Wim de Vries

List of Publications by Citations

94 papers	12,196 citations	36 h-index	104 g-index
104 ext. papers	16,369 ext. citations	9.4 avg, IF	6.32 L-index

#	Paper	IF	Citations
94	Sustainability. Planetary boundaries: guiding human development on a changing planet. *Science*, **2015**, 347, 1259855	33.3	4597
93	Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *Lancet, The*, **2019**, 393, 447-492	40	2664
92	Options for keeping the food system within environmental limits. *Nature*, **2018**, 562, 519-525	50.4	925
91	Consequences of human modification of the global nitrogen cycle. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2013**, 368, 20130116	5.8	456
90	The impact of nitrogen deposition on carbon sequestration in European forests and forest soils. *Global Change Biology*, **2006**, 12, 1151-1173	11.4	226
89	Impacts of European livestock production: nitrogen, sulphur, phosphorus and greenhouse gas emissions, land-use, water eutrophication and biodiversity. *Environmental Research Letters*, **2015**, 10, 115004	6.2	222
88	Analyses of the impact of changes in atmospheric deposition and climate on forest growth in European monitoring plots: A stand growth approach. *Forest Ecology and Management*, **2009**, 258, 1735-1750	3.9	157
87	Assessing planetary and regional nitrogen boundaries related to food security and adverse environmental impacts. *Current Opinion in Environmental Sustainability*, **2013**, 5, 392-402	7.2	152
86	Uncertainties in the relationship between atmospheric nitrogen deposition and forest carbon sequestration. *Global Change Biology*, **2008**, 14, 2057-2063	11.4	139
85	Ecologically implausible carbon response?. *Nature*, **2008**, 451, E1-3; discussion E3-4	50.4	120
84	Impacts of acid deposition, ozone exposure and weather conditions on forest ecosystems in Europe: an overview. *Plant and Soil*, **2014**, 380, 1-45	4.2	115
83	Short and long-term impacts of nitrogen deposition on carbon sequestration by forest ecosystems. *Current Opinion in Environmental Sustainability*, **2014**, 9-10, 90-104	7.2	115
82	Differentiation of nitrous oxide emission factors for agricultural soils. *Environmental Pollution*, **2011** , 159, 3215-22	9.3	114
81	Critical soil concentrations of cadmium, lead, and mercury in view of health effects on humans and animals. *Reviews of Environmental Contamination and Toxicology*, **2007**, 191, 91-130	3.5	113
80	Global-scale impacts of nitrogen deposition on tree carbon sequestration in tropical, temperate, and boreal forests: A meta-analysis. *Global Change Biology*, **2018**, 24, e416-e431	11.4	111
79	Human impacts on planetary boundaries amplified by Earth system interactions. *Nature Sustainability*, **2020**, 3, 119-128	22.1	108
78	Farm, land, and soil nitrogen budgets for agriculture in Europe calculated with CAPRI. *Environmental Pollution*, **2011**, 159, 3243-53	9.3	105

