FranÃ§ois Munoz

List of Publications by Year
in descending order

97 papers	4,369 citations	172457 29 h-index	123424 61 g-index
112 all docs	112 docs citations	112 times ranked	7920 citing authors

#	Article	IF	Citations
1	Dissecting fine root diameter distribution at the community level captures root morphological diversity. Oikos, 2023, 2023, .	2.7	3
2	Functionally distinct tree species support long-term productivity in extreme environments. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20211694.	2.6	6
3	Plant community impact on productivity: Trait diversity or key(stone) species effects?. Ecology Letters, 2022, 25, 913-925.	6.4	26
4	Deep Species Distribution Modeling From Sentinel-2 Image Time-Series: A Global Scale Analysis on the Orchid Family. Frontiers in Plant Science, 2022, 13, 839327.	3.6	5
5	Very High Resolution Species Distribution Modeling Based on Remote Sensing Imagery: How to Capture Fine-Grained and Large-Scale Vegetation Ecology With Convolutional Neural Networks?. Frontiers in Plant Science, 2022, 13, .	3.6	5
6	Do ecological specialization and functional traits explain the abundanceâ€"frequency relationship? Arable weeds as a case study. Journal of Biogeography, 2021, 48, 37-50.	3.0	7
7	Jointly estimating spatial sampling effort and habitat suitability for multiple species from opportunistic presenceâ€only data. Methods in Ecology and Evolution, 2021, 12, 933-945.	5.2	6
8	Functional biogeography of weeds reveals how anthropogenic management blurs traitâ€"climate relationships. Journal of Vegetation Science, 2021, 32, e12999.	2.2	3
9	Convolutional neural networks improve species distribution modelling by capturing the spatial structure of the environment. PLoS Computational Biology, 2021, 17, e1008856.	3.2	35
10	The dimensionality and structure of species trait spaces. Ecology Letters, 2021, 24, 1988-2009.	6.4	63
11	Unveiling ecological assembly rules from commonalities in trait distributions. Ecology Letters, 2021, 24, 1668-1680.	6.4	21
12	Imprints of Past Habitat Area Reduction on Extant Taxonomic, Functional, and Phylogenetic Composition. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	1
13	Canopy and understorey tree guilds respond differently to the environment in an Indian rain forest. Journal of Vegetation Science, 2021, 32, e13075.	2.2	0
14	Drivers of tree community assembly during tropical forest post-fire succession in anthropogenic savannas. Perspectives in Plant Ecology, Evolution and Systematics, 2021, 52, 125630.	2.7	5
15	Rebound in functional distinctiveness following warming and reduced fishing in the North Sea. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20201600.	2.6	14
16	How Do Deep Convolutional SDM Trained on Satellite Images Unravel Vegetation Ecology?. Lecture Notes in Computer Science, 2021, , 148-158.	1.3	2
17	Designing sampling protocols for plant-pollinator interactions - timing, meteorology, flowering variations and failed captures matter. Botany Letters, 2021, 168, 324-332.	1.4	4
18	TRY plant trait database â€" enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038

