LluÃs Coll

List of Publications by Year
in descending order

91 papers	5,885 citations	94433 37 h-index	76900 74 g-index
91 all docs	91 docs citations	91 times ranked	8768 citing authors

#	Article	IF	Citations
1	TRY plant trait database â€" enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
2	Facilitation in plant communities: the past, the present, and the future. Journal of Ecology, 2008, 96, 18-34.	4.0	788
3	Unraveling the Effects of Plant Hydraulics on Stomatal Closure during Water Stress in Walnut. Plant Physiology, 2002, 128, 282-290.	4.8	308
4	Growth and yield of mixed versus pure stands of Scots pine (Pinus sylvestris L.) and European beech (Fagus sylvatica L.) analysed along a productivity gradient through Europe. European Journal of Forest Research, 2015, 134, 927-947.	2.5	257
5	Viewing forests through the lens of complex systems science. Ecosphere, 2014, 5, 1-23.	2.2	182
6	Hydraulic architecture of leaf blades: where is the main resistance?. Plant, Cell and Environment, 2004, 27, 1257-1267.	5.7	159
7	Species interactions increase the temporal stability of community productivity in *Pinus sylvestris*–*Fagus sylvatica* mixtures across Europe. Journal of Ecology, 2017, 105, 1032-1043.	4.0	140
8	Effects of crown architecture and stand structure on light absorption in mixed and monospecific *Fagus sylvatica* and *Pinus sylvestris* forests along a productivity and climate gradient through Europe. Journal of Ecology, 2018, 106, 746-760.	4.0	125
9	Land€use legacies rather than climate change are driving the recent upward shift of the mountain tree line in the Pyrenees. Global Ecology and Biogeography, 2016, 25, 263-273.	5.8	123
10	BAAD: a Biomass And Allometry Database for woody plants. Ecology, 2015, 96, 1445-1445.	3.2	122
11	Mixing of Scots pine (Pinus sylvestris L.) and European beech (Fagus sylvatica L.) enhances structural heterogeneity, and the effect increases with water availability. Forest Ecology and Management, 2016, 373, 149-166.	3.2	115
12	European Mixed Forests: definition and research perspectives. Forest Systems, 2014, 23, 518.	0.3	107
13	Forest management for adaptation to climate change in the Mediterranean basin: A synthesis of evidence. Forest Ecology and Management, 2018, 407, 16-22.	3.2	95
14	Knowledge gaps about mixed forests: What do European forest managers want to know and what answers can science provide?. Forest Ecology and Management, 2018, 407, 106-115.	3.2	90
15	Plasticity in growth, biomass allocation and root morphology in beech seedlings as induced by irradiance and herbaceous competition. Annals of Forest Science, 2005, 62, 51-60.	2.0	88
16	Competition for water between beech seedlings and surrounding vegetation in different light and vegetation composition conditions. Annals of Forest Science, 2003, 60, 593-600.	2.0	83
17	Trajectory analysis in community ecology. Ecological Monographs, 2019, 89, e01350.	5.4	74
18	Land€use changes as major drivers of mountain pine (*Pinus uncinata* Ram.) expansion in the Pyrenees. Global Ecology and Biogeography, 2010, 19, 632-641.	5.8	72

