Dominique Gravel

List of Publications by Year
in descending order

128 papers	10,841 citations	31976 53 h-index	38395 95 g-index
145 all docs	145 docs citations	145 times ranked	12675 citing authors

#	Article	IF	Citations
1	Reconciling niche and neutrality: the continuum hypothesis. Ecology Letters, 2006, 9, 399-409.	6.4	635
2	Coâ€occurrence is not evidence of ecological interactions. Ecology Letters, 2020, 23, 1050-1063.	6.4	427
3	Islands as model systems in ecology and evolution: prospects fifty years after MacArthurâ€Wilson. Ecology Letters, 2015, 18, 200-217.	6.4	356
4	Accounting for dispersal and biotic interactions to disentangle the drivers of species distributions and their abundances. Ecology Letters, 2012, 15, 584-593.	6.4	352
5	Beyond species: why ecological interaction networks vary through space and time. Oikos, 2015, 124, 243-251.	2.7	347
6	Analysing ecological networks of species interactions. Biological Reviews, 2019, 94, 16-36.	10.4	347
7	The dissimilarity of species interaction networks. Ecology Letters, 2012, 15, 1353-1361.	6.4	341
8	Ecophylogenetics: advances and perspectives. Biological Reviews, 2012, 87, 769-785.	10.4	341
9	A comprehensive evaluation of predictive performance of 33 species distribution models at species and community levels. Ecological Monographs, 2019, 89, e01370.	5.4	290
10	Scalingâ€up biodiversityâ€ecosystem functioning research. Ecology Letters, 2020, 23, 757-776.	6.4	270
11	Inferring biotic interactions from proxies. Trends in Ecology and Evolution, 2015, 30, 347-356.	8.7	267
12	Linking community and ecosystem dynamics through spatial ecology. Ecology Letters, 2011, 14, 313-323.	6.4	213
13	Comparing species interaction networks along environmental gradients. Biological Reviews, 2018, 93, 785-800.	10.4	203
14	Experimental niche evolution alters the strength of the diversityâ€“productivity relationship. Nature, 2011, 469, 89-92.	27.8	200
15	Trophic theory of island biogeography. Ecology Letters, 2011, 14, 1010-1016.	6.4	198
16	The influence of interspecific interactions on species range expansion rates. Ecography, 2014, 37, 1198-1209.	4.5	196
17	Inferring food web structure from predatorâ€“prey body size relationships. Methods in Ecology and Evolution, 2013, 4, 1083-1090.	5.2	185
18	Functional identity is the main driver of diversity effects in young tree communities. Ecology Letters, 2016, 19, 638-647.	6.4	182

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19	Benchmarking novel approaches for modelling speciesÂrange dynamics. Global Change Biology, 2016, 22, 2651-2664.	9.5	180
20	A common framework for identifying linkage rules across different types of interactions. Functional Ecology, 2016, 30, 1894-1903.	3.6	161
21	Stability and complexity in model meta-ecosystems. Nature Communications, 2016, 7, 12457.	12.8	149
22	Trophic complementarity drives the biodiversityâ€“ecosystem functioning relationship in food webs. Ecology Letters, 2013, 16, 853-861.	6.4	141
23	Does probability of occurrence relate to population dynamics?. Ecography, 2014, 37, 1155-1166.	4.5	127
24	For the sake of resilience and multifunctionality, let's diversify planted forests!. Conservation Letters, 2022, 15, e12829.	5.7	124
25	Source and sink dynamics in metaâ€ecosystems. Ecology, 2010, 91, 2172-2184.	3.2	122
26	From projected species distribution to foodâ€web structure under climate change. Global Change Biology, 2014, 20, 730-741.	9.5	122
27	No complexityâ€“stability relationship in empirical ecosystems. Nature Communications, 2016, 7, 12573.	12.8	121
28	The meaning of functional trait composition of food webs for ecosystem functioning. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150268.	4.0	119
29	Extending the concept of keystone species to communities and ecosystems. Ecology Letters, 2013, 16, 1-8.	6.4	114
30	Niche Breadth: Causes and Consequences for Ecology, Evolution, and Conservation. Quarterly Review of Biology, 2020, 95, 179-214.	0.1	114
31	Synthesis and future research directions linking tree diversity to growth, survival, and damage in a global network of tree diversity experiments. Environmental and Experimental Botany, 2018, 152, 68-89.	4.2	113
32	Shade tolerance, canopy gaps and mechanisms of coexistence of forest trees. Oikos, 2010, 119, 475-484.	2.7	110
33	Multifaceted diversityâ€“area relationships reveal global hotspots of mammalian species, trait and lineage diversity. Global Ecology and Biogeography, 2014, 23, 836-847.	5.8	110
34	Integrating Biogeography with Contemporary Niche Theory. Trends in Ecology and Evolution, 2017, 32, 488-499.	8.7	102
35	Biodiversity as insurance: from concept to measurement and application. Biological Reviews, 2021, 96, 2333-2354.	10.4	101
36	Ectomycorrhizal fungal diversity and saprotrophic fungal diversity are linked to different tree community attributes in a fieldâ€based tree experiment. Molecular Ecology, 2016, 25, 4032-4046.	3.9	95

