Edzo Veldkamp

List of Publications by Year
in descending order

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135 papers	9,262 citations	34016 52 h-index	45213 90 g-index
158 all docs	158 docs citations	158 times ranked	8529 citing authors

#	Article	IF	Citations
1	Testing a Conceptual Model of Soil Emissions of Nitrous and Nitric Oxides. BioScience, 2000, 50, 667.	2.2	743
2	Multifunctional shade-tree management in tropical agroforestry landscapes - a review. Journal of Applied Ecology, 2011, 48, 619-629.	1.9	527
3	Organic Carbon Turnover in Three Tropical Soils under Pasture after Deforestation. Soil Science Society of America Journal, 1994, 58, 175-180.	1.2	338
4	Effects of Soil Texture on Belowground Carbon and Nutrient Storage in a Lowland Amazonian Forest Ecosystem. Ecosystems, 2000, 3, 193-209.	1.6	318
5	Effectiveness of exclosures to restore degraded soils as a result of overgrazing in Tigray, Ethiopia. Journal of Arid Environments, 2007, 69, 270-284.	1.2	270
6	Effect of pasture age on soil trace-gas emissions from a deforested area of Costa Rica. Nature, 1993, 365, 244-246.	13.7	233
7	Geographic bias of field observations of soil carbon stocks with tropical land-use changes precludes spatial extrapolation. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6318-6322.	3.3	225
8	Assessment of soil nutrient depletion and its spatial variability on smallholdersâ€™ mixed farming systems in Ethiopia using partial versus full nutrient balances. Agriculture, Ecosystems and Environment, 2005, 108, 1-16.	2.5	214
9	Land-use choices follow profitability at the expense of ecological functions in Indonesian smallholder landscapes. Nature Communications, 2016, 7, 13137.	5.8	186
10	Soil Nitrogen-Cycling Responses to Conversion of Lowland Forests to Oil Palm and Rubber Plantations in Sumatra, Indonesia. PLoS ONE, 2015, 10, e0133325.	1.1	172
11	Stocks and flows of coarse woody debris across a tropical rain forest nutrient and topography gradient. Forest Ecology and Management, 2002, 164, 237-248.	1.4	160
12	Trade-offs between multifunctionality and profit in tropical smallholder landscapes. Nature Communications, 2020, 11, 1186.	5.8	156
13	Impact of elevated N input on soil N cycling and losses in oldâ€growth lowland and montane forests in Panama. Ecology, 2010, 91, 1715-1729.	1.5	149
14	Conversion of lowland tropical forests to tree cash crop plantations loses up to one-half of stored soil organic carbon. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9956-9960.	3.3	149
15	Title is missing!. Biogeochemistry, 2003, 64, 111-128.	1.7	145
16	Direct and cascading impacts of tropical land-use change on multi-trophic biodiversity. Nature Ecology and Evolution, 2017, 1, 1511-1519.	3.4	137
17	Soil Carbon Stocks Decrease following Conversion of Secondary Forests to Rubber (Hevea) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	1.1	136
18	Effects of pasture management on N2O and NO emissions from soils in the humid tropics of Costa Rica. Global Biogeochemical Cycles, 1998, 12, 71-79.	1.9	123

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19	Changes in nitrogen cycling and retention processes in soils under spruce forests along a nitrogen enrichment gradient in Germany. Global Change Biology, 2007, 13, 1509-1527.	4.2	122
20	Deforestation and reforestation impacts on soils in the tropics. Nature Reviews Earth & Environment, 2020, 1, 590-605.	12.2	121
21	Immediate and longâ€term nitrogen oxide emissions from tropical forest soils exposed to elevated nitrogen input. Global Change Biology, 2009, 15, 2049-2066.	4.2	119
22	Effects of an induced drought on soil carbon dioxide (CO₂) efflux and soil CO₂ production in an Eastern Amazonian rainforest, Brazil. Global Change Biology, 2007, 13, 2218-2229.	4.2	115
