

# Catherine Fernandez

## List of Publications by Year in descending order

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106  
papers

3,491  
citations

136950

32  
h-index

168389

53  
g-index

112  
all docs

112  
docs citations

112  
times ranked

4188  
citing authors

#	ARTICLE	IF	CITATIONS
1	Plant secondary metabolites: a key driver of litter decomposition and soil nutrient cycling. <i>Journal of Ecology</i> , 2016, 104, 1527-1541.	4.0	222
2	The relationship between terpenes and flammability of leaf litter. <i>Forest Ecology and Management</i> , 2009, 257, 471-482.	3.2	166
3	Water deficit stress induces different monoterpene and sesquiterpene emission changes in Mediterranean species. Relationship between terpene emissions and plant water potential. <i>Chemosphere</i> , 2007, 67, 276-284.	8.2	152
4	Nutrition of the sea urchin <i>Paracentrotus lividus</i> (Echinodermata: Echinoidea) fed different artificial food. <i>Marine Ecology - Progress Series</i> , 2000, 204, 131-141.	1.9	106
5	Production and Diversity of Volatile Terpenes from Plants on Calcareous and Siliceous Soils: Effect of Soil Nutrients. <i>Journal of Chemical Ecology</i> , 2008, 34, 1219-1229.	1.8	105
6	Plant litter diversity increases microbial abundance, fungal diversity, and carbon and nitrogen cycling in a Mediterranean shrubland. <i>Soil Biology and Biochemistry</i> , 2017, 111, 124-134.	8.8	103
7	Plant litter mixture partly mitigates the negative effects of extended drought on soil biota and litter decomposition in a Mediterranean oak forest. <i>Journal of Ecology</i> , 2017, 105, 801-815.	4.0	87
8	Effect of Soil Nutrient on Production and Diversity of Volatile Terpenoids from Plants. <i>Current Bioactive Compounds</i> , 2012, 8, 71-79.	0.5	84
9	Potential allelopathic effect of <i>Pinus halepensis</i> in the secondary succession: an experimental approach. <i>Chemoecology</i> , 2006, 16, 97-105.	1.1	83
10	Plant coexistence alters terpene emission and content of Mediterranean species. <i>Phytochemistry</i> , 2007, 68, 840-852.	2.9	81
11	Mediterranean forests, land use and climate change: a social-ecological perspective. <i>Regional Environmental Change</i> , 2018, 18, 623-636.	2.9	79
12	The Impact of Competition and Allelopathy on the Trade-Off between Plant Defense and Growth in Two Contrasting Tree Species. <i>Frontiers in Plant Science</i> , 2016, 7, 594.	3.6	78
13	Regeneration failure of <i>Pinus halepensis</i> Mill.: The role of autotoxicity and some abiotic environmental parameters. <i>Forest Ecology and Management</i> , 2008, 255, 2928-2936.	3.2	75
14	Phenotypic plasticity of <i>Paracentrotus lividus</i> (Echinodermata:Echinoidea) in a lagoonal environment. <i>Marine Ecology - Progress Series</i> , 1997, 152, 145-154.	1.9	71
15	Climate change effects on litter decomposition: intensive drought leads to a strong decrease of litter mixture interactions. <i>Plant and Soil</i> , 2015, 393, 69-82.	3.7	69
16	Secondary metabolites of <i>Pinus halepensis</i> alter decomposer organisms and litter decomposition during afforestation of abandoned agricultural zones. <i>Journal of Ecology</i> , 2014, 102, 411-424.	4.0	68
17	Allelochemicals of <i>Pinus halepensis</i> as Drivers of Biodiversity in Mediterranean Open Mosaic Habitats During the Colonization Stage of Secondary Succession. <i>Journal of Chemical Ecology</i> , 2013, 39, 298-311.	1.8	59
18	Monoterpene and sesquiterpene emissions of three Mediterranean species through calcareous and siliceous soils in natural conditions. <i>Atmospheric Environment</i> , 2007, 41, 629-639.	4.1	58

