1997, 8, 85-94.	2.2	68
27	Spatial variability of fire history in subalpine forests: From natural to cultural regimes. Ecoscience, 2009, 16, 1-12.	1.4	68
28	Longâ€ŧerm fire frequency variability in the eastern Canadian boreal forest: the influences of climate vs. local factors. Global Change Biology, 2009, 15, 1230-1241.	9.5	67
29	An increase in the upper tree-limit of silver fir (Abies alba Mill.) in the Alps since the mid-20th century: A land-use change phenomenon. Forest Ecology and Management, 2010, 259, 1406-1415.	3.2	67
30	Eastern boreal North American wildfire risk of the past 7000 years: A modelâ€data comparison. Geophysical Research Letters, 2010, 37, .	4.0	66
31	Putting the rise of the Inca Empire within a climatic and land management context. Climate of the Past, 2009, 5, 375-388.	3.4	65
32	A review of Late Pleistocene and Holocene biogeography of highland Mediterranean pines (Pinus type) Tj ETQq0 0	g.gBT/O	verlock 10 T
33	Études pédoanthracologiques des variations de la limite supérieure des arbres au cours de l'Holocene dans les alpes françaises. GA©ographie Physique Et Quaternaire, 0, 52, 195-208.	0.2	63
34	Resilience of the boreal forest in response to Holocene fire-frequency changes assessed by pollen diversity and population dynamics. International Journal of Wildland Fire, 2010, 19, 1026.	2.4	62
35	Review on fire effects on ectomycorrhizal symbiosis, an unachieved work for a scalding topic. Forest Ecology and Management, 2017, 391, 446-457.	3.2	56
36	Aspects taphonomiques de la stratigraphie et de la datation de charbons de bois dans les solsÂ: exemple de quelques sols des Alpes. Géographie Physique Et Quaternaire, 0, 50, 233-244.	0.2	51

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37	Holocene tree-limit and distribution of Abies alba in the inner French Alps: anthropogenic or climatic changes?. Boreas, 2005, 34, 468-476.	2.4	50
38	Comparing fire-history interpretations based on area, number and estimated volume of macroscopic charcoal in lake sediments. Quaternary Research, 2009, 72, 462-468.	1.7	49
39	Fire, Fuel Composition and Resilience Threshold in Subalpine Ecosystem. PLoS ONE, 2010, 5, e12480.	2.5	48
40	Changes in fire regime explain the Holocene rise and fall of Abies balsamea in the coniferous forests of western Québec, Canada. Holocene, 2008, 18, 693-703.	1.7	46
41	Comments on "The Full-Glacial Forests of Central and Southeastern Europe―by Willis et al Quaternary Research, 2001, 55, 385-387.	1.7	44
42	Pinus cembra L. (arolla pine), a common tree in the inner French Alps since the early Holocene and above the present tree line: a synthesis based on charcoal data from soils and travertines. Journal of Biogeography, 2005, 32, 1659-1669.	3.0	44
43	Post-glacial migration of silver fir (Abies alba Mill.) in the south-western Alps. Journal of Biogeography, 2007, 34, 876-899.	3.0	44
44	Soil evolution and subalpine ecosystem changes in the French Alps inferred from geochemical analysis of lacustrine sediments. Journal of Paleolimnology, 2010, 44, 571-587.	1.6	44
45	Bark flammability as a fire-response trait for subalpine trees. Frontiers in Plant Science, 2013, 4, 466.	3.6	44
46	Global Modern Charcoal Dataset (GMCD): A tool for exploring proxy-fire linkages and spatial patterns of biomass burning. Quaternary International, 2018, 488, 3-17.	1.5	43
47	Trees in the subalpine belt since 11 700 cal. BP: origin, expansion and alteration of the modern forest. Holocene, 2010, 20, 139-146.	1.7	42
48	Unexpected warmingâ€induced growth decline in <i>Thuja occidentalis</i> at its northern limits in North America. Journal of Biogeography, 2015, 42, 1233-1245.	3.0	39
49	The reconstruction of burned area and fire severity using charcoal from boreal lake sediments. Holocene, 2020, 30, 1400-1409.	1.7	38