23	Tropical Andean Forests Are Highly Susceptible to Nutrient Inputsâ€"Rapid Effects of Experimental N and P Addition to an Ecuadorian Montane Forest. PLoS ONE, 2012, 7, e47128.	1.1	111
24	Fertilizer-induced nitric oxide emissions from agricultural soils. , 1997, 48, 69-77.		106
25	Substantial labile carbon stocks and microbial activity in deeply weathered soils below a tropical wet forest. Global Change Biology, 2003, 9, 1171-1184.	4.2	99
26	Halloysite versus gibbsite: Silicon cycling as a pedogenetic process in two lowland neotropical rain forest soils of La Selva, Costa Rica. Geoderma, 2007, 138, 1-11.	2.3	98
27	Nitrogen availability links forest productivity, soil nitrous oxide and nitric oxide fluxes of a tropical montane forest in southern Ecuador. Global Biogeochemical Cycles, 2011, 25, n/a-n/a.	1.9	98
28	Nitrogen oxide emissions from a banana plantation in the humid tropics. Journal of Geophysical Research, 1997, 102, 15889-15898.	3.3	94
29	Effects of an experimental drought on the functioning of a cacao agroforestry system, Sulawesi, Indonesia. Global Change Biology, 2010, 16, 1515-1530.	4.2	92
30	Differing N status and N retention processes of soils under old-growth lowland forest in Eastern Amazonia, CaxiuanÃ£, Brazil. Soil Biology and Biochemistry, 2008, 40, 740-750.	4.2	86
31	The Role of Dissolved Organic Carbon, Dissolved Organic Nitrogen, and Dissolved Inorganic Nitrogen in a Tropical Wet Forest Ecosystem. Ecosystems, 2005, 8, 339-351.	1.6	84
32	Calibration of time domain reflectometry technique using undisturbed soil samples from humid tropical soils of volcanic origin. Water Resources Research, 1997, 33, 1241-1249.	1.7	82
33	Title is missing!. Biogeochemistry, 1997, 39, 343-375.	1.7	82
34	Landscape and climatic controls on spatial and temporal variation in soil CO2 efflux in an Eastern Amazonian Rainforest, CaxiuanÃ£, Brazil. Forest Ecology and Management, 2006, 237, 57-64.	1.4	81
35	Calibration of a Frequency Domain Reflectometry Sensor for Humid Tropical Soils of Volcanic Origin. Soil Science Society of America Journal, 2000, 64, 1549-1553.	1.2	79
36	Reducing Fertilizer and Avoiding Herbicides in Oil Palm Plantationsâ€"Ecological and Economic Valuations. Frontiers in Forests and Global Change, 2019, 2, .	1.0	75

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37	Diurnal fluxes and the isotopomer ratios of N2O in a temperate grassland following urine amendment. Rapid Communications in Mass Spectrometry, 2001, 15, 1263-1269.	0.7	73
38	Economic valuation of land restoration: The case of exclosures established on communal grazing lands in Tigray, Ethiopia. Land Degradation and Development, 2011, 22, 334-344.	1.8	72
39	Tree Species Shape Soil Bacterial Community Structure and Function in Temperate Deciduous Forests. Frontiers in Microbiology, 2019, 10, 1519.	1.5	71
40	Restoration of Ecosystem Carbon Stocks Following Exclosure Establishment in Communal Grazing Lands in Tigray, Ethiopia. Soil Science Society of America Journal, 2011, 75, 246-256.	1.2	70
41	Response of N cycling to nutrient inputs in forest soils across a 1000â€“3000 m elevation gradient in the Ecuadorian Andes. Ecology, 2015, 96, 749-761.	1.5	70
42	Methane emissions from tank bromeliads in neotropical forests. Nature Geoscience, 2010, 3, 766-769.	5.4	69
43	Soil Carbon Stabilization in Converted Tropical Pastures and Forests Depends on Soil Type. Soil Science Society of America Journal, 2005, 69, 1110-1117.	1.2	67
44	Intensive field measurements of nitrous oxide emissions from a tropical agricultural soil. Global Biogeochemical Cycles, 2000, 14, 85-95.	1.9	66
45	Regional variation in soil carbon and Î´13C in forests and pastures of northeastern Costa Rica. Biogeochemistry, 2005, 72, 315-336.	1.7	66
46	Responses of nitrous oxide fluxes and soil nitrogen cycling to nutrient additions in montane forests along an elevation gradient in southern Ecuador. Biogeochemistry, 2013, 112, 625-636.	1.7	64