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19	Morphological and physiological responses of beech (Fagus sylvatica) seedlings to grass-induced belowground competition. Tree Physiology, 2004, 24, 45-54.	3.1	71
20	Future trade-offs and synergies among ecosystem services in Mediterranean forests under global change scenarios. Ecosystem Services, 2020, 45, 101174.	5.4	68
21	Species-specific and generic biomass equations for seedlings and saplings of European tree species. European Journal of Forest Research, 2016, 135, 313-329.	2.5	67
22	Species mixing reduces drought susceptibility of Scots pine (Pinus sylvestris L.) and oak (Quercus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Forest Ecology and Management, 2020, 461, 117908.	3.2	65
23	The role of below-ground competition during early stages of secondary succession: the case of 3-year-old Scots pine (Pinus sylvestris L.) seedlings in an abandoned grassland. Oecologia, 2006, 148, 373-383.	2.0	59
24	Climate influences on the maximum size-density relationship in Scots pine (Pinus sylvestris L.) and European beech (Fagus sylvatica L.) stands. Forest Ecology and Management, 2017, 385, 295-307.	3.2	59
25	Unraveling the effects of plant hydraulics on stomatal closure during water stress in walnut. Plant Physiology, 2002, 128, 282-90.	4.8	59
26	Coupling a water balance model with forest inventory data to predict drought stress: the role of forest structural changes vs. climate changes. Agricultural and Forest Meteorology, 2015, 213, 77-90.	4.8	55
27	Managing stand density to enhance the adaptability of Scots pine stands to climate change: A modelling approach. Ecological Modelling, 2017, 356, 141-150.	2.5	55
28	Resource and non‐resource root competition effects of grasses on early‐versus late‐successional trees. Journal of Ecology, 2009, 97, 548-554.	4.0	49
29	History matters: Previous land use changes determine post-fire vegetation recovery in forested Mediterranean landscapes. Forest Ecology and Management, 2012, 279, 121-127.	3.2	47
30	Growth, allocation and leaf gas exchanges of hybrid poplar plants in their establishment phase on previously forested sites: effect of different vegetation management techniques. Annals of Forest Science, 2007, 64, 275-285.	2.0	45
31	Root architecture and allocation patterns of eight native tropical species with different successional status used in open-grown mixed plantations in Panama. Trees - Structure and Function, 2008, 22, 585-596.	1.9	44
32	Climate Change Could Negate Positive Tree Diversity Effects on Forest Productivity: A Study Across Five Climate Types in Spain and Canada. Ecosystems, 2018, 21, 960-970.	3.4	43
33	Tree dynamics and co-existence in the montane-sub-alpine ecotone: the role of different light-induced strategies. Journal of Vegetation Science, 2011, 22, 1049-1061.	2.2	42
34	Predicting understory maximum shrubs cover using altitude and overstory basal area in different Mediterranean forests. European Journal of Forest Research, 2011, 130, 55-65.	2.5	42
35	Unraveling the relative importance of factors driving post-fire regeneration trajectories in non-serotinous Pinus nigra forests. Forest Ecology and Management, 2016, 361, 13-22.	3.2	42
36	Resistance, Resilience or Change: Post-disturbance Dynamics of Boreal Forests After Insect Outbreaks. Ecosystems, 2019, 22, 1886-1901.	3.4	42