50	Future fire in Canada's boreal forest: paleoecology results and general circulation model - regional climate model simulations. Canadian Journal of Forest Research, 2001, 31, 854-864.	1.7	38
51	Variability in Fire Frequency and Forest Composition in Canada's Southeastern Boreal Forest: A Challenge for Sustainable Forest Management. Ecology and Society, 1998, 2, .	0.9	38
52	Fire and soil erosion history in East Canadian boreal and temperate forests. Quaternary Science Reviews, 2006, 25, 1489-1500.	3.0	37
53	A comparison of charcoal measurements for reconstruction of Mediterranean paleo-fire frequency in the mountains of Corsica. Quaternary Research, 2013, 79, 337-349.	1.7	37
54	Soil Carbon Sequestration by Holocene Fires Inferred from Soil Charcoal in the Dry French Alps. Arctic, Antarctic, and Alpine Research, 2001, 33, 282-288.	1.1	36

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55	The Early Holocene treeline in the southern French Alps: new evidence from travertine formations. Global Ecology and Biogeography, 2003, 12, 411-419.	5.8	36
56	Distinguishing subalpine soil types using extractible Al and Fe fractions and REE geochemistry. Geoderma, 2008, 145, 107-120.	5.1	36
57	Can biochar and hydrochar stability be assessed with chemical methods?. Organic Geochemistry, 2013, 60, 40-44.	1.8	36
58	Historical range of fire frequency is not the Achilles' heel of the Corsican black pine ecosystem. Journal of Ecology, 2014, 102, 381-395.	4.0	36
59	Determination of the natural mortality age of an holm oak (Quercus ilex L.) stand in Corsica (Mediterranean Island). Acta Oecologica, 1997, 18, 519-530.	1.1	35
60	Paleofire reconstruction based on an ensembleâ€member strategy applied to sedimentary charcoal. Geophysical Research Letters, 2013, 40, 2667-2672.	4.0	33
61	Soil Carbon Sequestration by Holocene Fires Inferred from Soil Charcoal in the Dry French Alps. Arctic, Antarctic, and Alpine Research, 2001, 33, 282.	1.1	32
62	The function of surface fires in the dynamics and structure of a formerly grazed old subalpine forest. Journal of Ecology, 2009, 97, 728-741.	4.0	30
63	Fires control spatial variability of subalpine vegetation dynamics during the Holocene in the Maurienne valley (French Alps). Ecoscience, 2009, 16, 13-22.	1.4	29
64	Isotopic and anatomical signals for interpreting fire-related responses in Pinus halepensis. Trees - Structure and Function, 2014, 28, 1095-1104.	1.9	29
65	Geographic isolation and climatic variability contribute to genetic differentiation in fragmented populations of the long-lived subalpine conifer Pinus cembra L. in the western Alps. BMC Evolutionary Biology, 2019, 19, 190.	3.2	28
66	The effect of fire frequency on local cembra pine populations. Ecology, 2009, 90, 476-486.	3.2	27
67	The climate, the fuel and the land use: Longâ€ŧerm regional variability of biomass burning in boreal forests. Global Change Biology, 2018, 24, 4929-4945.	9.5	26
68	Allometric equations for biomass assessment of subalpine dwarf shrubs. Alpine Botany, 2011, 121, 129-134.	2.4	25
69	Sedimentary charcoal pattern in a karstic underground lake, Vercors massif, French Alps: implications for palaeo-fire history. Holocene, 2007, 17, 845-850.	1.7	24
70	Needle accumulation rate model-based reconstruction of palaeo-tree biomass in the western subalpine Alps. Holocene, 2012, 22, 579-587.	1.7	24
71	Local <i>versus </i> regional processes: can soil characteristics overcome climate and fire regimes by modifying vegetation trajectories?. Journal of Quaternary Science, 2012, 27, 745-756.	2.1	24
72	Black carbon yields and types in forest and cultivated sandy soils (Landes de Gascogne, France) as determined with different methods: Influence of change in land use. Organic Geochemistry, 2006, 37, 1185-1189.	1.8	23

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73	Disentangling the trajectories of alpha, beta and gamma plant diversity of North American boreal ecoregions since 15,500 years. Frontiers in Ecology and Evolution, 2014, 2, .	2.2	23
