Michel Loreau

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Biodiversity loss and its impact on humanity. Nature, 2012, 486, 59-67. | 27.8 | 4,969 |
| 2 | Partitioning selection and complementarity in biodiversity experiments. Nature, 2001, 412, 72-76. | 27.8 | 2,493 |
| 3 | High plant diversity is needed to maintain ecosystem services. Nature, 2011, 477, 199-202. | 27.8 | 1,195 |
| 4 | Impacts of plant diversity on biomass production increase through time because of species complementarity. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18123-18128. | 7.1 | 1,175 |
| 5 | Biodiversity increases the resistance of ecosystem productivity to climate extremes. Nature, 2015, 526, 574-577. | 27.8 | 1,032 |
| 6 | Community Patterns in Source‣ink Metacommunities. American Naturalist, 2003, 162, 544-557. | 2.1 | 827 |
| 7 | The functional role of biodiversity in ecosystems: incorporating trophic complexity. Ecology Letters, 2007, 10, 522-538. | 6.4 | 808 |
| 8 | Biodiversity as spatial insurance in heterogeneous landscapes. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12765-12770. | 7.1 | 805 |
| 9 | Biodiversity and ecosystem stability: a synthesis of underlying mechanisms. Ecology Letters, 2013, 16, 106-115. | 6.4 | 780 |
| 10 | Biodiversity and ecosystem functioning: recent theoretical advances. Oikos, 2000, 91, 3-17. | 2.7 | 767 |
| 11 | Meta-ecosystems: a theoretical framework for a spatial ecosystem ecology. Ecology Letters, 2003, 6, 673-679. | 6.4 | 527 |
| 12 | Species Synchrony and Its Drivers: Neutral and Nonneutral Community Dynamics in Fluctuating Environments. American Naturalist, 2008, 172, E48-E66. | 2.1 | 488 |
| 13 | Linking the influence and dependence of people on biodiversity across scales. Nature, 2017, 546, 65-72. | 27.8 | 474 |
| 14 | Functional Diversity of Plant–Pollinator Interaction Webs Enhances the Persistence of Plant Communities. PLoS Biology, 2005, 4, e1. | 5.6 | 438 |
| 15 | Are communities saturated? On the relationship between alpha, beta and gamma diversity. Ecology Letters, 2000, 3, 73-76. | 6.4 | 413 |
| 16 | The Causes and Consequences of Compensatory Dynamics in Ecological Communities. Annual Review of Ecology, Evolution, and Systematics, 2009, 40, 393-414. | 8.3 | 388 |
| 17 | Separating Sampling and Other Effects in Biodiversity Experiments. Oikos, 1998, 82, 600. | 2.7 | 382 |
| 18 | From selection to complementarity: shifts in the causes of biodiversity–productivity relationships in a long-term biodiversity experiment. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 871-876. | 2.6 | 375 |

| # | Article | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Linking biodiversity and ecosystems: towards a unifying ecological theory. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 49-60. | 4.0 | 349 |
| 20 | Does functional redundancy exist?. Oikos, 2004, 104, 606-611. | 2.7 | 340 |
| 21 | Species Richness and the Temporal Stability of Biomass Production: A New Analysis of Recent Biodiversity Experiments. American Naturalist, 2014, 183, 1-12. | 2.1 | 309 |
| 22 | From Populations to Ecosystems. , 2010, , . | | 298 |
| 23 | Evolutionary emergence of size-structured food webs. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5761-5766. | 7.1 | 297 |
| 24 | Scalingâ€up biodiversityâ€ecosystem functioning research. Ecology Letters, 2020, 23, 757-776. | 6.4 | 270 |
| 25 | Functional diversity governs ecosystem response to nutrient enrichment. Nature, 2000, 405, 340-344. | 27.8 | 264 |
| 26 | Overyielding in grassland communities: testing the sampling effect hypothesis with replicated biodiversity experiments. Ecology Letters, 2002, 5, 502-511. | 6.4 | 258 |
| 27 | Food-web constraints on biodiversity-ecosystem functioning relationships. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14949-14954. | 7.1 | 253 |
| 28 | Predicting ecosystem stability from community composition and biodiversity. Ecology Letters, 2013, 16, 617-625. | 6.4 | 251 |
| 29 | Global Human Footprint on the Linkage between Biodiversity and Ecosystem Functioning in Reef Fishes. PLoS Biology, 2011, 9, e1000606. | 5.6 | 249 |
| 30 | Global distribution of earthworm diversity. Science, 2019, 366, 480-485. | 12.6 | 248 |
| 31 | GRAZING OPTIMIZATION AND NUTRIENT CYCLING: WHEN DO HERBIVORES ENHANCE PLANT PRODUCTION?. Ecology, 1998, 79, 2242-2252. | 3.2 | 246 |
| 32 | REVIEW: Predictive ecology in a changing world. Journal of Applied Ecology, 2015, 52, 1293-1310. | 4.0 | 237 |