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37	Effects of tree size and position on pipe model ratios in Scots pine. Canadian Journal of Forest Research, 2005, 35, 1294-1304.	1.7	40
38	Predicting the spatial and temporal dynamics of species interactions in Fagus sylvatica and Pinus sylvestris forests across Europe. Forest Ecology and Management, 2017, 405, 112-133.	3.2	40
39	Forest vegetation management under debate: an introduction. European Journal of Forest Research, 2011, 130, 1-5.	2.5	38
40	Recruitment patterns of four tree species along elevation gradients in Mediterranean mountains: Not only climate matters. Forest Ecology and Management, 2016, 360, 287-296.	3.2	32
41	Wind and snow damage in the Pyrenees pine forests: effect of stand attributes and location. Silva Fennica, 2010, 44, .	1.3	32
42	Different Factors for Different Causes: Analysis of the Spatial Aggregations of Fire Ignitions in Catalonia (Spain). Risk Analysis, 2015, 35, 1197-1209.	2.7	31
43	Unravelling the effect of species mixing on water use and drought stress in Mediterranean forests: A modelling approach. Agricultural and Forest Meteorology, 2021, 296, 108233.	4.8	30
44	Species proportions by area in mixtures of Scots pine (Pinus sylvestris L.) and European beech (Fagus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.5	29
45	Modelling approaches for mixed forests dynamics prognosis. Research gaps and opportunities. Forest Systems, 2019, 28, eR002.	0.3	29
46	Linking multiple-level tree traits with biomass accumulation in native tree species used for reforestation in Panama. Trees - Structure and Function, 2008, 22, 337-349.	1.9	27
47	Herbivory and seedling establishment in Pyrenean forests: Influence of micro- and meso-habitat factors on browsing pressure. Forest Ecology and Management, 2015, 342, 103-111.	3.2	27
48	Survival vs. growth trade-off in early recruitment challenges global warming impacts on Mediterranean mountain trees. Perspectives in Plant Ecology, Evolution and Systematics, 2015, 17, 369-378.	2.7	27
49	EuMIXFOR empirical forest mensuration and ring width data from pure and mixed stands of Scots pine (Pinus sylvestris L.) and European beech (Fagus sylvatica L.) through Europe. Annals of Forest Science, 2017, 74, 1.	2.0	27
50	Nitrogen forms affect root structure and water uptake in the hybrid poplar. New Forests, 2011, 42, 347-362.	1.7	26
51	Architecture, cover and light interception by bramble (Rubus fruticosus): a common understorey weed in temperate forests. Forestry, 2013, 86, 39-46.	2.3	26
52	Tree light capture and spatial variability of understory light increase with species mixing and tree size heterogeneity. Canadian Journal of Forest Research, 2016, 46, 968-977.	1.7	26
53	Six-year time course of light-use efficiency, carbon gain and growth of beech saplings (Fagus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 1073-1082.	3.1	25
54	Valuing acorn dispersal and resprouting capacity ecological functions to ensure Mediterranean forest resilience after fire. European Journal of Forest Research, 2012, 131, 835-844.	2.5	25

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55	Ecosystem services provision by Mediterranean forests will be compromised above 2°C warming. Global Change Biology, 2021, 27, 4210-4222.	9.5	25
56	Assessing the persistence capacity of communities facing natural disturbances on the basis of species response traits. Ecological Indicators, 2016, 66, 76-85.	6.3	24
57	Forest expansion in mountain protected areas: Trends and consequences for the landscape. Landscape and Urban Planning, 2021, 216, 104240.	7.5	24
58	Uncoupled spatiotemporal patterns of seed dispersal and regeneration in Pyrenean silver fir populations. Forest Ecology and Management, 2014, 319, 18-28.	3.2	23
59	Combining aerial LiDAR and multispectral imagery to assess postfire regeneration types in a Mediterranean forest. Canadian Journal of Forest Research, 2015, 45, 856-866.	1.7	22
60	Fine root seasonal dynamics, plasticity, and mycorrhization in 2 coexisting Mediterranean oaks with contrasting aboveground phenology. Ecoscience, 2012, 19, 238-245.	1.4	21
61	Unraveling the role of light and biotic interactions on seedling performance of four Pyrenean species along environmental gradients. Forest Ecology and Management, 2013, 303, 25-34.	3.2	21
62	The use of scenarios and models to evaluate the future of nature values and ecosystem services in Mediterranean forests. Regional Environmental Change, 2019, 19, 415-428.	2.9	20
63	Diversifying sub-Mediterranean pinewoods with oak species in a context of assisted migration: responses to local climate and light environment. Applied Vegetation Science, 2016, 19, 254-266.	1.9	19
64	Understory light predictions in mixed conifer mountain forests: Role of aspect-induced variation in crown geometry and openness. Forest Ecology and Management, 2012, 276, 52-61.	3.2	18
65	Stand-level drivers of tree-species diversification in Mediterranean pine forests after abandonment of traditional practices. Forest Ecology and Management, 2015, 353, 107-117.	3.2	18
66	Modelling the effect of climate-induced changes in recruitment and juvenile growth on mixed-forest dynamics: The case of montane–subalpine Pyrenean ecotones. Ecological Modelling, 2015, 313, 84-93.	2.5	18
67	Tree Species Are Differently Impacted by Cumulative Drought Stress and Present Higher Growth Synchrony in Dry Places. Frontiers in Forests and Global Change, 2020, 3, .	2.3	18
68	Estimation and Uncertainty of the Mixing Effects on Scots Pine–European Beech Productivity from National Forest Inventories Data. Forests, 2018, 9, 518.	2.1	15
69	Crown bulk density and fuel moisture dynamics in Pinus pinaster stands are neither modified by thinning nor captured by the Forest Fire Weather Index. Annals of Forest Science, 2017, 74, 1.	2.0	14
70	Has COVID-19 halted winter-spring wildfires in the Mediterranean? Insights for wildfire science under a pandemic context. Science of the Total Environment, 2021, 765, 142793.	8.0	14
71	A general method for the classification of forest stands using species composition and vertical and horizontal structure. Annals of Forest Science, 2019, 76, 1.	2.0	13
72	Regeneration Patterns in Mixed-Species Stands. Managing Forest Ecosystems, 2018, , 103-130.	0.9	12