74	Long-term effects of climate and land-use change on larch budmoth outbreaks in the French Alps. Climate Research, 2014, 62, 1-14.	1.1	23
75	Fire ecology of a tree glacial refugium on a nunatak with a view on Alpine glaciers. New Phytologist, 2017, 216, 1281-1290.	7.3	22
76	Woody vegetation, fuel and fire track the melting of the Scandinavian ice-sheet before 9500 cal yr BP. Quaternary Research, 2012, 78, 540-548.	1.7	21
77	Wood anatomy of West European Betula: Quantitative descriptions and applications for routine identification in paleoecological studies. Ecoscience, 2003, 10, 370-379.	1.4	19
78	Calibration of charcoal production from trees biomass for soil charcoal analyses in subalpine ecosystems. Quaternary International, 2013, 289, 16-23.	1.5	18
79	In situ Comparison of Tree-Ring Responses to Climate and Population Genetics: The Need to Control for Local Climate and Site Variables. Frontiers in Ecology and Evolution, 2016, 4, .	2.2	18
80	Large herbivores control the invasive potential of nonnative Austrian black pine in a mixed deciduous Mediterranean forest. Canadian Journal of Forest Research, 2006, 36, 1047-1053.	1.7	17
81	Fire-scars and polymodal age-structure provide evidence of fire-events in an Aleppo pine population in southern France. Dendrochronologia, 2013, 31, 159-164.	2.2	17
82	Estimating phytolith influx in lake sediments. Quaternary Research, 2013, 80, 341-347.	1.7	17
83	Land use legacies and site variables control the understorey plant communities in Mediterranean broadleaved forests. Agriculture, Ecosystems and Environment, 2014, 189, 53-59.	5.3	17
84	Holocene fires and a herbâ€dominated understorey track wetter climates in subalpine forests. Journal of Ecology, 2010, 98, 1358-1368.	4.0	16
85	Tree cover and seasonal precipitation drive understorey flammability in alpine mountain forests. Journal of Biogeography, 2016, 43, 1869-1880.	3.0	15
86	Subalpine fires: the roles of vegetation, climate and, ultimately, land uses. Climatic Change, 2016, 135, 683-697.	3.6	15
87	Aridity and competition drive fire resistance trait covariation in mountain trees. Ecosphere, 2018, 9, e02493.	2.2	15
88	Fire-vegetation interactions during the last 11,000 years in boreal and cold temperate forests of Fennoscandia. Quaternary Science Reviews, 2020, 241, 106408.	3.0	15
89	Title is missing!. Journal of Paleolimnology, 2003, 30, 167-181.	1.6	14
90	Ancient split of major genetic lineages of European Black Pine: evidence from chloroplast DNA. Tree Genetics and Genomes, 2016, 12, 1.	1.6	14

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91	Diversity of foliar endophytic ascomycetes in the endemic Corsican pine forests. Fungal Ecology, 2018, 36, 128-140.	1.6	14
92	THE TRAVERSETTE (ITALIA) ROCKFALL: GEOMORPHOLOGICAL INDICATOR OF THE HANNIBALIC INVASION ROUTE*. Archaeometry, 2010, 52, 156-172.	1.3	13
93	Range-wide genetic structure of maritime pine predates the last glacial maximum: evidence from nuclear DNA. Hereditas, 2014, 151, 1-13.	1.4	13
94	Periglacial fires and trees in a continental setting of Central <scp>C</scp> anada, <scp>U</scp> pper <scp>P</scp> leistocene. Geobiology, 2014, 12, 109-118.	2.4	13
95	Higher potential fire intensity at the dry range margins of European mountain trees. Journal of Biogeography, 2018, 45, 2003-2015.	3.0	13
96	Resistance of mixed subalpine forest to fire frequency changes: the ecological function of dwarf pine (Pinus mugo ssp. mugo). Quaternary Science Reviews, 2014, 90, 60-68.	3.0	12
97	Effects of vegetation zones and climatic changes on fire-induced atmospheric carbon emissions: a model based on paleodata. International Journal of Wildland Fire, 2010, 19, 1015.	2.4	11
98	Post-fire dynamics and spatial heterogeneity of woody debris associated with <i>Pinus halepensis</i> in an oak-pine Mediterranean ecosystem. Ecoscience, 2012, 19, 356-363.	1.4	10