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19	Is prediction of species richness from stacked species distribution models biased by habitat saturation?. Ecological Indicators, 2020, 111, 105970.	6.3	21
20	Loss of pollinator specialization revealed by historical opportunistic data: Insights from network-based analysis. PLoS ONE, 2020, 15, e0235890.	2.5	12
21	Successional dynamics shape tree diversity in evergreen forests of CÃ´te dâ€™Ivoire, West Africa. Journal of Tropical Ecology, 2020, 36, 182-189.	1.1	1
22	How citizen scientists contribute to monitor protected areas thanks to automatic plant identification tools. Ecological Solutions and Evidence, 2020, 1, e12023.	2.0	20
23	Bias in presence-only niche models related to sampling effort and species niches: Lessons for background point selection. PLoS ONE, 2020, 15, e0232078.	2.5	26
24	Assessing metacommunity processes through signatures in spatiotemporal turnover of community composition. Ecology Letters, 2020, 23, 1330-1339.	6.4	47
25	Extinctionâ€"immigration dynamics lag behind environmental filtering in shaping the composition of tropical dry forests within a changing landscape. Ecography, 2020, 43, 869-881.	4.5	16
26	Ecological Specialization and Rarity of Arable Weeds: Insights from a Comprehensive Survey in France. Plants, 2020, 9, 824.	3.5	10
27	Weeds: Against the Rules?. Trends in Plant Science, 2020, 25, 1107-1116.	8.8	25
28	Which Traits Make Weeds More Successful in Maize Crops? Insights from a Three-Decade Monitoring in France. Plants, 2020, 9, 40.	3.5	17
29	Analyzing snapshot diversity patterns with the Neutral Theory can show functional groupsâ€™ effects on community assembly. Ecology, 2020, 101, e02977.	3.2	7
30	Generalist plants are more competitive and more functionally similar to each other than specialist plants: insights from network analyses. Journal of Biogeography, 2020, 47, 1922-1933.	3.0	35
31	Diachronic variations in the distribution of butterflies and dragonflies linked to recent habitat changes in Western Europe. Insect Conservation and Diversity, 2019, 12, 49-68.	3.0	8
32	Distinguishing the signatures of local environmental filtering and regional trait range limits in the study of traitâ€"environment relationships. Oikos, 2019, 128, 960-971.	2.7	19
33	Regional rainfall and local topography jointly drive tree community assembly in lowland tropical forests of New Caledonia. Journal of Vegetation Science, 2019, 30, 845-856.	2.2	15
34	Deterministic processes drive functional and phylogenetic temporal changes of woody species in temperate forests in Northeast China. Annals of Forest Science, 2019, 76, 1.	2.0	10
35	Disentangling the processes driving tree community assembly in a tropical biodiversity hotspot (New) Tj ETQq1 1 0.784314 rgBT /Overlock	3.0	4
36	Functional biogeography of dietary strategies in birds. Global Ecology and Biogeography, 2019, 28, 1004-1017.	5.8	16

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37	Phylogenetic diversity in the Western Ghats biodiversity hotspot reflects environmental filtering and past niche diversification of trees. Journal of Biogeography, 2019, 46, 145-157.	3.0	25
38	What makes a weed a weed? A largeâ€scale evaluation of arable weeds through a functional lens. American Journal of Botany, 2019, 106, 90-100.	1.7	63
39	Two dimensions define the variation of fine root traits across plant communities under the joint influence of ecological succession and annual mowing. Journal of Ecology, 2018, 106, 2031-2042.	4.0	60
40	Ecological and biogeographical drivers of freshwater green algae biodiversity: from local communities to large-scale species pools of desmids. Oecologia, 2018, 186, 1017-1030.	2.0	15
41	How teachers' attitudes on GMO relate to their environmental values. Journal of Environmental Psychology, 2018, 57, 1-9.	5.1	13
42	Species distribution modeling based on the automated identification of citizen observations. Applications in Plant Sciences, 2018, 6, e1029.	2.1	25
43	<i>ecolottery</i>: Simulating and assessing community assembly with environmental filtering and neutral dynamics in <scp>R</scp>. Methods in Ecology and Evolution, 2018, 9, 693-703.	5.2	35
44	Cushion-plant protection determines guild-dependent plant strategies in high-elevation peatlands of the Cordillera Real, Bolivian Andes. Perspectives in Plant Ecology, Evolution and Systematics, 2018, 30, 103-114.	2.7	11
45	Multiple facets of rarity among rain forest trees in the Western Ghats of India. Biological Conservation, 2018, 228, 110-119.	4.1	4
46	Boundary constraints on population dynamics in a percolating habitat. Ecological Complexity, 2018, 36, 230-238.	2.9	0
47	Functional rarity of coral reef fishes at the global scale: Hotspots and challenges for conservation. Biological Conservation, 2018, 226, 288-299.	4.1	35
48	What makes traitâ€"abundance relationships when both environmental filtering and stochastic neutral dynamics are at play?. Oikos, 2018, 127, 1735-1745.	2.7	24
49	How to design trait-based analyses of community assembly mechanisms: Insights and guidelines from a literature review. Perspectives in Plant Ecology, Evolution and Systematics, 2017, 25, 29-44.	2.7	53
50	Functional Rarity: The Ecology of Outliers. Trends in Ecology and Evolution, 2017, 32, 356-367.	8.7	258
51	Mowing influences communityâ€level variation in resourceâ€use strategies and flowering phenology along an ecological succession on Mediterranean road slopes. Applied Vegetation Science, 2017, 20, 376-387.	1.9	11
52	Sensitivity of communityâ€level traitâ€"environment relationships to data representativeness: A test for functional biogeography. Global Ecology and Biogeography, 2017, 26, 729-739.	5.8	37
53	A Common Toolbox to Understand, Monitor or Manage Rarity? A Response to Carmona et al.. Trends in Ecology and Evolution, 2017, 32, 891-893.	8.7	4
54	Plant community structure and nitrogen inputs modulate the climate signal on leaf traits. Global Ecology and Biogeography, 2017, 26, 1138-1152.	5.8	37

