Simon L Lewis

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6255670/publications.pdf

Version: 2024-02-01

148 papers	31,323 citations	16411 64 h-index	9311 143 g-index
154 all docs	154 docs citations	154 times ranked	26843 citing authors

#	Article	IF	Citations
1	Aboveground biomass density models for NASAâ€™s Global Ecosystem Dynamics Investigation (GEDI) lidar mission. Remote Sensing of Environment, 2022, 270, 112845.	4.6	108
2	The number of tree species on Earth. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	86
3	Aboveground forest biomass varies across continents, ecological zones and successional stages: refined IPCC default values for tropical and subtropical forests. Environmental Research Letters, 2022, 17, 014047.	2.2	21
4	A comprehensive framework for assessing the accuracy and uncertainty of global above-ground biomass maps. Remote Sensing of Environment, 2022, 272, 112917.	4.6	48
5	MODIS Vegetation Continuous Fields tree cover needs calibrating in tropical savannas. Biogeosciences, 2022, 19, 1377-1394.	1.3	7
6	An Integrated Framework to Assess Greenwashing. Sustainability, 2022, 14, 4431.	1.6	46
7	Making forest data fair and open. Nature Ecology and Evolution, 2022, 6, 656-658.	3.4	18
8	Functional susceptibility of tropical forests to climate change. Nature Ecology and Evolution, 2022, 6, 878-889.	3.4	8
9	Water table depth modulates productivity and biomass across Amazonian forests. Global Ecology and Biogeography, 2022, 31, 1571-1588.	2.7	17
10	How the Glasgow Declaration on Forests can help keep alive the 1.5â€‰Â°C target. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	11
11	Pantropical modelling of canopy functional traits using Sentinel-2 remote sensing data. Remote Sensing of Environment, 2021, 252, 112122.	4.6	38
12	Pantropical variability in tree crown allometry. Global Ecology and Biogeography, 2021, 30, 459-475.	2.7	27
13	Effects of Earth system feedbacks on the potential mitigation of large-scale tropical forest restoration. Biogeosciences, 2021, 18, 2627-2647.	1.3	18
14	Resistance of African tropical forests to an extreme climate anomaly. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	37
15	Earth System Models Are Not Capturing Presentâ€Day Tropical Forest Carbon Dynamics. Earth's Future, 2021, 9, e2020EF001874.	2.4	22
16	High aboveground carbon stock of African tropical montane forests. Nature, 2021, 596, 536-542.	13.7	65
17	The NASA AfriSAR campaign: Airborne SAR and lidar measurements of tropical forest structure and biomass in support of current and future space missions. Remote Sensing of Environment, 2021, 264, 112533.	4.6	33
18	Congo Basin rainforest â€” invest US$150 million in science. Nature, 2021, 598, 411-414.	13.7	9

#	Article	IF	Citations
19	Browse from Three Tree Legumes Increases Forage Production for Cattle in a Silvopastoral System in the Southwest Amazon. Animals, 2021, 11, 3585.	1.0	3
20	The Role of Forest Elephants in Shaping Tropical Forestâ€“Savanna Coexistence. Ecosystems, 2020, 23, 602-616.	1.6	33
21	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	4.2	1,038
22	Old growth Afrotropical forests critical for maintaining forest carbon. Global Ecology and Biogeography, 2020, 29, 1785-1798.	2.7	19
23	Tree mode of death and mortality risk factors across Amazon forests. Nature Communications, 2020, 11, 5515.	5.8	62
24	First Evidence of Peat Domes in the Congo Basin using LiDAR from a Fixed-Wing Drone. Remote Sensing, 2020, 12, 2196.	1.8	18
25	Evaluating the potential of fullâ€waveform lidar for mapping panâ€tropical tree species richness. Global Ecology and Biogeography, 2020, 29, 1799-1816.	2.7	31
26	Long-term thermal sensitivity of Earthâ€™s tropical forests. Science, 2020, 368, 869-874.	6.0	198
27	Additive influences of soil and climate gradients drive tree community composition of Central African rain forests. Journal of Vegetation Science, 2020, 31, 1154-1167.	1.1	3
28	Competition influences tree growth, but not mortality, across environmental gradients in Amazonia and tropical Africa. Ecology, 2020, 101, e03052.	1.5	57
29	Asynchronous carbon sink saturation in African and Amazonian tropical forests. Nature, 2020, 579, 80-87.	13.7	439
30	Long-term droughts may drive drier tropical forests towards increased functional, taxonomic and phylogenetic homogeneity. Nature Communications, 2020, 11, 3346.	5.8	61
31	The global abundance of tree palms. Global Ecology and Biogeography, 2020, 29, 1495-1514.	2.7	62
32	Assessment of Bias in Pan-Tropical Biomass Predictions. Frontiers in Forests and Global Change, 2020, 3, .	1.0	36
33	Estimating aboveground net biomass change for tropical and subtropical forests: Refinement of IPCC default rates using forest plot data. Global Change Biology, 2019, 25, 3609-3624.	4.2	78
34	Exploring the relation between remotely sensed vertical canopy structure and tree species diversity in Gabon. Environmental Research Letters, 2019, 14, 094013.	2.2	20
35	The Forest Observation System, building a global reference dataset for remote sensing of forest biomass. Scientific Data, 2019, 6, 198.	2.4	44
36	Comment on â€œThe global tree restoration potentialâ€. Science, 2019, 366, .	6.0	55