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19	Contrasting responses of bacterial and fungal communities to plant litter diversity in a Mediterranean oak forest. <i>Soil Biology and Biochemistry</i> , 2018, 125, 27-36.	8.8	53
20	Effect of diet on the biochemical composition of <i>Paracentrotus lividus</i> (Echinodermata: Echinoidea) under natural and rearing conditions (effect of diet on biochemical composition of urchins). <i>Comparative Biochemistry and Physiology A, Comparative Physiology</i> , 1997, 118, 1377-1384.	0.6	51
21	Primary production and vegetative cycle in <i>Posidonia oceanica</i> when in competition with the green algae <i>Caulerpa taxifolia</i> and <i>Caulerpa racemosa</i> . <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2002, 82, 379-387.	0.8	51
22	Phenols and Flavonoids in Aleppo Pine Needles as Bioindicators of Air Pollution. <i>Journal of Environmental Quality</i> , 2003, 32, 2265-2271.	2.0	51
23	Concentrations and fluxes of isoprene and oxygenated VOCs at a French Mediterranean oak forest. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 10085-10102.	4.9	50
24	The use of airborne remote sensing for benthic cartography: Advantages and reliability. <i>International Journal of Remote Sensing</i> , 1997, 18, 1167-1177.	2.9	49
25	Variations in Allelochemical Composition of Leachates of Different Organs and Maturity Stages of <i>Pinus halepensis</i> . <i>Journal of Chemical Ecology</i> , 2009, 35, 970-979.	1.8	43
26	Long-Term Forest Dynamics and Land-Use Abandonment in the Mediterranean Mountains, Corsica, France. <i>Ecology and Society</i> , 2013, 18, .	2.3	43
27	Allelopathic effects of volatile organic compounds released from <i>Pinus halepensis</i> needles and roots. <i>Ecology and Evolution</i> , 2019, 9, 8201-8213.	1.9	42
28	Functional Traits 2.0: The power of the metabolome for ecology. <i>Journal of Ecology</i> , 2022, 110, 4-20.	4.0	42
29	Plant Flavonoids in Mediterranean Species: A Focus on Flavonols as Protective Metabolites under Climate Stress. <i>Plants</i> , 2022, 11, 172.	3.5	37
30	Environmental control of terpene emissions from <i>Cistus monspeliensis</i> L. in natural Mediterranean shrublands. <i>Chemosphere</i> , 2010, 78, 942-949.	8.2	35
31	Potential Shift in Plant Communities with Climate Change: Outcome on Litter Decomposition and Nutrient Release in a Mediterranean Oak Forest. <i>Ecosystems</i> , 2015, 18, 1253-1268.	3.4	35
32	Seasonal Changes in the Biochemical Composition of the Edible Sea Urchin <i>Paracentrotus lividus</i> Echinodermata: Echinoidea in a Lagoonal Environment. <i>Marine Ecology</i> , 1998, 19, 1-11.	1.1	34
33	Effects of environmental factors and leaf chemistry on leaf litter colonization by fungi in a Mediterranean shrubland. <i>Pedobiologia</i> , 2006, 50, 1-10.	1.2	34
34	Short-term Effects of Sewage-Sludge Compost on a Degraded Mediterranean Soil. <i>Soil Science Society of America Journal</i> , 2006, 70, 1178-1188.	2.2	33
35	Effect of an exceptional rainfall event on the sea urchin ( <i>Paracentrotus lividus</i> ) stock and seagrass distribution in a Mediterranean coastal lagoon. <i>Estuarine, Coastal and Shelf Science</i> , 2006, 68, 259-270.	2.1	33
36	Chronic Drought Decreases Anabolic and Catabolic BVOC Emissions of <i>Quercus pubescens</i> in a Mediterranean Forest. <i>Frontiers in Plant Science</i> , 2017, 8, 71.	3.6	33