77	Changes in wet nitrogen deposition in the United States between 1985 and 2012. *Environmental Research Letters*, **2014**, 9, 095004	6.2	102
76	The impact of atmospheric deposition and climate on forest growth in European monitoring plots: An individual tree growth model. *Forest Ecology and Management*, **2009**, 258, 1751-1761	3.9	95
75	Responses of forest ecosystems in Europe to decreasing nitrogen deposition. *Environmental Pollution*, **2019**, 244, 980-994	9.3	76
74	Impacts of nitrogen addition on plant species richness and abundance: A global meta-analysis. *Global Ecology and Biogeography*, **2019**, 28, 398-413	6.1	75
73	Modelling the spatial distribution of livestock in Europe. *Landscape Ecology*, **2009**, 24, 1207-1222	4.3	69
72	Model-Based Analysis of the Long-Term Effects of Fertilization Management on Cropland Soil Acidification. *Environmental Science & Technology*, **2017**, 51, 3843-3851	10.3	67
71	Imbalanced phosphorus and nitrogen deposition in China‘s forests. *Atmospheric Chemistry and Physics*, **2016**, 16, 8571-8579	6.8	62
70	Modelling the impact of nitrogen deposition, climate change and nutrient limitations on tree carbon sequestration in Europe for the period 1900-2050. *Environmental Pollution*, **2011**, 159, 2289-99	9.3	60
69	Nitrogen as a threat to European terrestrial biodiversity463-494		58
68	Inorganic nitrogen deposition in China‘s forests: Status and characteristics. *Atmospheric Environment*, **2014**, 98, 474-482	5.3	55
67	Modeling soil acidification in typical Chinese cropping systems. *Science of the Total Environment*, **2018**, 613-614, 1339-1348	10.2	53
66	Direct effect of acid rain on leaf chlorophyll content of terrestrial plants in China. *Science of the Total Environment*, **2017**, 605-606, 764-769	10.2	53
65	Enhanced acidification in Chinese croplands as derived from element budgets in the period 1980-2010. *Science of the Total Environment*, **2018**, 618, 1497-1505	10.2	50
64	The contribution of atmospheric deposition and forest harvesting to forest soil acidification in China since 1980. *Atmospheric Environment*, **2016**, 146, 215-222	5.3	48
63	Nitrogen as a threat to the European greenhouse balance434-462		43
62	Nitrogen deposition is the most important environmental driver of growth of pure, even-aged and managed European forests. *Forest Ecology and Management*, **2020**, 458, 117762	3.9	43
61	Spatial variation of modelled total, dry and wet nitrogen deposition to forests at global scale. *Environmental Pollution*, **2018**, 243, 1287-1301	9.3	41
60	Nitrogen-induced new net primary production and carbon sequestration in global forests. *Environmental Pollution*, **2018**, 242, 1476-1487	9.3	39

59	Relation between forest vegetation, atmospheric deposition and site conditions at regional and European scales. *Environmental Pollution*, **2010**, 158, 921-33	9.3	37
58	Modelling long-term impacts of changes in climate, nitrogen deposition and ozone exposure on carbon sequestration of European forest ecosystems. *Science of the Total Environment*, **2017**, 605-606, 1097-1116	10.2	32
57	Quantification of the contribution of nitrogen fertilization and crop harvesting to soil acidification in a wheat-maize double cropping system. *Plant and Soil*, **2019**, 434, 167-184	4.2	31
56	Soil carbon 4 per mille: a good initiative but let's manage not only the soil but also the expectations. *Geoderma*, **2018**, 309, 111-112	6.7	30
55	The contribution of nitrogen deposition to the eutrophication signal in understorey plant communities of European forests. *Ecology and Evolution*, **2017**, 7, 214-227	2.8	30
54	Cropland acidification increases risk of yield losses and food insecurity in China. *Environmental Pollution*, **2020**, 256, 113145	9.3	30
53	Quantifying impacts of nitrogen use in European agriculture on global warming potential. *Current Opinion in Environmental Sustainability*, **2011**, 3, 291-302	7.2	27
52	Impacts of nitrogen fertilizer type and application rate on soil acidification rate under a wheat-maize double cropping system. *Journal of Environmental Management*, **2020**, 270, 110888	7.9	25
51	Spatially Explicit Integrated Risk Assessment of Present Soil Concentrations of Cadmium, Lead, Copper and Zinc in The Netherlands. *Water, Air, and Soil Pollution*, **2008**, 191, 199-215	2.6	24
50	Modelling soil carbon sequestration of intensively monitored forest plots in Europe by three different approaches. *Forest Ecology and Management*, **2009**, 258, 1780-1793	3.9	22
49	Modelling long-term impacts of fertilization and liming on soil acidification at Rothamsted experimental station. *Science of the Total Environment*, **2020**, 713, 136249	10.2	22
48	Environmental impacts of innovative dairy farming systems aiming at improved internal nutrient cycling: A multi-scale assessment. *Science of the Total Environment*, **2015**, 536, 432-442	10.2	20
47	Nitrogen futures in the shared socioeconomic pathways 4. *Global Environmental Change*, **2020**, 61, 102029	10.1	18
46	Spatio-temporal trends of nitrogen deposition and climate effects on Sphagnum productivity in European peatlands. *Environmental Pollution*, **2014**, 187, 73-80	9.3	18
45	Geostatistical prediction and simulation of European soil property maps. *Geoderma Regional*, **2016**, 7, 201-215	2.7	18
44	Assessment of uncertainties in greenhouse gas emission profiles of livestock sectors in Africa, Latin America and Europe. *Regional Environmental Change*, **2016**, 16, 1571-1582	4.3	17
43	Non-linear direct effects of acid rain on leaf photosynthetic rate of terrestrial plants. *Environmental Pollution*, **2017**, 231, 1442-1445	9.3	16
42	Carbon–nitrogen interactions in European forests and semi-natural vegetation – Part 1: Fluxes and budgets of carbon, nitrogen and greenhouse gases from ecosystem monitoring and modelling. *Biogeosciences*, **2020**, 17, 1583-1620	4.6	12