99	Holocene upper tree-limits of Pinus section sylvestris in the Western Alps as evidenced from travertine archives. Review of Palaeobotany and Palynology, 2012, 169, 96-102.	1.5	10
100	Keep your feet warm? A cryptic refugium of trees linked to a geothermal spring in an ocean of glaciers. Global Change Biology, 2018, 24, 2476-2487.	9.5	10
101	PALEOBOTANY   Charred Particle Analysis. , 2007, , 1582-1593.		10
102	Long-Term Steady-State Dry Boreal Forest in the Face of Disturbance. Ecosystems, 2020, 23, 1075-1092.	3.4	9
103	For a few years more: reductions in plant diversity 70Âyears after the last fire in Mediterranean forests. Plant Ecology, 2020, 221, 559-576.	1.6	9
104	Tree-rings, genetics and the environment: Complex interactions at the rear edge of species distribution range. Dendrochronologia, 2021, 69, 125863.	2.2	9
105	Assessing Paleo-Biodiversity Using Low Proxy Influx. PLoS ONE, 2013, 8, e65852.	2.5	8
106	Soil particles reworking evidences by AMS 14C dating of charcoal. Comptes Rendus De L'Académie Des Sciences Earth & Planetary Sciences Série II, Sciences De La Terre Et Des PlanÃ'tes =, 2001, 332, 21-28.	0.2	7
107	Ancient genetic bottleneck and Plio-Pleistocene climatic changes imprinted the phylobiogeography of European Black Pine populations. European Journal of Forest Research, 2017, 136, 767-786.	2.5	7
108	Selective and taxon-dependent effects of semi-feral cattle grazing on tree regeneration in an old-growth Mediterranean mountain forest. Forest Ecosystems, 2020, 7, .	3.1	7

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109	Holocene changes in climate and land use drove shifts in the diversity of testate amoebae in a subalpine pond. Journal of Paleolimnology, 2013, 49, 633-646.	1.6	6
110	Land-use legacies: multi-centuries years-old management control of between-stands variability at the landscape scale in Mediterranean mountain forests, France. Journal of Forest Science, 2013, 59, 1-7.	1.1	6
111	<i>Xylobolus subpileatus</i> , a specialized basidiomycete functionally linked to old canopy gaps. Canadian Journal of Forest Research, 2017, 47, 965-973.	1.7	6
112	Once upon a time biomass burning in the western Alps: Nesting effects of climate and local drivers on long-term subalpine fires. Forest Ecosystems, 2022, 9, 100024.	3.1	6
113	Unlimited fuel wood during the middle Mesolithic (9650–8300 cal. yr BP) in northern Sweden: Fuel typology and pine-dominated vegetation inferred from charcoal identification and tree-ring morphology. Holocene, 2017, 27, 1370-1378.	1.7	5
114	Effets des contraintes (vents et embruns) sur la composition et la structure de la végétation des pentes drainées de l'île de la Possession (archipel Crozet, subantarctique). Canadian Journal of Botany, 1995, 73, 1739-1749.	1.1	4
115	A new, isolated and endangered relict population of dwarf pine (Pinus mugo Turra) in the northwestern Alps. Comptes Rendus - Biologies, 2009, 332, 456-463.	0.2	4
116	HANNIBAL'S INVASION ROUTE: AN AGEâ€OLD QUESTION REVISITED WITHIN A GEOARCHAEOLOGICAL AND PALAEOBOTANICAL CONTEXT. Archaeometry, 2010, 52, 1096-1109.	1.3	4
117	Debris flow burial of ancient wall system in the Upper Po River valley. Geology Today, 2010, 26, 209-215.	0.9	4
118	Confounding legacies of land uses and land-form pattern on the regional vegetation structure and diversity of Mediterranean montane forests. Forest Ecology and Management, 2017, 384, 268-278.	3.2	4
119	Fir expansion not controlled by moderate densities of large herbivores: a Mediterranean mountain grassland conservation issue. Annals of Forest Science, 2018, 75, 1.	2.0	4
120	Limited recruitment of eastern white cedar ( <i>Thuja occidentalis</i> L.) under black spruce canopy at its northern distribution limit. Ecoscience, 2019, 26, 123-132.	1.4	4
121	Glacial refugia in the southâ€western Alps?. New Phytologist, 2019, 222, 663-667.	7.3	4