47	Cold storage and laboratory incubation of intact soil cores do not reflect in-situ nitrogen cycling rates of tropical forest soils. Soil Biology and Biochemistry, 2008, 40, 2480-2483.	4.2	63
48	Smallholdersâ€™ Soil Fertility Management in the Central Highlands of Ethiopia: Implications for Nutrient Stocks, Balances and Sustainability of Agroecosystems. Nutrient Cycling in Agroecosystems, 2006, 75, 135-146.	1.1	61
49	Stabilization of recent soil carbon in the humid tropics following land use changes: evidence from aggregate fractionation and stable isotope analyses. Biogeochemistry, 2008, 87, 247-263.	1.7	59
50	Soil Nitrogen Cycling following Montane Forest Conversion in Central Sulawesi, Indonesia. Soil Science Society of America Journal, 2006, 70, 359-366.	1.2	58
51	Deforestation trends in the Atlantic Zone of Costa Rica: A case study. Land Degradation and Development, 1992, 3, 71-84.	1.8	56
52	Soil fertility controls soilâ€“atmosphere carbon dioxide and methane fluxes in a tropical landscape converted from lowland forest to rubber and oil palm plantations. Biogeosciences, 2015, 12, 5831-5852.	1.3	56
53	Nitrous oxide, nitric oxide, and methane fluxes from soils following clearing and burning of tropical secondary forest. Journal of Geophysical Research, 1998, 103, 28047-28058.	3.3	55
54	Nutrient flows and balances at the field and farm scale: Exploring effects of land-use strategies and access to resources. Agricultural Systems, 2007, 94, 459-470.	3.2	55

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55	An in-depth look into a tropical lowland forest soil: nitrogen-addition effects on the contents of N2O, CO2 and CH4 and N2O isotopic signatures down to 2-m depth. Biogeochemistry, 2012, 111, 695-713.	1.7	55
56	Spatial variability surpasses land-use change effects on soil biochemical properties of converted lowland landscapes in Sumatra, Indonesia. Geoderma, 2016, 284, 42-50.	2.3	54
57	Long-term CO2 production from deeply weathered soils of a tropical rain forest: evidence for a potential positive feedback to climate warming. Global Change Biology, 2006, 12, 1878-1893.	4.2	52
58	Trace gas fluxes and nitrogen cycling along an elevation sequence of tropical montane forests in Central Sulawesi, Indonesia. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	51
59	Indications of nitrogen-limited methane uptake in tropical forest soils. Biogeosciences, 2013, 10, 5367-5379.	1.3	51
60	Measured greenhouse gas budgets challenge emission savings from palm-oil biodiesel. Nature Communications, 2020, 11, 1089.	5.8	51
61	Soil organic carbon in density fractions of tropical soils under forest â€“ pasture â€“ secondary forest land use changes. European Journal of Soil Science, 2008, 59, 359-371.	1.8	48
62	Soil nitrogen cycling and nitrogen oxide emissions along a pasture chronosequence in the humid tropics of Costa Rica. Soil Biology and Biochemistry, 1999, 31, 387-394.	4.2	47
63	Effects of dung and urine amendments on the isotopic content of N2O released from grasslands. Rapid Communications in Mass Spectrometry, 2000, 14, 1356-1360.	0.7	46
64	Is soil degradation unrelated to deforestation? Examining soil parameters of land use systems in upland Central Sulawesi, Indonesia. Plant and Soil, 2004, 265, 197-209.	1.8	45
65	Are Partial Nutrient Balances Suitable to Evaluate Nutrient Sustainability of Land use Systems? Results from a Case Study in Central Sulawesi, Indonesia. Nutrient Cycling in Agroecosystems, 2005, 72, 201-212.	1.1	45
66	Restoration of native vegetation following exclosure establishment on communal grazing lands in Tigray, Ethiopia. Applied Vegetation Science, 2012, 15, 71-83.	0.9	43
67	Free-living nitrogen fixation responds to elevated nutrient inputs in tropical montane forest floor and canopy soils of southern Ecuador. Biogeochemistry, 2015, 122, 281-294.	1.7	43