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37	When is an ecological network complex? Connectance drives degree distribution and emerging network properties. PeerJ, 2014, 2, e251.	2.0	95
38	Species coexistence in a variable world. Ecology Letters, 2011, 14, 828-839.	6.4	94
39	Crossâ€scale integration of knowledge for predicting species ranges: a metamodelling framework. Global Ecology and Biogeography, 2016, 25, 238-249.	5.8	88
40	Advancing biodiversityâ€“ecosystem functioning science using high-density tree-based experiments over functional diversity gradients. Oecologia, 2014, 174, 609-621.	2.0	86
41	Bringing Elton and Grinnell together: a quantitative framework to represent the biogeography of ecological interaction networks. Ecography, 2019, 42, 401-415.	4.5	85
42	Unifying sources and sinks in ecology andÂ<scp>E</scp>arth sciences. Biological Reviews, 2013, 88, 365-379.	10.4	85
43	A theory for species co-occurrence in interaction networks. Theoretical Ecology, 2016, 9, 39-48.	1.0	83
44	Persistence Increases with Diversity and Connectance in Trophic Metacommunities. PLoS ONE, 2011, 6, e19374.	2.5	81
45	Extinction debt and colonization credit delay range shifts of eastern North American trees. Nature Ecology and Evolution, 2017, 1, .	7.8	79
46	Towards a multiâ€trophic extension of metacommunity ecology. Ecology Letters, 2019, 22, 19-33.	6.4	79
47	On the development of a predictive functional trait approach for studying terrestrial arthropods. Journal of Animal Ecology, 2018, 87, 1209-1220.	2.8	77
48	The spatial scaling of species interaction networks. Nature Ecology and Evolution, 2018, 2, 782-790.	7.8	77
49	The marine fish food web is globally connected. Nature Ecology and Evolution, 2019, 3, 1153-1161.	7.8	76
50	Emergence of Structural Patterns in Neutral Trophic Networks. PLoS ONE, 2012, 7, e38295.	2.5	71
51	Species traits as drivers of food web structure. Oikos, 2018, 127, 316-326.	2.7	68
52	Patch Dynamics, Persistence, and Species Coexistence in Metaecosystems. American Naturalist, 2010, 176, 289-302.	2.1	66
53	The Paradox of Enrichment in Metaecosystems. American Naturalist, 2014, 184, 752-763.	2.1	65
54	Hosts, parasites and their interactions respond to different climatic variables. Global Ecology and Biogeography, 2017, 26, 942-951.	5.8	62

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55	Trait matching and phylogeny as predictors of predatorâ€“prey interactions involving ground beetles. Functional Ecology, 2018, 32, 192-202.	3.6	62
56	The Case for Open Preprints in Biology. PLoS Biology, 2013, 11, e1001563.	5.6	60
57	Extensions of Island Biogeography Theory predict the scaling of functional trait composition with habitat area and isolation. Ecology Letters, 2017, 20, 135-146.	6.4	58
58	How lifeâ€history traits affect ecosystem properties: effects of dispersal in metaâ€ecosystems. Oikos, 2017, 126, 532-546.	2.7	54
59	Assessing changes in arthropod predatorâ€“prey interactions through <scp>DNA</scp>â€based gut content analysisâ€”variable environment, stable diet. Molecular Ecology, 2019, 28, 266-280.	3.9	54
60	mangal â€“ making ecological network analysis simple. Ecography, 2016, 39, 384-390.	4.5	53
61	Ecological Data Should Not Be So Hard to Find and Reuse. Trends in Ecology and Evolution, 2019, 34, 494-496.	8.7	52
62	The structure of probabilistic networks. Methods in Ecology and Evolution, 2016, 7, 303-312.	5.2	49
63	Body size as a predictor of species loss effect on ecosystem functioning. Scientific Reports, 2014, 4, 4616.	3.3	47
64	Moderate disturbances accelerate forest transition dynamics under climate change in the temperateâ€“boreal ecotone of eastern North America. Global Change Biology, 2020, 26, 4418-4435.	9.5	44
65	An integrative framework of coexistence mechanisms in competitive metacommunities. Ecography, 2017, 40, 630-641.	4.5	42
66	Ecological interactions and the Netflix problem. PeerJ, 2017, 5, e3644.	2.0	39
67	Global knowledge gaps in species interaction networks data. Journal of Biogeography, 2021, 48, 1552-1563.	3.0	38
68	Highâ€Throughput Sequencing: A Roadmap Toward Community Ecology. Ecology and Evolution, 2013, 3, 1125-1139.	1.9	36
69	Interactions among trees: A key element in the stabilising effect of species diversity on forest growth. Functional Ecology, 2019, 33, 360-367.	3.6	36
70	Intraspecific variability in growth response to environmental fluctuations modulates the stabilizing effect of species diversity on forest growth. Journal of Ecology, 2017, 105, 1010-1020.	4.0	35
71	Ecological network complexity scales with area. Nature Ecology and Evolution, 2022, 6, 307-314.	7.8	35
72	Identifying a common backbone of interactions underlying food webs from different ecosystems. Nature Communications, 2018, 9, 2603.	12.8	34

