Duncan N L Menge

List of Publications by Year
in descending order

58 papers	3,104 citations	201674 27 h-index	161849 54 g-index
58 all docs	58 docs citations	58 times ranked	4265 citing authors

#	Article	IF	Citations
1	Biological nitrogen fixation: rates, patterns and ecological controls in terrestrial ecosystems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20130119.	4.0	537
2	The Nitrogen Paradox in Tropical Forest Ecosystems. Annual Review of Ecology, Evolution, and Systematics, 2009, 40, 613-635.	8.3	402
3	Nitrogen fixation in different biogeochemical niches along a 120â€Š000â€year chronosequence in New Zealand. Ecology, 2009, 90, 2190-2201.	3.2	130
4	Facultative versus Obligate Nitrogen Fixation Strategies and Their Ecosystem Consequences. American Naturalist, 2009, 174, 465-477.	2.1	116
5	Dynamics of coastal metaâ€ecosystems: the intermittent upwelling hypothesis and a test in rocky intertidal regions. Ecological Monographs, 2013, 83, 283-310.	5.4	116
6	Feedbacks between plant N demand and rhizosphere priming depend on type of mycorrhizal association. Ecology Letters, 2017, 20, 1043-1053.	6.4	114
7	Legume abundance along successional and rainfall gradients in Neotropical forests. Nature Ecology and Evolution, 2018, 2, 1104-1111.	7.8	107
8	Large losses of inorganic nitrogen from tropical rainforests suggest a lack of nitrogen limitation. Ecology Letters, 2012, 15, 9-16.	6.4	105
9	Nitrogen and Phosphorus Limitation over Long-Term Ecosystem Development in Terrestrial Ecosystems. PLoS ONE, 2012, 7, e42045.	2.5	101
10	Evolutionary tradeoffs can select against nitrogen fixation and thereby maintain nitrogen limitation. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1573-1578.	7.1	94
11	Light regulates tropical symbiotic nitrogen fixation more strongly than soil nitrogen. Nature Plants, 2018, 4, 655-661.	9.3	89
12	Diversity of nitrogen fixation strategies in Mediterranean legumes. Nature Plants, 2015, 1, 15064.	9.3	83
13	Diverse Mycorrhizal Associations Enhance Terrestrial C Storage in a Global Model. Global Biogeochemical Cycles, 2019, 33, 501-523.	4.9	80
14	Nitrogen fixation strategies can explain the latitudinal shift in nitrogenâ€fixing tree abundance. Ecology, 2014, 95, 2236-2245.	3.2	70
15	Higher survival drives the success of nitrogenâ€fixing trees through succession in Costa Rican rainforests. New Phytologist, 2016, 209, 965-977.	7.3	69
16	Gauging the impact of meta-analysis on ecology. Evolutionary Ecology, 2012, 26, 1153-1167.	1.2	55
17	Nitrogen-fixing trees inhibit growth of regenerating Costa Rican rainforests. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8817-8822.	7.1	52
18	Metaâ€analysis on the potential for increasing nitrogen losses from intensifying tropical agriculture. Global Change Biology, 2020, 26, 1668-1680.	9.5	51

#	Article	IF	Citations
19	Emergence and Maintenance of Nutrient Limitation over Multiple Timescales in Terrestrial Ecosystems. American Naturalist, 2009, 173, 164-175.	2.1	44
20	Successional dynamics of nitrogen fixation and forest growth in regenerating Costa Rican rainforests. Ecology, 2019, 100, e02637.	3.2	44
21	Nitrogen-fixing trees could exacerbate climate change under elevated nitrogen deposition. Nature Communications, 2019, 10, 1493.	12.8	40
22	Phylogenetic Constraints Do Not Explain the Rarity of Nitrogen-Fixing Trees in Late-Successional Temperate Forests. PLoS ONE, 2010, 5, e12056.	2.5	40
23	Variation between individuals fosters regional species coexistence. Ecology Letters, 2018, 21, 1496-1504.	6.4	34
24	Logarithmic scales in ecological data presentation may cause misinterpretation. Nature Ecology and Evolution, 2018, 2, 1393-1402.	7.8	34
25	Why are nitrogenâ€fixing trees rare at higher compared to lower latitudes?. Ecology, 2017, 98, 3127-3140.	3.2	32
26	The symbionts made me do it: legumes are not hardwired for high nitrogen concentrations but incorporate more nitrogen when inoculated. New Phytologist, 2017, 213, 690-699.	7.3	31
27	Global climate change will increase the abundance of symbiotic nitrogenâ€fixing trees in much of North America. Global Change Biology, 2017, 23, 4777-4787.	9.5	30
28	Patterns of nitrogenâ€fixing tree abundance in forests across Asia and America. Journal of Ecology, 2019, 107, 2598-2610.	4.0	29
29	Effects of two centuries of global environmental variation on phenology and physiology of Arabidopsis thaliana. Global Change Biology, 2020, 26, 523-538.	9.5	29
30	A gradient of nutrient enrichment reveals nonlinear impacts of fertilization on Arctic plant diversity and ecosystem function. Ecology and Evolution, 2017, 7, 2449-2460.	1.9	24
31	Rapid Assessment of Lepidoptera Predation Rates in Neotropical Forest Fragments1. Biotropica, 2005, 38, 051207072004004.	1.6	22
32	Conditions Under Which Nitrogen Can Limit Steady-State Net Primary Production in a General Class of Ecosystem Models. Ecosystems, 2011, 14, 519-532.	3.4	21
33	Can evolutionary constraints explain the rarity of nitrogenâ€fixing trees in highâ€latitude forests?. New Phytologist, 2016, 211, 1195-1201.	7.3	20
34	A roadmap for sampling and scaling biological nitrogen fixation in terrestrial ecosystems. Methods in Ecology and Evolution, 2021, 12, 1122-1137.	5.2	20
35	Dynamics of nutrient uptake strategies: lessons from the tortoise and the hare. Theoretical Ecology, 2011, 4, 163-177.	1.0	19
36	Symbiotic N fixation is sufficient to support net aboveground biomass accumulation in a humid tropical forest. Scientific Reports, 2019, 9, 7571.	3.3	19