68	Soil redistribution by terracing alleviates soil organic carbon losses caused by forest conversion to rubber plantation. Forest Ecology and Management, 2014, 313, 26-33.	1.4	42
69	Tree species diversity effects on productivity, soil nutrient availability and nutrient response efficiency in a temperate deciduous forest. Forest Ecology and Management, 2015, 338, 114-123.	1.4	42
70	Land use change effects on trace gas fluxes in the forest margins of Central Sulawesi, Indonesia. Journal of Geophysical Research, 2008, 113, .	3.3	41
71	Atmospheric methane uptake by tropical montane forest soils and the contribution of organic layers. Biogeochemistry, 2012, 111, 469-483.	1.7	41
72	Nitrogen-oxide emissions from tropical forest soils exposed to elevated nitrogen input strongly interact with rainfall quantity and seasonality. Biogeochemistry, 2014, 118, 103-120.	1.7	41

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73	Conversion of monoculture cropland and open grassland to agroforestry alters the abundance of soil bacteria, fungi and soil-N-cycling genes. PLoS ONE, 2019, 14, e0218779.	1.1	41
74	Poplar Rows in Temperate Agroforestry Croplands Promote Bacteria, Fungi, and Denitrification Genes in Soils. Frontiers in Microbiology, 2019, 10, 3108.	1.5	41
75	Management effects on methane fluxes in humid tropical pasture soils. Soil Biology and Biochemistry, 2001, 33, 1493-1499.	4.2	38
76	Asymbiotic biological nitrogen fixation in a temperate grassland as affected by management practices. Soil Biology and Biochemistry, 2014, 70, 38-46.	4.2	38
77	Soil nitrogen oxide fluxes from lowland forests converted to smallholder rubber and oil palm plantations in Sumatra, Indonesia. Biogeosciences, 2017, 14, 2781-2798.	1.3	38
78	Conversion of tropical forests to smallholder rubber and oil palm plantations impacts nutrient leaching losses and nutrient retention efficiency in highly weathered soils. Biogeosciences, 2018, 15, 5131-5154.	1.3	38
79	Response of nitrogen oxide emissions to grazer species and plant species composition in temperate agricultural grassland. Agriculture, Ecosystems and Environment, 2012, 151, 34-43.	2.5	37
80	Nitrogen cycling in canopy soils of tropical montane forests responds rapidly to indirect N and P fertilization. Global Change Biology, 2014, 20, 3802-3813.	4.2	37
81	Soil N cycling in old-growth forests across an Andosol toposequence in Ecuador. Forest Ecology and Management, 2009, 257, 2079-2087.	1.4	36
82	An inverse analysis reveals limitations of the soil-CO₂ profile method to calculate CO₂ production and efflux for well-structured soils. Biogeosciences, 2010, 7, 2311-2325.	1.3	34
83	Simulated drought reduces soil CO₂efflux and production in a tropical forest in Sulawesi, Indonesia. Ecosphere, 2011, 2, art119.	1.0	34
84	Spatial and temporal effects of drought on soil CO₂ efflux in a cacao agroforestry system in Sulawesi, Indonesia. Biogeosciences, 2010, 7, 1223-1235.	1.3	33
85	Direct contribution of nitrogen deposition to nitrous oxide emissions in a temperate beech and spruce forest â€“ a ¹⁵N tracer study. Biogeosciences, 2011, 8, 621-635.	1.3	33
86	Uncertainty analysis of Î´13C method in soil organic matter studies. Soil Biology and Biochemistry, 1994, 26, 153-160.	4.2	32
87	Disentangling gross N2O production and consumption in soil. Scientific Reports, 2016, 6, 36517.	1.6	32
88	Nitrous oxide fluxes and nitrogen cycling along a pasture chronosequence in Central Amazonia, Brazil. Biogeosciences, 2005, 2, 175-187.	1.3	30
89	Soil N2O fluxes along an elevation gradient of tropical montane forests under experimental nitrogen and phosphorus addition. Frontiers in Earth Science, 2015, 3, .	0.8	30
90	Patterns in Soil Chemical Weathering Related to Topographic Gradients and Vegetation Structure in a High Andean Tropical Ecosystem. Journal of Geophysical Research F: Earth Surface, 2019, 124, 666-685.	1.0	30