| 33 | Subsidy hypothesis and strength of trophic cascades across ecosystems. Ecology Letters, 2008, 11, 1147-1156. | 6.4 | 235 |
| 34 | The predator-prey power law: Biomass scaling across terrestrial and aquatic biomes. Science, 2015, 349, aac6284. | 12.6 | 235 |
| 35 | Estimating local biodiversity change: a critique of papers claiming no net loss of local diversity. Ecology, 2016, 97, 1949-1960. | 3.2 | 224 |
| 36 | Biodiversity and ecosystem stability across scales in metacommunities. Ecology Letters, 2016, 19, 510-518. | 6.4 | 213 |

| # | Article | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Contributions of a global network of tree diversity experiments to sustainable forest plantations. Ambio, 2016, 45, 29-41. | 5.5 | 203 |
| 38 | Comparing species interaction networks along environmental gradients. Biological Reviews, 2018, 93, 785-800. | 10.4 | 203 |
| 39 | Ecosystem stability in space: α, β and γ variability. Ecology Letters, 2014, 17, 891-901. | 6.4 | 200 |
| 40 | Plant species richness and community productivity: why the mechanism that promotes coexistence matters. Ecology Letters, 2002, 5, 56-65. | 6.4 | 199 |
| 41 | Does complementary resource use enhance ecosystem functioning? A model of light competition in plant communities. Ecology Letters, 2007, 10, 54-62. | 6.4 | 189 |
| 42 | Tropical tree diversity enhances light capture through crown plasticity and spatial and temporal niche differences. Ecology, 2014, 95, 2479-2492. | 3.2 | 178 |
| 43 | Microbial diversity, producer–decomposer interactions and ecosystem processes: a theoretical model. Proceedings of the Royal Society B: Biological Sciences, 2001, 268, 303-309. | 2.6 | 170 |
| 44 | Plant diversity effects on grassland productivity are robust to both nutrient enrichment and drought. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150277. | 4.0 | 169 |
| 45 | Biodiversity effects and transgressive overyielding. Journal of Plant Ecology, 2008, 1, 95-102. | 2.3 | 160 |
| 46 | Quantifying effects of biodiversity on ecosystem functioning across times and places. Ecology Letters, 2018, 21, 763-778. | 6.4 | 157 |
| 47 | Trophic Interactions and the Relationship between Species Diversity and Ecosystem Stability. American Naturalist, 2005, 166, E95-E114. | 2.1 | 154 |
| 48 | Local facilitation, bistability and transitions in arid ecosystems. Theoretical Population Biology, 2007, 71, 367-379. | 1.1 | 149 |
| 49 | Metacommunity theory explains the emergence of food web complexity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19293-19298. | 7.1 | 149 |
| 50 | Soil fauna: key to new carbon models. Soil, 2016, 2, 565-582. | 4.9 | 149 |
| 51 | The biodiversityâ€dependent ecosystem service debt. Ecology Letters, 2015, 18, 119-134. | 6.4 | 146 |
| 52 | Generic assembly patterns in complex ecological communities. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2156-2161. | 7.1 | 141 |
| 53 | Diversity without representation. Nature, 2006, 442, 245-246. | 27.8 | 139 |
| 54 | Nitrogen enrichment weakens ecosystem stability through decreased species asynchrony and population stability in a temperate grassland. Global Change Biology, 2016, 22, 1445-1455. | 9.5 | 139 |

| # | Article | IF | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Connecting models, data, and concepts to understand fragmentation's ecosystemâ€wide effects. Ecography, 2017, 40, 1-8. | 4.5 | 137 |
| 56 | Consumers as Maximizers of Matter and Energy Flow in Ecosystems. American Naturalist, 1995, 145, 22-42. | 2.1 | 136 |
| 57 | Diversity spurs diversification in ecological communities. Nature Communications, 2017, 8, 15810. | 12.8 | 133 |
| 58 | Is local biodiversity declining or not? A summary of the debate over analysis of species richness time trends. Biological Conservation, 2018, 219, 175-183. | 4.1 | 127 |
| 59 | Source and sink dynamics in metaâ€ecosystems. Ecology, 2010, 91, 2172-2184. | 3.2 | 122 |
| 60 | The relationship between biodiversity and ecosystem functioning in food webs. Ecological Research, 2006, 21, 17-25. | 1.5 | 121 |
| 61 | Spatial Flows and the Regulation of Ecosystems. American Naturalist, 2004, 163, 606-615. | 2.1 | 112 |
| 62 | ECOLOGICAL STOICHIOMETRY, PRIMARY PRODUCER–DECOMPOSER INTERACTIONS, AND ECOSYSTEM PERSISTENCE. Ecology, 2001, 82, 3069-3082. | 3.2 | 110 |
| 63 | Ecological and evolutionary consequences of niche construction for its agent. Ecology Letters, 2008, 11, 1072-1081. | 6.4 | 110 |