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55	funrar: An R package to characterize functional rarity. Diversity and Distributions, 2017, 23, 1365-1371.	4.1	90
56	Two disjunct Pleistocene populations and anisotropic postglacial expansion shaped the current genetic structure of the relict plant Amborella trichopoda. PLoS ONE, 2017, 12, e0183412.	2.5	6
57	What it takes to invade grassland ecosystems: traits, introduction history and filtering processes. Ecology Letters, 2016, 19, 219-229.	6.4	86
58	From the Neutral Theory to a Comprehensive and Multiscale Theory of Ecological Equivalence. Quarterly Review of Biology, 2016, 91, 321-342.	0.1	31
59	Growth rings in tropical trees: role of functional traits, environment, and phylogeny. Trees - Structure and Function, 2016, 30, 2153-2175.	1.9	23
60	Into the functional ecology of ectomycorrhizal communities: environmental filtering of enzymatic activities. Journal of Ecology, 2016, 104, 1585-1598.	4.0	28
61	Past potential habitats shed light on the biogeography of endemic tree species of the Western Ghats biodiversity hotspot, South India. Journal of Biogeography, 2016, 43, 899-910.	3.0	15
62	CSR ecological strategies and plant mating systems: outcrossing increases with competitiveness but stressâ€tolerance is related to mixed mating. Oikos, 2016, 125, 1296-1303.	2.7	38
63	Sub-chapter 2.4.4. Using the past to predict the future. , 2016, , 377-386.		2
64	Beyond ectomycorrhizal bipartite networks: projected networks demonstrate contrasted patterns between early- and late-successional plants in Corsica. Frontiers in Plant Science, 2015, 6, 881.	3.6	25
65	Recent declines and range changes of orchids in Western Europe (France, Belgium and Luxembourg). Biological Conservation, 2015, 190, 133-141.	4.1	44
66	Vegetation ecology meets ecosystem science: Permanent grasslands as a functional biogeography case study. Science of the Total Environment, 2015, 534, 43-51.	8.0	38
67	Long-Distance Rescue and Slow Extinction Dynamics Govern Multiscale Metapopulations. American Naturalist, 2015, 186, 460-469.	2.1	12
68	Characterizing the Phylogenetic Tree Community Structure of a Protected Tropical Rain Forest Area in Cameroon. PLoS ONE, 2014, 9, e98920.	2.5	8
69	Statistical ecology comes of age. Biology Letters, 2014, 10, 20140698.	2.3	40
70	How do habitat filtering and niche conservatism affect community composition at different taxonomic resolutions?. Ecology, 2014, 95, 2179-2191.	3.2	12
71	Correlated percolation models of structured habitat in ecology. Physica A: Statistical Mechanics and Its Applications, 2014, 416, 290-308.	2.6	8
72	Phylogeography and niche modelling of the relict plant *Amborella trichopoda* (Amborellaceae) reveal multiple Pleistocene refugia in New Caledonia. Molecular Ecology, 2013, 22, 6163-6178.	3.9	35