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73	Examination of aboveground attributes to predict belowground biomass of young trees. Forest Ecology and Management, 2022, 505, 119942.	3.2	12
74	Relative size to resprouters determines post-fire recruitment of non-serotinous pines. Forest Ecology and Management, 2018, 429, 300-307.	3.2	8
75	Temporal dimension of forest vulnerability to fire along successional trajectories. Journal of Environmental Management, 2019, 248, 109301.	7.8	8
76	Quantifying the effect of nitrogen-induced physiological and structural changes on poplar growth using a carbon-balance model. Tree Physiology, 2011, 31, 381-390.	3.1	7
77	Contrasting patterns of tree species mixture effects on wood Î´13C along an environmental gradient. European Journal of Forest Research, 2020, 139, 229-245.	2.5	7
78	Maximum height of mountain forests abruptly decreases above an elevation breakpoint. GIScience and Remote Sensing, 2021, 58, 442-454.	5.9	7
79	A broad-scale analysis of the main factors determining the current structure and understory composition of Catalonian sub-alpine (Pinus uncinata Ram.) forests. Forestry, 2012, 85, 225-236.	2.3	6
80	Spatial and temporal variations of overstory and understory fuels in Mediterranean landscapes. Forest Ecology and Management, 2021, 490, 119094.	3.2	6
81	Forest structure of Mediterranean yew (Taxus baccata L.) populations and neighbor effects on juvenile yew performance in the NE Iberian Peninsula. Forest Systems, 2015, 24, e042.	0.3	6
82	Can bioplastic or woodchip groundcover replace herbicides or plastic mulching for valuable broadleaf plantations in Mediterranean areas?. New Forests, 2017, 48, 415-429.	1.7	4
83	Local characteristics of the standing genetic diversity of European beech with high within-region differentiation at the eastern part of the range. Canadian Journal of Forest Research, 0, , .	1.7	4
84	Soil erodibility in European mountain beech forests. Canadian Journal of Forest Research, 2021, 51, 1846-1855.	1.7	4
85	Regional climate moderately influences species-mixing effect on tree growth-climate relationships and drought resistance for beech and pine across Europe. Forest Ecology and Management, 2022, 520, 120317.	3.2	4
86	Climate-Smart Silviculture in Mountain Regions. Managing Forest Ecosystems, 2022, , 263-315.	0.9	3
87	Assessing post-storm forest dynamics in the pyrenees using high-resolution LIDAR data and aerial photographs. Journal of Mountain Science, 2015, 12, 841-853.	2.0	1
88	Elevation modulates the phenotypic responses to light of four co-occurring Pyrenean forest tree species. Annals of Forest Science, 2019, 76, 1.	2.0	1
89	Response to â€˜Letter to the editor regarding Rodrigues et al. 2020: Is COVID-19 halting wildfires in the Mediterranean? Insights for wildfire science under a pandemic contextâ€™. Science of the Total Environment, 2021, 766, 143187.	8.0	1
90	Dynamics and Management of Western Mediterranean Pinewoods. Managing Forest Ecosystems, 2021, , 659-677.	0.9	0

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91	Correction: Soil erodibility in European mountain beech forests. Canadian Journal of Forest Research, 2022, 52, 135-135.	1.7	0