| 64 | Ecological constraints increase the climatic debt in forests. Nature Communications, 2016, 7, 12643. | 12.8 | 108 |
| 65 | Multispecies forest plantations outyield monocultures across a broad range of conditions. Science, 2022, 376, 865-868. | 12.6 | 107 |
| 66 | Biodiversity as insurance: from concept to measurement and application. Biological Reviews, 2021, 96, 2333-2354. | 10.4 | 101 |
| 67 | Nontrophic Interactions, Biodiversity, and Ecosystem Functioning: An Interaction Web Model. American Naturalist, 2008, 171, 91-106. | 2.1 | 98 |
| 68 | Niche construction in the light of niche theory. Ecology Letters, 2011, 14, 82-90. | 6.4 | 97 |
| 69 | Towards an integrative understanding of soil biodiversity. Biological Reviews, 2020, 95, 350-364. | 10.4 | 97 |
| 70 | Understanding the value of plant diversity for ecosystem functioning through niche theory. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20160536. | 2.6 | 96 |
| 71 | Linking scaling laws across eukaryotes. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21616-21622. | 7.1 | 95 |
| 72 | Organizing principles for vegetation dynamics. Nature Plants, 2020, 6, 444-453. | 9.3 | 95 |

| # | Article | IF | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 73 | Understanding mutualism when there is adaptation to the partner. Journal of Ecology, 2005, 93, 305-314. | 4.0 | 94 |
| 74 | Phenotypic Diversity and Stability of Ecosystem Processes. Theoretical Population Biology, 1999, 56, 29-47. | 1.1 | 90 |
| 75 | Stability and synchrony across ecological hierarchies in heterogeneous metacommunities: linking theory to data. Ecography, 2019, 42, 1200-1211. | 4.5 | 89 |
| 76 | RECONCILING EMPIRICAL ECOLOGY WITH NEUTRAL COMMUNITY MODELS. Ecology, 2006, 87, 1370-1377. | 3.2 | 87 |
| 77 | A mathematical synthesis of niche and neutral theories in community ecology. Journal of Theoretical Biology, 2011, 269, 150-165. | 1.7 | 87 |
| 78 | Cascading extinctions and ecosystem functioning: contrasting effects of diversity depending on food web structure. Oikos, 2007, 116, 163-173. | 2.7 | 85 |
| 79 | Unifying sources and sinks in ecology andÂ <scp>E</scp> arth sciences. Biological Reviews, 2013, 88, 365-379. | 10.4 | 85 |
| 80 | Ecosystem development explained by competition within and between material cycles. Proceedings of the Royal Society B: Biological Sciences, 1998, 265, 33-38. | 2.6 | 83 |
| 81 | The strength of the biodiversity–ecosystem function relationship depends on spatial scale. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180038. | 2.6 | 82 |
| 82 | Immigration and local competition in herbaceous plant communities: a three-year seed-sowing experiment. Oikos, 2004, 104, 77-90. | 2.7 | 79 |
| 83 | Effects of newly planted hedges on ground-beetle diversity (Coleoptera, Carabidae) in an agricultural landscape. Ecography, 1999, 22, 87-97. | 4.5 | 78 |
| 84 | Title is missing!. Landscape Ecology, 2001, 16, 17-32. | 4.2 | 77 |
| 85 | Biodiversity–productivity relationships are key to nature-based climate solutions. Nature Climate Change, 2021, 11, 543-550. | 18.8 | 77 |
| 86 | Measuring resilience is essential to understand it. Nature Sustainability, 2019, 2, 895-897. | 23.7 | 76 |
| 87 | Nitrogen addition does not reduce the role of spatial asynchrony in stabilising grassland communities. Ecology Letters, 2019, 22, 563-571. | 6.4 | 75 |
| 88 | General destabilizing effects of eutrophication on grassland productivity at multiple spatial scales. Nature Communications, 2020, 11, 5375. | 12.8 | 75 |
| 89 | Relationships among ecological traits of wild bee communities along gradients of habitat amount and fragmentation. Ecography, 2017, 40, 85-97. | 4.5 | 74 |
| 90 | Climate variability decreases species richness and community stability in a temperate grassland. Oecologia, 2018, 188, 183-192. | 2.0 | 74 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 91 | Above―and belowâ€ground biodiversity jointly regulate temperate forest multifunctionality along a localâ€scale environmental gradient. Journal of Ecology, 2020, 108, 2012-2024. | 4.0 | 74 |
| 92 | Biotic homogenization destabilizes ecosystem functioning by decreasing spatial asynchrony. Ecology, 2021, 102, e03332. | 3.2 | 74 |
| 93 | Emergence and maintenance of biodiversity in an evolutionary food-web model. Theoretical Ecology, 2011, 4, 467-478. | 1.0 | 73 |
| 94 | Aboveground carbon storage is driven by functional trait composition and stand structural attributes rather than biodiversity in temperate mixed forests recovering from disturbances. Annals of Forest Science, 2018, 75, 1. | 2.0 | 72 |