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91	Chronic nitrogen addition causes a reduction in soil carbon dioxide efflux during the high stem-growth period in a tropical montane forest but no response from a tropical lowland forest on a decadal time scale. Biogeosciences, 2009, 6, 2973-2983.	1.3	29
92	Indirect feedbacks to rising CO2. Nature, 2011, 475, 177-178.	13.7	26
93	If a Tree Falls in the Forest.... Science, 1996, 273, 201-0.	6.0	23
94	Gross N2O emission and gross N2O uptake in soils under temperate spruce and beech forests. Soil Biology and Biochemistry, 2017, 112, 228-236.	4.2	23
95	Nitrous oxide emissions from stems of alder, beech and spruce in a temperate forest. Plant and Soil, 2017, 420, 423-434.	1.8	23
96	Implementing REDD+ (Reducing Emissions from Deforestation and Degradation): evidence on governance, evaluation and impacts from the REDD-ALERT project. Mitigation and Adaptation Strategies for Global Change, 2014, 19, 907-925.	1.0	19
97	Soil research challenges in response to emerging agricultural soil management practices. Advances in Agronomy, 2020, , 179-240.	2.4	19
98	Effects of Nutrient Addition on the Productivity of Montane Forests and Implications for the Carbon Cycle. Ecological Studies, 2013, , 315-329.	0.4	18
99	The Ecological and Economic Potential of Carbon Sequestration in Forests: Examples from South America. Ambio, 2005, 34, 224-229.	2.8	17
100	Soil trace gas fluxes along orthogonal precipitation and soil fertility gradients in tropical lowland forests of Panama. Biogeosciences, 2017, 14, 3509-3524.	1.3	17
101	Nutrient saturation of crop monocultures and agroforestry indicated by nutrient response efficiency. Nutrient Cycling in Agroecosystems, 2021, 119, 69-82.	1.1	17
102	Differential response of mineral-associated organic matter in tropical soils formed in volcanic ashes and marine Tertiary sediment to treatment with HCl, NaOCl, and Na4P2O7. Soil Biology and Biochemistry, 2008, 40, 1846-1855.	4.2	16
103	Nitrogen response efficiency of a managed and phytodiverse temperate grassland. Plant and Soil, 2013, 364, 193-206.	1.8	16
104	Changes in soil organic carbon and nutrient stocks in conventional selective logging versus reduced-impact logging in rainforests on highly weathered soils in Southern Cameroon. Forest Ecology and Management, 2019, 451, 117522.	1.4	16
105	Responses of tree growth and biomass production to nutrient addition in a semiâ€deciduous tropical forest in <scp>Africa</scp>. Ecology, 2022, 103, e3659.	1.5	16
106	Tropical Rainforests and Agroforests under Global Change. Environmental Science and Engineering, 2010, , .	0.1	14
107	Determinants of fern and angiosperm herb community structure in lower montane rainforest in <scp>I</scp>ndonesia. Journal of Vegetation Science, 2014, 25, 1216-1224.	1.1	14
108	Mulching with pruned fronds promotes the internal soil N cycling and soil fertility in a large-scale oil palm plantation. Biogeochemistry, 2021, 154, 63-80.	1.7	13

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109	Sample Pretreatment Affects the Distribution of Organic Carbon in Aggregates of Tropical Grassland Soils. Soil Science Society of America Journal, 2008, 72, 500-506.	1.2	12
110	Nitrogen retention efficiency and nitrogen losses of a managed and phytodiverse temperate grassland. Basic and Applied Ecology, 2014, 15, 207-218.	1.2	11
111	Herbicide weed control increases nutrient leaching compared to mechanical weeding in a large-scale oil palm plantation. Biogeosciences, 2020, 17, 5243-5262.	1.3	11
112	Alkali Basalt Gravel Weathering in Quaternary Allier River Terraces, Limagne, France. Soil Science Society of America Journal, 1990, 54, 1043-1048.	1.2	10
113	Tree-microbial biomass competition for nutrients in a temperate deciduous forest, central Germany. Plant and Soil, 2016, 408, 227-242.	1.8	10