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37	Inter-population variability of leaf morpho-anatomical and terpenoid patterns of <i>Pistacia atlantica</i> Desf. ssp. <i>atlantica</i> growing along an aridity gradient in Algeria. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , 2011, 206, 397-405.	1.2	28
38	Does competition stress decrease allelopathic potential?. <i>Biochemical Systematics and Ecology</i> , 2011, 39, 401-407.	1.3	28
39	Diversification of <i>Pinus halepensis</i> forests by sowing <i>Quercus ilex</i> and <i>Quercus pubescens</i> acorns: testing the effects of different vegetation and soil treatments. <i>European Journal of Forest Research</i> , 2011, 130, 67-76.	2.5	28
40	Variability of BVOC emissions from a Mediterranean mixed forest in southern France with a focus on <i>Quercus pubescens</i> . <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 431-446.	4.9	27
41	Competition and water stress indices as predictors of <i>Pinus halepensis</i> Mill. radial growth under drought. <i>Forest Ecology and Management</i> , 2020, 460, 117877.	3.2	27
42	Wetland monitoring: aquatic plant changes in two Corsican coastal lagoons (Western Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (M	2.0	26
43	Do shrubs facilitate oak seedling establishment in Mediterranean pine forest understory?. <i>Forest Ecology and Management</i> , 2016, 381, 289-296.	3.2	26
44	Temporal Shifts in Plant Diversity Effects on Carbon and Nitrogen Dynamics During Litter Decomposition in a Mediterranean Shrubland Exposed to Reduced Precipitation. <i>Ecosystems</i> , 2019, 22, 939-954.	3.4	26
45	Microclimate in Mediterranean pine forests: What is the influence of the shrub layer?. <i>Agricultural and Forest Meteorology</i> , 2020, 282-283, 107856.	4.8	26
46	Allelopathic potential of <i>Medicago arborea</i> , a Mediterranean invasive shrub. <i>Chemoecology</i> , 2005, 15, 193-198.	1.1	24
47	Compost may affect volatile and semi-volatile plant emissions through nitrogen supply and chlorophyll fluorescence. <i>Chemosphere</i> , 2009, 77, 94-104.	8.2	24
48	Isoprene Emissions from Downy Oak under Water Limitation during an Entire Growing Season: What Cost for Growth?. <i>PLoS ONE</i> , 2014, 9, e112418.	2.5	24
49	Effect of Intraspecific Competition and Substrate Type on Terpene Emissions from Some Mediterranean Plant Species. <i>Journal of Chemical Ecology</i> , 2007, 33, 277-286.	1.8	23
50	Can we use shelterwoods in Mediterranean pine forests to promote oak seedling development?. <i>Forest Ecology and Management</i> , 2011, 262, 1426-1433.	3.2	22
51	Characterization of Phenolic Compounds in <i>Pinus laricio</i> Needles and Their Responses to Prescribed Burnings. <i>Molecules</i> , 2007, 12, 1614-1622.	3.8	21
52	Effects of different site preparation treatments on species diversity, composition, and plant traits in <i>Pinus halepensis</i> woodlands. <i>Plant Ecology</i> , 2011, 212, 627-638.	1.6	21
53	How terpene content affects fuel flammability of wildland "urban interface vegetation. <i>International Journal of Wildland Fire</i> , 2019, 28, 614.	2.4	21
54	Demographic structure suggests migration of the sea urchin <i>Paracentrotus lividus</i> in a coastal lagoon. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2001, 81, 361-362.	0.8	20