| 95 | Mowing exacerbates the loss of ecosystem stability under nitrogen enrichment in a temperate grassland. Functional Ecology, 2017, 31, 1637-1646. | 3.6 | 71 |
| 96 | Light partitioning in experimental grass communities. Oikos, 2008, 117, 1351-1361. | 2.7 | 70 |
| 97 | Dynamics of Reciprocal Pulsed Subsidies in Local and Meta-Ecosystems. Ecosystems, 2012, 15, 48-59. | 3.4 | 69 |
| 98 | Pyramids and cascades: a synthesis of food chain functioning and stability. Ecology Letters, 2019, 22, 405-419. | 6.4 | 68 |
| 99 | Plant-herbivore interactions and ecological stoichiometry: when do herbivores determine plant nutrient limitation?. Ecology Letters, 2001, 4, 196-206. | 6.4 | 67 |
| 100 | Evolution of body size in food webs: does the energetic equivalence rule hold?. Ecology Letters, 2006, 9, 171-178. | 6.4 | 67 |
| 101 | Intra- and interspecific density-dependent dispersal in an aquatic prey?predator system. Journal of Animal Ecology, 2007, 76, 552-558. | 2.8 | 66 |
| 102 | Patch Dynamics, Persistence, and Species Coexistence in Metaecosystems. American Naturalist, 2010, 176, 289-302. | 2.1 | 66 |
| 103 | Multiple abiotic and biotic pathways shape biomass demographic processes in temperate forests. Ecology, 2019, 100, e02650. | 3.2 | 66 |
| 104 | Material Cycling and the Stability of Ecosystems. American Naturalist, 1994, 143, 508-513. | 2.1 | 62 |
| 105 | An invariability-area relationship sheds new light on the spatial scaling of ecological stability. Nature Communications, 2017, 8, 15211. | 12.8 | 61 |
| 106 | Evolution of Local Facilitation in Arid Ecosystems. American Naturalist, 2008, 172, E1-E17. | 2.1 | 60 |
| 107 | A patch-dynamic framework for food web metacommunities. Theoretical Ecology, 2010, 3, 223-237. | 1.0 | 59 |
| 108 | Plant–herbivore–decomposer stoichiometric mismatches and nutrient cycling in ecosystems. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20122453. | 2.6 | 59 |

| # | Article | IF | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 109 | Global evidence of positive biodiversity effects on spatial ecosystem stability in natural grasslands. Nature Communications, 2019, 10, 3207. | 12.8 | 59 |
| 110 | Human–nature connectedness as a pathway to sustainability: A global metaâ€analysis. Conservation Letters, 2022, 15, e12852. | 5.7 | 59 |
| 111 | Niche and fitness differences relate the maintenance of diversity to ecosystem function: comment. Ecology, 2012, 93, 1482-1487. | 3.2 | 58 |
| 112 | The inherent multidimensionality of temporal variability: how common and rare species shape stability patterns. Ecology Letters, 2019, 22, 1557-1567. | 6.4 | 57 |
| 113 | Consistently positive effect of species diversity on ecosystem, but not population, temporal stability. Ecology Letters, 2021, 24, 2256-2266. | 6.4 | 56 |
| 114 | Relationships beetween the regional distribution of carabid beetles (Coleoptera, Carabidae) and the abundance of their potential prey. Acta Oecologica, 1997, 18, 465-483. | 1.1 | 55 |
| 115 | Limitations of entropy maximization in ecology. Oikos, 2008, 117, 1700-1710. | 2.7 | 52 |
| 116 | General relationships between consumer dispersal, resource dispersal and metacommunity diversity. Ecology Letters, 2014, 17, 175-184. | 6.4 | 52 |
| 117 | Superorganisms or loose collections of species? A unifying theory of community patterns along environmental gradients. Ecology Letters, 2019, 22, 1243-1252. | 6.4 | 52 |
| 118 | The mechanics of predator–prey interactions: First principles of physics predict predator–prey size ratios. Functional Ecology, 2019, 33, 323-334. | 3.6 | 52 |
| 119 | Nutrient enrichment and food chains: can evolution buffer top-down control?. Theoretical Population Biology, 2004, 65, 285-298. | 1.1 | 50 |
| 120 | Habitat choice meets thermal specialization: Competition with specialists may drive suboptimal habitat preferences in generalists. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11988-11993. | 7.1 | 50 |
| 121 | Meta-ecosystem dynamics and functioning on finite spatial networks. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132094. | 2.6 | 49 |
| 122 | Abiotic and biotic determinants of coarse woody productivity in temperate mixed forests. Science of the Total Environment, 2018, 630, 422-431. | 8.0 | 49 |
| 123 | Expert perspectives on global biodiversity loss and its drivers and impacts on people. Frontiers in Ecology and the Environment, 2023, 21, 94-103. | 4.0 | 49 |