41	Complementing the topsoil information of the Land Use/Land Cover Area Frame Survey (LUCAS) with modelled N2O emissions. *PLoS ONE*, **2017**, 12, e0176111	3.7	12
40	Impacts of model structure and data aggregation on European wide predictions of nitrogen and green house gas fluxes in response to changes in livestock, land cover, and land management. *Journal of Integrative Environmental Sciences*, **2010**, 7, 145-157	3	12
39	Use of measurements and models to improve the national IPCC based assessments of soil emissions of nitrous oxide. *Journal of Integrative Environmental Sciences*, **2005**, 2, 217-233		12
38	Spatially explicit boundaries for agricultural nitrogen inputs in the European Union to meet air and water quality targets. *Science of the Total Environment*, **2021**, 786, 147283	10.2	12
37	Impacts of agronomic measures on crop, soil, and environmental indicators: A review and synthesis of meta-analysis. *Agriculture, Ecosystems and Environment*, **2021**, 319, 107551	5.7	11
36	Efficiency of agricultural measures to reduce nitrogen deposition in Natura 2000 sites. *Environmental Science and Policy*, **2013**, 32, 68-79	6.2	9
35	Nitrogen as a threat to European soil quality495-510		9
34	Carbon–nitrogen interactions in European forests and semi-natural vegetation – Part 2: Untangling climatic, edaphic, management and nitrogen deposition effects on carbon sequestration potentials. *Biogeosciences*, **2020**, 17, 1621-1654	4.6	8
33	The use of soil nutrient balances in deriving forest biomass harvesting guidelines specific to region, tree species and soil type in the Netherlands. *Forest Ecology and Management*, **2021**, 479, 118591	3.9	8
32	Effects of nitrogen addition on soil methane uptake in global forest biomes. *Environmental Pollution*, **2020**, 264, 114751	9.3	7
31	Impacts of Nitrogen Deposition on Forest Ecosystem Services and Biodiversity **2019**, 183-189		7
30	Impacts of nitrogen emissions on ecosystems and human health: A mini review. *Current Opinion in Environmental Science and Health*, **2021**, 21, 100249	8.1	7
29	Evaluation of different approaches to describe the sorption and desorption of phosphorus in soils on experimental data. *Science of the Total Environment*, **2016**, 571, 292-306	10.2	7
28	Global variation in soil carbon sequestration potential through improved cropland management. *Global Change Biology*, **2021**, 28, 1162	11.4	6
27	Reconciling regional nitrogen boundaries with global food security. *Nature Food*, **2021**, 2, 700-711	14.4	6
26	A synthesis of ecosystem management strategies for forests in the face of chronic nitrogen deposition. *Environmental Pollution*, **2019**, 248, 1046-1058	9.3	5
25	Experimental evidence shows minor contribution of nitrogen deposition to global forest carbon sequestration. *Global Change Biology*, **2021**,	11.4	5
24	Retention of deposited ammonium and nitrate and its impact on the global forest carbon sink.. *Nature Communications*, **2022**, 13, 880	17.4	5