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73	Changing assembly processes during a primary succession of plant communities on Mediterranean roadcuts. Journal of Plant Ecology, 2013, 6, 19-28.	2.3	10
74	Do Spatially-Implicit Estimates of Neutral Migration Comply with Seed Dispersal Data in Tropical Forests?. PLoS ONE, 2013, 8, e72497.	2.5	5
75	Comment on â€œGlobal Correlations in Tropical Tree Species Richness and Abundance Reject Neutralityâ€. Science, 2012, 336, 1639-1639.	12.6	4
76	Ecophylogenetics: advances and perspectives. Biological Reviews, 2012, 87, 769-785.	10.4	341
77	Community ecology in the age of multivariate multiscale spatial analysis. Ecological Monographs, 2012, 82, 257-275.	5.4	506
78	Mechanisms of ecological succession: insights from plant functional strategies. Oikos, 2012, 121, 1761-1770.	2.7	114
79	The role of epiphytism in architecture and evolutionary constraint within mycorrhizal networks of tropical orchids. Molecular Ecology, 2012, 21, 5098-5109.	3.9	164
80	Phylogenetic turnover in tropical tree communities: impact of environmental filtering, biogeography and mesoclimatic niche conservatism. Global Ecology and Biogeography, 2012, 21, 1007-1016.	5.8	84
81	Estimating immigration in neutral communities: theoretical and practical insights into the sampling properties. Methods in Ecology and Evolution, 2012, 3, 152-161.	5.2	2
82	In search of a health education model: teachersâ€™ conceptions in four Mediterranean countries. Global Health Promotion, 2011, 18, 5-15.	1.3	9
83	How does herbivory affect individuals and populations of the perennial herb Paeonia officinalis?. Flora: Morphology, Distribution, Functional Ecology of Plants, 2011, 206, 544-549.	1.2	4
84	Equation or Algorithm: Differences and Choosing Between Them. Acta Biotheoretica, 2011, 59, 67-79.	1.5	5
85	Continental-scale patterns of *Cecropia* reproductive phenology: evidence from herbarium specimens. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 2437-2445.	2.6	46
86	Teachers' conceptions of nature and environment in 16 countries. Journal of Environmental Psychology, 2009, 29, 407-413.	5.1	57
87	Studying ecological communities from a neutral standpoint: A review of modelsâ€™ structure and parameter estimation. Ecological Modelling, 2009, 220, 2603-2610.	2.5	21
88	Distance-based eigenvector maps (DBEM) to analyse metapopulation structure with irregular sampling. Ecological Modelling, 2009, 220, 2683-2689.	2.5	11
89	ALLEE EFFECT AND SELF-FERTILIZATION IN HERMAPHRODITES: REPRODUCTIVE ASSURANCE IN A STRUCTURED METAPOPULATION. Evolution; International Journal of Organic Evolution, 2008, 62, 2558-2569.	2.3	54
90	Beta Diversity in Spatially Implicit Neutral Models: A New Way to Assess Species Migration. American Naturalist, 2008, 172, 116-127.	2.1	32

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91	ESTIMATING PARAMETERS OF NEUTRAL COMMUNITIES: FROM ONE SINGLE LARGE TO SEVERAL SMALL SAMPLES. Ecology, 2007, 88, 2482-2488.	3.2	40
92	Spectral analysis of simulated species distribution maps provides insights into metapopulation dynamics. Ecological Modelling, 2007, 205, 314-322.	2.5	11
93	Automated Identification of Citizen Science Observations for Ecological Studies. Biodiversity Information Science and Standards, 0, 2, e25450.	0.0	0
94	When more competitors means less harvested resource. Peer Community in Ecology, 0, , .	0.0	0
95	Diversification and divergence of rainforest woody plants in South India and Madagascar relate to geomorphological history. Journal of Biogeography, 0, , .	3.0	1
96	How to evaluate and interpret the contribution of species turnover and interaction rewiring when comparing ecological networks?. Peer Community in Ecology, 0, , .	0.0	0
97	Securing Biodiversity, Functional Integrity, and Ecosystem Services in Drying River Networks (DRYvER). Research Ideas and Outcomes, 0, 7, .	1.0	4