| 124 | Multiple metrics of diversity have different effects on temperate forest functioning over succession. Oecologia, 2016, 182, 1175-1185. | 2.0 | 48 |
| 125 | Do we have to choose between feeding the human population and conserving nature? Modelling the global dependence of people on ecosystem services. Science of the Total Environment, 2018, 634, 1463-1474. | 8.0 | 48 |
| 126 | Density-dependent dispersal and relative dispersal affect the stability of predator–prey metacommunities. Journal of Theoretical Biology, 2010, 266, 458-469. | 1.7 | 47 |

| # | Article | IF | CITATIONS |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | Spatial ecological networks: planning for sustainability in the long-term. Current Opinion in Environmental Sustainability, 2017, 29, 187-197. | 6.3 | 46 |
| 128 | Biodiversity and Ecosystem Functioning: The Mystery of the Deep Sea. Current Biology, 2008, 18, R126-R128. | 3.9 | 45 |
| 129 | Biodiversity as spatial insurance: the effects of habitat fragmentation and dispersal on ecosystem functioning. , 2009, , 134-146. | | 45 |
| 130 | Environmental responses, not species interactions, determine synchrony of dominant species in semiarid grasslands. Ecology, 2017, 98, 971-981. | 3.2 | 43 |
| 131 | Consequences of Plant-Herbivore Coevolution on the Dynamics and Functioning of Ecosystems. Journal of Theoretical Biology, 2002, 217, 369-381. | 1.7 | 42 |
| 132 | Consumerâ€mediated recycling and cascading trophic interactions. Ecology, 2010, 91, 2162-2171. | 3.2 | 42 |
| 133 | Biodiversity, productivity, and the spatial insurance hypothesis revisited. Journal of Theoretical Biology, 2015, 380, 426-435. | 1.7 | 41 |
| 134 | Dispersal and metapopulation stability. PeerJ, 2015, 3, e1295. | 2.0 | 41 |
| 135 | A food web perspective on large herbivore community limitation. Ecography, 2011, 34, 196-202. | 4.5 | 40 |
| 136 | Robustness of mutualistic networks under phenological change and habitat destruction. Oikos, 2015, 124, 22-32. | 2.7 | 38 |
| 137 | The Impact of Spatial and Temporal Dimensions of Disturbances on Ecosystem Stability. Frontiers in Ecology and Evolution, 2018, 6, 224. | 2.2 | 38 |
| 138 | Tradeâ€offs in the provisioning and stability of ecosystem services in agroecosystems. Ecological Applications, 2019, 29, e01853. | 3.8 | 38 |
| 139 | How complementarity and selection affect the relationship between ecosystem functioning and stability. Ecology, 2021, 102, e03347. | 3.2 | 38 |
| 140 | Spatial structure and the survival of an inferior competitor: a theoretical model of neighbourhood competition in plants. Ecological Modelling, 2002, 158, 1-19. | 2.5 | 37 |
| 141 | Nutrient flows between ecosystems can destabilize simple food chains. Journal of Theoretical Biology, 2010, 266, 162-174. | 1.7 | 37 |
| 142 | Effects of biodiversity on the functioning of ecosystems: a summary of 164 experimental manipulations of species richness. Ecology, 2009, 90, 854-854. | 3.2 | 36 |
| 143 | Emergence of nutrient coâ€limitation through movement in stoichiometric metaâ€ecosystems. Ecology Letters, 2015, 18, 1163-1173 | 6.4 | 36 |
| 144 | When microbes and consumers determine the limiting nutrient of autotrophs: a theoretical analysis. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 487-497. | 2.6 | 35 |

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|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 145 | Succession in mixed boreal forest of Russia: Markov models and non-Markov effects. Ecological Modelling, 2001, 142, 25-38. | 2.5 | 34 |
| 146 | Differential responses of sizeâ€based functional groups to bottom–up and top–down perturbations in pelagic food webs: a metaâ€analysis. Oikos, 2014, 123, 1291-1300. | 2.7 | 34 |
| 147 | Coexistence of multiple food chains in a heterogeneous environment: Interactions among community structure, ecosystem functioning, and nutrient dynamics. Mathematical Biosciences, 1996, 134, 153-188. | 1.9 | 33 |
| 148 | Scale dependence of the diversity–stability relationship in a temperate grassland. Journal of Ecology, 2018, 106, 1277-1285. | 4.0 | 33 |
| 149 | Ecological autocatalysis: a central principle in ecosystem organization?. Ecological Monographs, 2018, 88, 304-319. | 5.4 | 32 |
| 150 | Nutrient-induced shifts of dominant species reduce ecosystem stability via increases in species synchrony and population variability. Science of the Total Environment, 2019, 692, 441-449. | 8.0 | 32 |
| 151 | General statistical scaling laws for stability in ecological systems. Ecology Letters, 2021, 24, 1474-1486. | 6.4 | 32 |