23	Impacts of sampling design and estimation methods on nutrient leaching of intensively monitored forest plots in the Netherlands. *Journal of Environmental Monitoring*, **2010**, 12, 1515-23		4
22	Modeling atmospheric ammonia using agricultural emissions with improved spatial variability and temporal dynamics. *Atmospheric Chemistry and Physics*, **2020**, 20, 16055-16087	6.8	4
21	Quantifying drivers of soil acidification in three Chinese cropping systems. *Soil and Tillage Research*, **2022**, 215, 105230	6.5	4
20	Spatially divergent trends of nitrogen versus phosphorus limitation across European forests. *Science of the Total Environment*, **2021**, 771, 145391	10.2	4
19	A comparison of disaggregated nitrogen budgets for Danish agriculture using Europe-wide and national approaches. *Science of the Total Environment*, **2018**, 643, 890-901	10.2	4
18	Reconciling food production and environmental boundaries for nitrogen in the European Union. *Science of the Total Environment*, **2021**, 786, 147427	10.2	4
17	The diurnal cycle of summer tropospheric ozone concentrations across Chinese cities: Spatial patterns and main drivers. *Environmental Pollution*, **2021**, 286, 117547	9.3	4
16	Quantification of Impacts of Nitrogen Deposition on Forest Ecosystem Services in Europe **2014**, 411-424		3
15	A decision support framework assessing management impacts on crop yield, soil carbon changes and nitrogen losses to the environment. *European Journal of Soil Science*, **2020**, 72, 1590	3.4	3
14	Region-specific nitrogen management indexes for sustainable cereal production in China. *Environmental Research Communications*, **2020**, 2, 075002	3.1	2
13	Nonlinear responses of ecosystem carbon fluxes to nitrogen deposition in an old-growth boreal forest. *Ecology Letters*, **2022**, 25, 77-88	10	2
12	Global-Scale Impact of Human Nitrogen Fixation on Greenhouse Gas Emissions		2
11	The INI European Regional Nitrogen Centre: Concepts and Vision **2020**, 445-455		1
10	Anthropogenic and climatic shaping of soil nitrogen properties across urban-rural-natural forests in the Beijing metropolitan region. *Geoderma*, **2022**, 406, 115524	6.7	1
9	Effects-Based Integrated Assessment Modelling for the Support of European Air Pollution Abatement Policies. *Environmental Pollution*, **2015**, 613-635	0	1
8	Climate change impacts on rainfed maize yields in Zambia under conventional and optimized crop management. *Climatic Change*, **2021**, 167, 1	4.5	1
7	Soil carbon sequestration, greenhouse gas emissions, and water pollution under different tillage practices.. *Science of the Total Environment*, **2022**, 154161	10.2	1
6	Low-level nitrogen and short-term addition increase soil carbon sequestration in Chinese forest ecosystems. *Catena*, **2022**, 215, 106333	5.8	1

5	Roadmap to develop a stress test for forest ecosystem services supply. *One Earth*, **2022**, 5, 25-34	8.1	0
4	Calculation of spatially explicit amounts and intervals of agricultural lime applications at county-level in China. *Science of the Total Environment*, **2022**, 806, 150955	10.2	0
3	Model-based analysis of phosphorus flows in the food chain at county level in China and options for reducing the losses towards green development. *Environmental Pollution*, **2021**, 288, 117768	9.3	0
2	Optimizing stand density for climate-smart forestry: A way forward towards resilient forests with enhanced carbon storage under extreme climate events. *Soil Biology and Biochemistry*, **2021**, 162, 108396	7.5	0
1	Insight in impacts of atmospheric emissions of population on air, soil and water quality, and thereby on terrestrial and aquatic ecosystems. *Ambio*, **2011**, 40, 834	6.5	