114	Cocoa production: Monocultures are not the solution to climate adaptationâ€"Response to Abdulai etÂal. 2017. Global Change Biology, 2018, 24, 561-562.	4.2	10
115	Impacts of burning on soil trace gas fluxes in two wooded savanna sites in Burkina Faso. Journal of Arid Environments, 2019, 165, 132-140.	1.2	10
116	Canopy soil of oil palm plantations emits methane and nitrous oxide. Soil Biology and Biochemistry, 2018, 122, 1-6.	4.2	9
117	Soil greenhouse gas fluxes following conventional selective and reduced-impact logging in a Congo Basin rainforest. Biogeochemistry, 2020, 151, 153-170.	1.7	9
118	Micromorphological Characterization and Microchemical Quantification of Weathering in an Alkali Basalt Pebble. Soil Science Society of America Journal, 1993, 57, 128-134.	1.2	8
119	Stem and soil nitrous oxide fluxes from rainforest and cacao agroforest on highly weathered soils in the Congo Basin. Biogeosciences, 2020, 17, 5377-5397.	1.3	8
120	Variation of measured banana yields in a Costa Rican plantation as explained by soil survey and thematic mapper data. Geoderma, 1990, 47, 337-348.	2.3	7
121	Nitrogen and Phosphorus Control Soil Methane Uptake in Tropical Montane Forests. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005970.	1.3	7
122	Late Holocene ENSO-related fire impact on vegetation, nutrient status and carbon accumulation of peatlands in Jambi, Sumatra, Indonesia. Review of Palaeobotany and Palynology, 2021, 293, 104482.	0.8	7
123	Reduced Soil Gross N ₂ O Emission Driven by Substrates Rather Than Denitrification Gene Abundance in Cropland Agroforestry and Monoculture. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	1.3	6
124	Substantial Stem Methane Emissions From Rainforest and Cacao Agroforest Partly Negate Soil Uptake in the Congo Basin. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006312.	1.3	5
125	Canopy soil greenhouse gas dynamics in response to indirect fertilization across an elevation gradient of tropical montane forests. Biotropica, 2017, 49, 153-159.	0.8	4
126	Spatial variability in soil organic carbon in a tropical montane landscape: associations between soil organic carbon and land use, soil properties, vegetation, and topography vary across plot to landscape scales. Soil, 2017, 3, 123-137.	2.2	4

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127	Soil Biochemical Properties and Nutrient Leaching from Smallholder Oil Palm Plantations, Sumatra-Indonesia. Agrivita, 2018, 40, .	0.2	4
128	Soil Carbon Dynamics Following Land Use Changes and Conversion to Oil Palm Plantations in Tropical Lowlands Inferred From Radiocarbon. Global Biogeochemical Cycles, 2020, 34, e2019GB006461.	1.9	3
129	Implementing a New Rubber Plant Functional Type in the Community Land Model (CLM5) Improves Accuracy of Carbon and Water Flux Estimation. Land, 2022, 11, 183.	1.2	3
130	Weathering of alcali basalt gravel in two older Allier river terraces, Limagne, France. Chemical Geology, 1990, 84, 148-149.	1.4	2
131	Carbon Changes Following the Establishment of Exclosure on Communal Grazing Lands in the Semi-Arid Lowlands of Tigray, Ethiopia. Climate Change Management, 2011, , 111-131.	0.6	2
132	Using a Bottom-Up Approach to Scale Leaf Photosynthetic Traits of Oil Palm, Rubber, and Two Coexisting Tropical Woody Species. Forests, 2021, 12, 359.	0.9	1
133	The ecological and economic potential of carbon sequestration in forests: examples from South America. Ambio, 2005, 34, 224-9.	2.8	1
134	Partial Nutrient Budget from Lowland Forests Converted to Oil Palm and Rubber Plantations in Sumatra, Indonesia. , 2017, , 273-285.		0
135	Tropical rainforests and agroforests under global change: Ecological and socio-economic valuations â€" an introduction. Environmental Science and Engineering, 2010, , 1-11.	0.1	0