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55	Inter-Population Variability of Terpenoid Composition in Leaves of <i>Pistacia lentiscus</i> L. from Algeria: A Chemoecological Approach. <i>Molecules</i> , 2011, 16, 2646-2657.	3.8	20
56	Resilience and stability of <i>Cymodocea nodosa</i> seagrass meadows over the last four decades in a Mediterranean lagoon. <i>Estuarine, Coastal and Shelf Science</i> , 2013, 130, 89-98.	2.1	20
57	Resistance of native oak to recurrent drought conditions simulating predicted climatic changes in the Mediterranean region. <i>Plant, Cell and Environment</i> , 2018, 41, 2299-2312.	5.7	20
58	Seasonal dynamics of <i>Zostera noltii</i> Hornem. in two Mediterranean lagoons. <i>Hydrobiologia</i> , 2005, 543, 233-243.	2.0	19
59	Seasonal variations of <i>Quercus pubescens</i> ; isoprene emissions from an <i>in natura</i> forest under drought stress and sensitivity to future climate change in the Mediterranean area. <i>Biogeosciences</i> , 2018, 15, 4711-4730.	3.3	19
60	Biotic interactions in a Mediterranean oak forest: role of allelopathy along phenological development of woody species. <i>European Journal of Forest Research</i> , 2017, 136, 699-710.	2.5	18
61	Effect of mid-term drought on <i>Quercus pubescens</i> ; BVOCs' emission seasonality and their dependency on light and/or temperature. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 7555-7566.	4.9	18
62	To what extent do time, species identity and selected plant response variables influence woody plant interactions?. <i>Journal of Applied Ecology</i> , 2012, 49, 1344-1355.	4.0	17
63	Forest microhabitats differentially influence seedling phenology of two coexisting Mediterranean oak species. <i>Journal of Vegetation Science</i> , 2012, 23, 260-270.	2.2	17
64	Bacterial symbiosis in <i>Loripes lucinalis</i> (Mollusca: Bivalvia) with comments on reproductive strategy. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2001, 81, 251-257.	0.8	16
65	A top-down approach of surface carbonyl sulfide exchange by a Mediterranean oak forest ecosystem in southern France. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 14909-14923.	4.9	16
66	Experimental Assessment of the Water Quality Influence on the Phosphorus Uptake of an Invasive Aquatic Plant: Biological Responses throughout Its Phenological Stage. <i>PLoS ONE</i> , 2015, 10, e0118844.	2.5	15
67	Compost effect on bacterial and fungal colonization of kermes oak leaf litter in a terrestrial Mediterranean ecosystem. <i>Applied Soil Ecology</i> , 2005, 30, 79-89.	4.3	14
68	Introducing resprouters to enhance Mediterranean forest resilience: importance of functional traits to select species according to a gradient of pine density. <i>Journal of Applied Ecology</i> , 2016, 53, 1735-1745.	4.0	14
69	Phenolics of the understory shrub <i>Cotinus coggygria</i> influence Mediterranean oak forests diversity and dynamics. <i>Forest Ecology and Management</i> , 2019, 441, 262-270.	3.2	14
70	Water availability rather than temperature control soil fauna community structure and predator interactions. <i>Functional Ecology</i> , 2021, 35, 1550-1559.	3.6	14
71	Chemical composition of the volatile oil of <i>Laggera aurita</i> Schulz from Burkina-Faso. <i>Biochemical Systematics and Ecology</i> , 2006, 34, 815-818.	1.3	13
72	Fertilization and allelopathy modify <i>Pinus halepensis</i> saplings crown acclimation to shade. <i>Trees - Structure and Function</i> , 2011, 25, 497-507.	1.9	13

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73	Soil biota response to experimental rainfall reduction depends on the dominant tree species in mature northern Mediterranean forests. <i>Soil Biology and Biochemistry</i> , 2021, 154, 108122.	8.8	13
74	Sea urchin-seagrasses interactions: trophic links in a benthic ecosystem from a coastal lagoon. <i>Hydrobiologia</i> , 2012, 699, 21-33.	2.0	12
75	Influence of neighbouring woody treatments on Mediterranean oak development in an experimental plantation: Better form but weaker growth. <i>Forest Ecology and Management</i> , 2016, 362, 89-98.	3.2	12
76	Do litter-mediated plant-soil feedbacks influence Mediterranean oak regeneration? A two-year pot experiment. <i>Plant and Soil</i> , 2018, 430, 59-71.	3.7	12
77	Compost spreading in Mediterranean shrubland indirectly increases biogenic emissions by promoting growth of VOC-emitting plant parts. <i>Atmospheric Environment</i> , 2011, 45, 3631-3639.	4.1	11
78	Does Prescribed Burning Affect Leaf Secondary Metabolites in Pine Stands?. <i>Journal of Chemical Ecology</i> , 2013, 39, 398-412.	1.8	11
79	Tree litter identity and predator density control prey and predator demographic parameters in a Mediterranean litter-based multi-trophic system. <i>Pedobiologia</i> , 2019, 73, 1-9.	1.2	11
80	Exogenous Isoprene Confers Physiological Benefits in a Negligible Isoprene Emitter (Acer) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (	3.5	11
81	Identification of windows of emergence and seedling establishment in a pine Mediterranean forest under controlled disturbances. <i>Basic and Applied Ecology</i> , 2015, 16, 36-45.	2.7	10
82	Pollinator Specific Richness and Their Interactions With Local Plant Species: 10 Years of Sampling in Mediterranean Habitats. <i>Environmental Entomology</i> , 2020, 49, 947-955.	1.4	10
83	Influence of light, water stress and shrub cover on sapling survival and height growth: the case of <i>A. unedo</i> , <i>F. ornus</i> and <i>S. domestica</i> under Mediterranean climate. <i>European Journal of Forest Research</i> , 2021, 140, 635-647.	2.5	10
84	Variability of <i>Ruppia cirrhosa</i> in two coastal lagoons with differing anthropogenic stresses. <i>Botanica Marina</i> , 2006, 49, .	1.2	9
85	How nutrient availability influences acclimation to shade of two (pioneer and late-successional) Mediterranean tree species?. <i>European Journal of Forest Research</i> , 2013, 132, 325-333.	2.5	9
86	Multiple Interventions for Diabetic Foot Ulcer Treatment Trial (MIDFUT): study protocol for a randomised controlled trial. <i>BMJ Open</i> , 2020, 10, e035947.	1.9	9
87	Direct and indirect impact of sewage sludge compost spreading on <i>Quercus coccifera</i> monoterpene emissions in a Mediterranean shrubland. <i>Environmental Pollution</i> , 2011, 159, 963-969.	7.5	8
88	Litter traits and rainfall reduction alter microbial litter decomposers: the evidence from three Mediterranean forests. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	2.7	8
89	Response of Downy Oak ( <i>Quercus pubescens</i> Willd.) to Climate Change: Transcriptome Assembly, Differential Gene Analysis and Targeted Metabolomics. <i>Plants</i> , 2020, 9, 1149.	3.5	8
90	Vegetation dynamics and regeneration of <i>Pinus pinea</i> forests in Mount Lebanon: Towards the progressive disappearance of pine. <i>Ecological Engineering</i> , 2020, 152, 105866.	3.6	8