| 152 | Towards a more biologically realistic use of Droop's equations to model growth under multiple nutrient limitation. Oikos, 2010, 119, 897-907. | 2.7 | 31 |
| 153 | The three regimes of spatial recovery. Ecology, 2019, 100, e02586. | 3.2 | 31 |
| 154 | Reconciling biodiversity conservation, food production and farmers' demand in agricultural landscapes. Ecological Modelling, 2020, 416, 108889. | 2.5 | 31 |
| 155 | The relationship between the spatial scaling of biodiversity and ecosystem stability. Global Ecology and Biogeography, 2018, 27, 439-449. | 5.8 | 30 |
| 156 | Divergent above―and belowâ€ground biodiversity pathways mediate disturbance impacts on temperate forest multifunctionality. Global Change Biology, 2021, 27, 2883-2894. | 9.5 | 30 |
| 157 | Time scale of resource dynamics and coexistence through time partitioning. Theoretical Population Biology, 1992, 41, 401-412. | 1.1 | 29 |
| 158 | Global data on earthworm abundance, biomass, diversity and corresponding environmental properties. Scientific Data, 2021, 8, 136. | 5.3 | 29 |
| 159 | Incisor size and community structure in rodents: Two tests of the role of competition. Acta Oecologica, 1999, 20, 93-101. | 1.1 | 28 |
| 160 | Dynamics of a three-species food chain model with adaptive traits. Chaos, Solitons and Fractals, 2009, 41, 2812-2819. | 5.1 | 27 |
| 161 | Modeling the direct and indirect effects of copper on phytoplankton–zooplankton interactions. Aquatic Toxicology, 2015, 162, 73-81. | 4.0 | 27 |
| 162 | Annual activity and life cycles of carabid beetles in two forest communities. Ecography, 1985, 8, 228-235. | 4.5 | 25 |

| # | Article | IF | CITATIONS |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 163 | Beyond shading: Litter production by neighbors contributes to overyielding in tropical trees. Ecology, 2013, 94, 941-952. | 3.2 | 25 |
| 164 | (A bit) Earlier or later is always better: Phenological shifts in consumer–resource interactions. Theoretical Ecology, 2014, 7, 149-162. | 1.0 | 25 |
| 165 | An ecological theory of changing human population dynamics. People and Nature, 2019, 1, 31-43. | 3.7 | 25 |
| 166 | Agricultural land use and the sustainability of social-ecological systems. Ecological Modelling, 2020, 437, 109312. | 2.5 | 25 |
| 167 | How community adaptation affects biodiversity–ecosystem functioning relationships. Ecology Letters, 2020, 23, 1263-1275. | 6.4 | 25 |
| 168 | Foraging activity of the carabid beetle Pterostichus melanarius Ill. in field margin habitats. Agriculture, Ecosystems and Environment, 2002, 89, 253-259. | 5.3 | 24 |
| 169 | Evolution of Dispersal in a Predator-Prey Metacommunity. American Naturalist, 2012, 179, 204-216. | 2.1 | 24 |
| 170 | Scaling up biodiversity–ecosystem functioning relationships: the role of environmental heterogeneity in space and time. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20202779. | 2.6 | 24 |
| 171 | Temporal stability of aboveground biomass is governed by species asynchrony in temperate forests. Ecological Indicators, 2019, 107, 105661. | 6.3 | 23 |
| 172 | Disentangling local, metapopulation, and cross ommunity sources of stabilization and asynchrony in metacommunities. Ecosphere, 2020, 11, e03078. | 2.2 | 23 |
| 173 | Activity and satiation state in Pterostichus melanarius : an experiment in different agricultural habitats. Ecological Entomology, 2001, 26, 235-244. | 2.2 | 22 |
| 174 | Stability trophic cascades in food chains. Royal Society Open Science, 2018, 5, 180995. | 2.4 | 22 |
| 175 | How ecological feedbacks between human population and land cover influence sustainability. PLoS Computational Biology, 2018, 14, e1006389. | 3.2 | 22 |
| 176 | Coexistence of temporally segregated competitors in a cyclic environment. Theoretical Population Biology, 1989, 36, 181-201. | 1.1 | 21 |
| 177 | Interactions between algae and the microbial loop in experimental microcosms. Oikos, 2001, 95, 231-238. | 2.7 | 21 |
| 178 | Seasonal patterns in species diversity across biomes. Ecology, 2019, 100, e02627. | 3.2 | 21 |
| 179 | Thermal mismatches in biological rates determine trophic control and biomass distribution under warming. Global Change Biology, 2021, 27, 257-269. | 9.5 | 21 |
| 180 | How to estimate complementarity and selection effects from an incomplete sample of species. Methods in Ecology and Evolution, 2019, 10, 2141-2152. | 5.2 | 20 |