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73	Geographic scale and disturbance influence intraspecific trait variability in leaves and roots of North American understorey plants. Functional Ecology, 2019, 33, 1771-1784.	3.6	34
74	Ecogeographical rules and the macroecology of food webs. Global Ecology and Biogeography, 2019, 28, 1204-1218.	5.8	34
75	On the integration of biotic interaction and environmental constraints at the biogeographical scale. Ecography, 2016, 39, 921-931.	4.5	33
76	A roadmap towards predicting species interaction networks (across space and time). Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20210063.	4.0	33
77	Synthetic datasets and community tools for the rapid testing of ecological hypotheses. Ecography, 2016, 39, 402-408.	4.5	32
78	The internal structure of metacommunities. Oikos, 2022, 2022, .	2.7	32
79	Effect of a major ice storm on understory light conditions in an old-growth Acerâ€“Fagus forest: Pattern of recovery over seven years. Forest Ecology and Management, 2007, 242, 553-557.	3.2	30
80	Forecasting fineâ€scale changes in the foodâ€web structure of coastal marine communities under climate change. Ecography, 2016, 39, 1227-1237.	4.5	30
81	Local adaptation of trees at the range margins impacts range shifts in the face of climate change. Global Ecology and Biogeography, 2018, 27, 1507-1519.	5.8	29
82	PARTITIONING THE FACTORS OF SPATIAL VARIATION IN REGENERATION DENSITY OF SHADE-TOLERANT TREE SPECIES. Ecology, 2008, 89, 2879-2888.	3.2	28
83	Assessing tree germination resilience to global warming: a manipulative experiment using sugar maple (Acer saccharum). Seed Science Research, 2016, 26, 153-164.	1.7	28
84	Spatial analyses of multiâ€trophic terrestrial vertebrate assemblages in Europe. Global Ecology and Biogeography, 2019, 28, 1636-1648.	5.8	27
85	Traits of litterâ€dwelling forest arthropod predators and detritivores covary spatially with traits of their resources. Ecology, 2019, 100, e02815.	3.2	27
86	Intraguild predation enhances biodiversity and functioning in complex food webs. Ecology, 2019, 100, e02616.	3.2	26
87	Linking DNA Metabarcoding and Text Mining to Create Network-Based Biomonitoring Tools: A Case Study on Boreal Wetland Macroinvertebrate Communities. Advances in Ecological Research, 2018, 59, 33-74.	2.7	25
88	Mammalian phylogenetic diversityâ€“area relationships at a continental scale. Ecology, 2015, 96, 2814-2822.	3.2	24
89	Derivation of Predator Functional Responses Using a Mechanistic Approach in a Natural System. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	24
90	Sapling age structure and growth series reveal a shift in recruitment dynamics of sugar maple and American beech over the last 40Âyears. Canadian Journal of Forest Research, 2011, 41, 873-880.	1.7	22