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91	Volatile and semi-volatile terpenes impact leaf flammability: differences according to the level of terpene identification. <i>Chemoecology</i> , 2021, 31, 259-275.	1.1	8
92	Investigating the role of root exudates in the interaction between oak seedlings and purple moor grass in temperate forest. <i>Forest Ecology and Management</i> , 2021, 491, 119175.	3.2	8
93	Amplified Drought and Seasonal Cycle Modulate <i>Quercus pubescens</i> Leaf Metabolome. <i>Metabolites</i> , 2022, 12, 307.	2.9	7
94	Litter of mediterranean species as a source of volatile organic compounds. <i>Atmospheric Environment</i> , 2020, 242, 117815.	4.1	6
95	Isoprene contribution to ozone production under climate change conditions in the French Mediterranean area. <i>Regional Environmental Change</i> , 2020, 20, 1.	2.9	6
96	Soil scarification favors natural regeneration of <i>Pinus pinea</i> in Lebanon forests: Evidences from field and laboratory experiments. <i>Forest Ecology and Management</i> , 2020, 459, 117840.	3.2	5
97	Volatilome of Aleppo Pine litter over decomposition process. <i>Ecology and Evolution</i> , 2021, 11, 6862-6880.	1.9	5
98	Morpho-chronological variations and primary production in <i>Posidonia</i> sea grass from Western Australia. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2004, 84, 895-899.	0.8	4
99	Impact of precipitation, air temperature and abiotic emissions on gross primary production in Mediterranean ecosystems in Europe. <i>European Journal of Forest Research</i> , 2020, 139, 111-126.	2.5	4
100	Mediterranean woody plant specialized metabolites affect germination of <i>Linum perenne</i> at its dry and upper thermal limits. <i>Plant and Soil</i> , 2020, 446, 291-305.	3.7	4
101	Lavender sensitivity to water stress: Comparison between eleven varieties across two phenological stages. <i>Industrial Crops and Products</i> , 2022, 177, 114531.	5.2	4
102	Evolution and Vitality of Seagrasses in a Mediterranean Lagoon. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2003, 38, 1459-1468.	1.7	3
103	The presence of putative sulphur-oxidizing bacteria colonizing the periostracal secretion in the endosymbiont-bearing bivalve <i>Loripes lucinalis</i> . <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2001, 81, 893-894.	0.8	2
104	Sub-chapter 2.4.1. Mediterranean forests, biocultural heritage and climate change. , 2016, , 339-348.		2
105	Chemical interaction between <i>Quercus pubescens</i> and its companion species is not emphasized under drought stress. <i>European Journal of Forest Research</i> , 2021, 140, 333-343.	2.5	1
106	Contribution of some Mediterranean plants to BVOC in the atmosphere of an open and a closed environment: a preliminary study. <i>WIT Transactions on Ecology and the Environment</i> , 2006, , .	0.0	0