| # | Article | IF | CITATIONS |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 181 | Source–Sink Dynamics and the Coexistence of Species on a Single Resource. Theoretical Population Biology, 1997, 51, 79-93. | 1.1 | 19 |
| 182 | Context-dependency of tree species diversity, trait composition and stand structural attributes regulate temperate forest multifunctionality. Science of the Total Environment, 2021, 757, 143724. | 8.0 | 19 |
| 183 | Universal scaling of robustness of ecosystem services to species loss. Nature Communications, 2021, 12, 5167. | 12.8 | 19 |
| 184 | Fingerprints of High-Dimensional Coexistence in Complex Ecosystems. Physical Review X, 2021, 11, . | 8.9 | 18 |
| 185 | GROWTH AND DEMOGRAPHY OF POPULATIONS OF BIOMPHALARIA PFEIFFERI (GASTROPODA, PLANORBIDAE) IN THE LABORATORY. Journal of Molluscan Studies, 1987, 53, 171-177. | 1.2 | 17 |
| 186 | Biodiversity Science Evolves. Science, 2005, 310, 943-943. | 12.6 | 17 |
| 187 | Trivial and nonâ€ŧrivial applications of entropy maximization in ecology: a reply to Shipley. Oikos, 2009, 118, 1270-1278. | 2.7 | 17 |
| 188 | Comparison of Iso-enzyme Electrophoresis and Gut Content Examination for Determining the Natural Diet of the Groundbeetle Species Abax ater (Coleoptera: Carabidae). Entomologia Generalis, 1995, 19, 253-259. | 3.1 | 17 |
| 189 | Do not downplay biodiversity loss. Nature, 2022, 601, E27-E28. | 27.8 | 17 |
| 190 | Size-related effects of physical factors on phytoplankton communities. Ecological Modelling, 2016, 323, 41-50. | 2.5 | 16 |
| 191 | The hidden role of multiâ€ŧrophic interactions in driving diversity–productivity relationships. Ecology Letters, 2022, 25, 405-415. | 6.4 | 16 |
| 192 | POPULATION DYNAMICS OF THE FRESHWATER SNAIL BIOMPHALARIA PFEIFFERI IN EASTERN ZAÃRE. Journal of Molluscan Studies, 1987, 53, 249-265. | 1.2 | 15 |
| 193 | Nutrient-limited food webs with up to three trophic levels: Feasibility, stability, assembly rules, and effects of nutrient enrichment. Theoretical Population Biology, 2006, 69, 48-66. | 1.1 | 15 |
| 194 | Ecotone formation through ecological niche construction: the role of biodiversity and species interactions. Ecography, 2020, 43, 714-723. | 4.5 | 15 |
| 195 | Regulation of Redfield ratios in the deep ocean. Global Biogeochemical Cycles, 2015, 29, 254-266. | 4.9 | 14 |
| 196 | A Graphical-Mechanistic Approach to Spatial Resource Competition. American Naturalist, 2015, 185, E1-E13. | 2.1 | 14 |
| 197 | Transcending boundaries in biodiversity research. Trends in Ecology and Evolution, 1998, 13, 134-135. | 8.7 | 13 |
| 198 | Not even wrong: Comment by Loreau and Hector. Ecology, 2019, 100, e02794. | 3.2 | 13 |

| # | Article | IF | CITATIONS |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 199 | Defector clustering is linked to cooperation in a pathogenic bacterium. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20172001. | 2.6 | 12 |
| 200 | An a posteriori species clustering for quantifying the effects of species interactions on ecosystem functioning. Methods in Ecology and Evolution, 2018, 9, 704-715. | 5.2 | 12 |
| 201 | Metapopulation capacity determines food chain length in fragmented landscapes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 11 |
| 202 | Local densities connect spatial ecology to game, multilevel selection and inclusive fitness theories of cooperation. Journal of Theoretical Biology, 2015, 380, 414-425. | 1.7 | 10 |
| 203 | Species dispersal and biodiversity in human-dominated metacommunities. Journal of Theoretical Biology, 2018, 457, 199-210. | 1.7 | 10 |
| 204 | Tree species diversity enhances plant-soil interactions in a temperate forest in northeast China. Forest Ecology and Management, 2021, 491, 119160. | 3.2 | 10 |
| 205 | Diversitas: an international programme of biodiversity science. Trends in Ecology and Evolution, 1999, 14, 2-3. | 8.7 | 9 |
| 206 | Can biomass distribution across trophic levels predict trophic cascades?. Ecology Letters, 2021, 24, 464-476. | 6.4 | 9 |
| 207 | Habitat fragmentation and food security in crop pollination systems. Journal of Ecology, 2021, 109, 2991-3006. | 4.0 | 9 |
| 208 | Phytoplankton diversity affects biomass and energy production differently during community development. Functional Ecology, 2022, 36, 446-457. | 3.6 | 9 |
| 209 | Testing MacArthur's minimisation principle: do communities minimise energy wastage during succession?. Ecology Letters, 2018, 21, 1182-1190. | 6.4 | 8 |
| 210 | Synchrony and Perturbation Transmission in Trophic Metacommunities. American Naturalist, 2021, 197, E188-E203. | 2.1 | 8 |