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91	Spatial Structures of the Environment and of Dispersal Impact Species Distribution in Competitive Metacommunities. PLoS ONE, 2013, 8, e68927.	2.5	22
92	A quantitative framework for investigating the reliability of empirical network construction. Methods in Ecology and Evolution, 2019, 10, 902-911.	5.2	22
93	Perceptions of climate change across the Canadian forest sector: The key factors of institutional and geographical environment. PLoS ONE, 2018, 13, e0197689.	2.5	21
94	Priority effects will impede range shifts of temperate tree species into the boreal forest. Journal of Ecology, 2020, 108, 1155-1173.	4.0	21
95	Thermal mismatches in biological rates determine trophic control and biomass distribution under warming. Global Change Biology, 2021, 27, 257-269.	9.5	21
96	Identity effects dominate the impacts of multiple species extinctions on the functioning of complex food webs. Ecology, 2013, 94, 169-179.	3.2	20
97	Moving toward a sustainable ecological science: don't let data go to waste!. Ideas in Ecology and Evolution, 2013, 6, .	0.1	20
98	Simulations of biomass dynamics in community food webs. Methods in Ecology and Evolution, 2017, 8, 881-886.	5.2	19
99	A novel set of traits to describe Collembola mouthparts: taking a bite out of the broad chewing mandible classification. Soil Biology and Biochemistry, 2019, 138, 107608.	8.8	19
100	Forecasting parasite sharing under climate change. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200360.	4.0	19
101	Seeing is believing? Comparing plantâ€“herbivore networks constructed by field coâ€occurrence and DNA barcoding methods for gaining insights into network structures. Ecology and Evolution, 2019, 9, 1764-1776.	1.9	18
102	Trait positions for elevated invasiveness in adaptive ecological networks. Biological Invasions, 2021, 23, 1965-1985.	2.4	18
103	How Likely Is Speciation in Neutral Ecology?. American Naturalist, 2012, 179, 137-144.	2.1	16
104	Foodâ€web structure of willowâ€galling sawflies and their natural enemies across Europe. Ecology, 2017, 98, 1730-1730.	3.2	16
105	A complex speciationâ€“richness relationship in a simple neutral model. Ecology and Evolution, 2012, 2, 1781-1790.	1.9	15
106	Revealing biases in the sampling of ecological interaction networks. PeerJ, 2019, 7, e7566.	2.0	15
107	Climate affects neighbourâ€induced changes in leaf chemical defences and tree diversityâ€“herbivory relationships. Functional Ecology, 2021, 35, 67-81.	3.6	12
108	The transient response of ecosystems to climate change is amplified by trophic interactions. Oikos, 2018, 127, 1822-1833.	2.7	11

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109	Variable strength of predatorâ€mediated effects on species occurrence in an arctic terrestrial vertebrate community. Ecography, 2021, 44, 1236-1248.	4.5	11
110	A mechanistic model of functional response provides new insights into indirect interactions among arctic tundra prey. Ecology, 2022, 103, e3734.	3.2	11
111	Size evolution in microorganisms masks trade-offs predicted by the growth rate hypothesis. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20162272.	2.6	10
112	Trait selection during food web assembly: the roles of interactions and temperature. Theoretical Ecology, 2016, 9, 417-429.	1.0	10
113	Springtail community structure is influenced by functional traits but not biogeographic origin of leaf litter in soils of novel forest ecosystems. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180647.	2.6	10
114	Epidemiological landscape models reproduce cyclic insect outbreaks. Ecological Complexity, 2017, 31, 78-87.	2.9	9
115	Direct and Indirect Effects of Forest Anthropogenic Disturbance on Above and Below Ground Communities and Litter Decomposition. Ecosystems, 2021, 24, 1716-1737.	3.4	9
116	Disentangling food-web environment relationships: A review with guidelines. Basic and Applied Ecology, 2022, 61, 102-115.	2.7	9
117	Temperature and trophic structure are driving microbial productivity along a biogeographical gradient. Ecography, 2016, 39, 981-989.	4.5	8
118	Regional variation drives differences in microbial communities associated with sugar maple across a latitudinal range. Ecology, 2022, 103, e3727.	3.2	7
119	Can hyperparasitoids cause largeâ€scale outbreaks of insect herbivores?. Oikos, 2018, 127, 1344-1354.	2.7	6
120	Climateâ€induced variation in the demography of 14 tree species is not sufficient to explain their distribution in eastern North America. Global Ecology and Biogeography, 2021, 30, 352-369.	5.8	6
121	Slow demography and limited dispersal constrain the expansion of northâ€eastern temperate forests under climate change. Journal of Biogeography, 2020, 47, 2645-2656.	3.0	5
122	Sampling and asymptotic network properties of spatial multiâ€trophic networks. Oikos, 2021, 130, 2250-2259.	2.7	5
123	More than Moran: coupling statistical and simulation models to understand how defoliation spread and weather variation drive insect outbreak dynamics. Canadian Journal of Forest Research, 2018, 48, 255-264.	1.7	3
124	Complex Ecological Networks. , 2019, , 536-545.		3
125	Toward a general theory of metacommunity ecology. , 2020, , 195-220.		3
126	Exotics are more complementary over time in tree biodiversityâ€“ecosystem functioning experiments. Functional Ecology, 2021, 35, 2550.	3.6	2

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127	Patterns of belowground overyielding and fineâ€root biomass in native and exotic angiosperms and gymnosperms. Oikos, 0, , .	2.7	1
128	The difficult interpretation of species co-distribution. Peer Community in Ecology, 0, , .	0.0	0