#	Article	IF	Citations
37	A Spatially Explicit, Empirical Estimate of Treeâ€Based Biological Nitrogen Fixation in Forests of the United States. Global Biogeochemical Cycles, 2020, 34, e2019GB006241.	4.9	19
38	Nitrogenâ€fixing tree abundance in higherâ€latitude North America is not constrained by diversity. Ecology Letters, 2017, 20, 842-851.	6.4	18
39	Temperature sensitivity of woody nitrogen fixation across species and growing temperatures. Nature Plants, 2022, 8, 209-216.	9.3	17
40	Nitrogenâ€fixing trees increase soil nitrous oxide emissions: a metaâ€analysis. Ecology, 2021, 102, e03415.	3.2	16
41	Spatial heterogeneity can resolve the nitrogen paradox of tropical forests. Ecology, 2017, 98, 1049-1061.	3.2	15
42	Demography of Symbiotic Nitrogen-Fixing Trees Explains Their Rarity and Successional Decline in Temperate Forests in the United States. PLoS ONE, 2016, 11, e0164522.	2.5	14
43	The potential for alternative stable states in nutrient-enriched invaded grasslands. Theoretical Ecology, 2015, 8, 399-417.	1.0	12
44	Testing the intermittent upwelling hypothesis: comment. Ecology, 2019, 100, e02476.	3.2	12
45	Nitrogenâ€fixing trees have no net effect on forest growth in the coterminous United States. Journal of Ecology, 2021, 109, 877-887.	4.0	11
46	Light, nitrogen supply, and neighboring plants dictate costs and benefits of nitrogen fixation for seedlings of a tropical nitrogenâ€fixing tree. New Phytologist, 2021, 231, 1758-1769.	7.3	9
47	Repeatable, continuous and realâ€time estimates of coupled nitrogenase activity and carbon exchange at the wholeâ€plant scale. Methods in Ecology and Evolution, 2019, 10, 960-970.	5.2	8
48	A mechanism of expansion: Arctic deciduous shrubs capitalize on warming-induced nutrient availability. Oecologia, 2020, 192, 671-685.	2.0	8
49	A discrepancy between predictions of saturating nutrient uptake models and nitrogenâ€toâ€phosphorus stoichiometry in the surface ocean. Limnology and Oceanography, 2010, 55, 997-1008.	3.1	7
50	Quantifying Urban Bioswale Nitrogen Cycling in the Soil, Gas, and Plant Phases. Water (Switzerland), 2018, 10, 1627.	2.7	6
51	A novel representation of biological nitrogen fixation and competitive dynamics between nitrogen-fixing and non-fixing plants in a land model (GFDL LM4.1-BNF). Biogeosciences, 2021, 18, 4143-4183.	3.3	6
52	N supply mediates the radiative balance of N₂O emissions and CO₂ sequestration driven by Nâ€fixing vs. nonâ€fixing trees. Ecology, 2021, 102, e03414.	3.2	6
53	Nitric and nitrous oxide fluxes from intensifying crop agriculture in the seasonally dry tropical Amazonâ€“Cerrado border region. , 2021, 4, e20169.		5
54	Small traits with big consequences: how seed traits of nitrogenâ€fixing plants might influence ecosystem nutrient cycling. Oikos, 2019, 128, 668-679.	2.7	4

#	Article	IF	Citations
55	Topography and Tree Species Improve Estimates of Spatial Variation in Soil Greenhouse Gas Fluxes in a Subtropical Forest. Ecosystems, 2022, 25, 648-660.	3.4	3
56	Anion Exchange Capacity Explains Deep Soil Nitrate Accumulation in Brazilian Amazon Croplands. Ecosystems, 2023, 26, 134-145.	3.4	3
57	Divergent Pathways of Nitrogen-Fixing Trees through Succession Depend on Starting Nitrogen Supply and Priority Effects. American Naturalist, 2021, 198, E198-E214.	2.1	2
58	The Question That Launched My Career. Bulletin of the Ecological Society of America, 2014, 95, 218-221.	0.2	0