| 211 | Predator avoidance and foraging for food shape synchrony and response to perturbations in trophic metacommunities. Journal of Theoretical Biology, 2021, 528, 110836. | 1.7 | 8 |
| 212 | Grand challenges in biodiversity–ecosystem functioning research in the era of science–policy platforms require explicit consideration of feedbacks. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210783. | 2.6 | 8 |
| 213 | Spatial evolutionary dynamics produce a negative cooperation–population size relationship. Theoretical Population Biology, 2019, 125, 94-101. | 1.1 | 7 |
| 214 | A macroâ€ecological approach to predation densityâ€dependence. Oikos, 2021, 130, 553-570. | 2.7 | 7 |
| 215 | Community composition and size structure of murid rodents in relation to the biogeography of the Japanese archipelago. Ecography, 2000, 23, 413-423. | 4.5 | 7 |
| 216 | Disentangling multiple predator effects in biodiversity and ecosystem functioning research. Journal of Animal Ecology, 2009, 78, 695-698. | 2.8 | 6 |

| # | Article | IF | CITATIONS |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 217 | Patchiness in a microhabitat chip affects evolutionary dynamics of bacterial cooperation. Lab on A Chip, 2015, 15, 3723-3729. | 6.0 | 6 |
| 218 | A combinatorial analysis using observational data identifies species that govern ecosystem functioning. PLoS ONE, 2018, 13, e0201135. | 2.5 | 6 |
| 219 | Why do forests respond differently to nitrogen deposition? A modelling approach. Ecological Modelling, 2020, 425, 109034. | 2.5 | 6 |
| 220 | Unequal access to resources undermines global sustainability. Science of the Total Environment, 2021, 763, 142981. | 8.0 | 6 |
| 221 | Consistent functional clusters explain the effects of biodiversity on ecosystem productivity in a longâ€ŧerm experiment. Ecology, 2021, 102, e03441. | 3.2 | 6 |
| 222 | Scaleâ€dependent shifts in functional and phylogenetic structure of Mediterranean island plant communities over two centuries. Journal of Ecology, 2021, 109, 3513. | 4.0 | 5 |
| 223 | Mass and Energy Flow in Closed Ecosystems: Do Ecological or Mathematical Constraints Prevail?. Journal of Theoretical Biology, 1994, 168, 237-243. | 1.7 | 4 |
| 224 | Cascading extinctions, functional complementarity, and selection in two-trophic-level model communities: A trait-based mechanistic approach. Journal of Theoretical Biology, 2010, 267, 375-387. | 1.7 | 4 |
| 225 | Can Organisms Regulate Global Biogeochemical Cycles?. Ecosystems, 2015, 18, 813-825. | 3.4 | 4 |
| 226 | Community efficiency during succession: a test of MacArthur's minimization principle in phytoplankton communities. Ecology, 2020, 101, e03015. | 3.2 | 4 |
| 227 | Habitat percolation transition undermines sustainability in socialâ€ecological agricultural systems. Ecology Letters, 2022, 25, 163-176. | 6.4 | 4 |
| 228 | Synchrony and Stability in Trophic Metacommunities: When Top Predators Navigate in a Heterogeneous World. Frontiers in Ecology and Evolution, 0, 10, . | 2.2 | 4 |
| 229 | Interactive effects of nutrient enrichment and the manipulation of intermediate hosts by parasites on infection prevalence and food web structure. Ecological Modelling, 2012, 228, 1-7. | 2.5 | 3 |
| 230 | Human impacts on minimum subsets of species critical for maintaining ecosystem structure. Basic and Applied Ecology, 2013, 14, 623-629. | 2.7 | 3 |
| 231 | A graphical causal model for resolving species identity effects and biodiversity–ecosystem function correlations: comment. Ecology, 2022, 103, e03378. | 3.2 | 3 |
| 232 | Breaking Through Ecosystem Boundaries. Bulletin of the Ecological Society of America, 2017, 98, 95-98. | 0.2 | 2 |
| 233 | Broadly inflicted stressors can cause ecosystem thinning. Theoretical Ecology, 2019, 12, 207-223. | 1.0 | 2 |
| 234 | Nutrient cycling and selfâ€regulation determine food web stability. Functional Ecology, 2022, 36, 202-213. | 3.6 | 2 |

| # | Article | IF | CITATIONS |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 235 | Towards a new community ecology?. Species Coexistence: Ecological and Evolutionary Perspectives. By M. Tokeshi. Blackwell Science, Oxford, 1999. ISBN 086542 744 5 Journal of Evolutionary Biology, 1999, 12, 1169-1170. | 1.7 | 1 |
| 236 | Title is missing!. Acta Oecologica, 1997, 18, 715-716. | 1.1 | 0 |
| 237 | Biotic regulation of non-limiting nutrient pools and coupling of biogeochemical cycles. Ecological Modelling, 2016, 334, 1-7. | 2.5 | 0 |