#	Article	IF	Citations
37	Restoring natural forests is the best way to remove atmospheric carbon. Nature, 2019, 568, 25-28.	13.7	508
38	The persistence of carbon in the African forest understory. Nature Plants, 2019, 5, 133-140.	4.7	41
39	Earth system impacts of the European arrival and Great Dying in the Americas after 1492. Quaternary Science Reviews, 2019, 207, 13-36.	1.4	299
40	Ground Data are Essential for Biomass Remote Sensing Missions. Surveys in Geophysics, 2019, 40, 863-880.	2.1	91
41	Drier tropical forests are susceptible to functional changes in response to a longâ€term drought. Ecology Letters, 2019, 22, 855-865.	3.0	75
42	Compositional response of Amazon forests to climate change. Global Change Biology, 2019, 25, 39-56.	4.2	265
43	Congo Basin peatlands: threats and conservation priorities. Mitigation and Adaptation Strategies for Global Change, 2019, 24, 669-686.	1.0	64
44	Topography shapes the structure, composition and function of tropical forest landscapes. Ecology Letters, 2018, 21, 989-1000.	3.0	215
45	Field methods for sampling tree height for tropical forest biomass estimation. Methods in Ecology and Evolution, 2018, 9, 1179-1189.	2.2	78
46	Comparison of Small- and Large-Footprint Lidar Characterization of Tropical Forest Aboveground Structure and Biomass: A Case Study From Central Gabon. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 3512-3526.	2.3	60
47	Panâ€tropical prediction of forest structure from the largest trees. Global Ecology and Biogeography, 2018, 27, 1366-1383.	2.7	78
48	In Situ Reference Datasets From the TropiSAR and AfriSAR Campaigns in Support of Upcoming Spaceborne Biomass Missions. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 3617-3627.	2.3	49
49	Estimating aboveground carbon density and its uncertainty in Borneo's structurally complex tropical forests using airborne laser scanning. Biogeosciences, 2018, 15, 3811-3830.	1.3	47
50	Phylogenetic composition and structure of tree communities shed light on historical processes influencing tropical rainforest diversity. Ecography, 2017, 40, 521-530.	2.1	29
51	Seasonal drought limits tree species across the Neotropics. Ecography, 2017, 40, 618-629.	2.1	143
52	Diversity and carbon storage across the tropical forest biome. Scientific Reports, 2017, 7, 39102.	1.6	251
53	Age, extent and carbon storage of the central Congo Basin peatland complex. Nature, 2017, 542, 86-90.	13.7	428
54	New insights on above ground biomass and forest attributes in tropical montane forests. Forest Ecology and Management, 2017, 399, 235-246.	1.4	30

#	Article	IF	Citations
55	Area-based vs tree-centric approaches to mapping forest carbon in Southeast Asian forests from airborne laser scanning data. Remote Sensing of Environment, 2017, 194, 77-88.	4.6	142
56	Biogeographic distributions of neotropical trees reflect their directly measured drought tolerances. Scientific Reports, 2017, 7, 8334.	1.6	51
57	Spatial Distribution of Carbon Stored in Forests of theÂDemocratic Republic of Congo. Scientific Reports, 2017, 7, 15030.	1.6	44
58	Long-term carbon sink in Borneoâ€™s forests halted by drought and vulnerable to edge effects. Nature Communications, 2017, 8, 1966.	5.8	116
59	Height-diameter allometry and above ground biomass in tropical montane forests: Insights from the Albertine Rift in Africa. PLoS ONE, 2017, 12, e0179653.	1.1	37
60	African Savanna-Forest Boundary Dynamics: A 20-Year Study. PLoS ONE, 2016, 11, e0156934.	1.1	44
61	The Paris Agreement has solved a troubling problem. Nature, 2016, 532, 283-283.	13.7	21
62	Land cover change and carbon emissions over 100Âyears in an <scp>A</scp>frican biodiversity hotspot. Global Change Biology, 2016, 22, 2787-2800.	4.2	52
63	An integrated panâ€tropical biomass map using multiple reference datasets. Global Change Biology, 2016, 22, 1406-1420.	4.2	469
64	Consistent, small effects of treefall disturbances on the composition and diversity of four Amazonian forests. Journal of Ecology, 2016, 104, 497-506.	1.9	15
65	Carbon sequestration and biodiversity following 18 years of active tropical forest restoration. Forest Ecology and Management, 2016, 373, 44-55.	1.4	88
66	Positive biodiversity-productivity relationship predominant in global forests. Science, 2016, 354, .	6.0	864
67	Recent Changes in Amazon Forest Biomass and Dynamics. Ecological Studies, 2016, , 191-224.	0.4	11
68	Aboveground biomass estimation in tropical forests at single tree level with ALS data. , 2016, , .		1
69	Ecosystem heterogeneity determines the ecological resilience of the Amazon to climate change. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 793-797.	3.3	161
70	Phylogenetic diversity of Amazonian tree communities. Diversity and Distributions, 2015, 21, 1295-1307.	1.9	72
71	A transparent framework for defining the Anthropocene Epoch. Infrastructure Asset Management, 2015, 2, 128-146.	1.2	54
72	Anthropocene: Earth System, geological, philosophical and political paradigm shifts. Infrastructure Asset Management, 2015, 2, 108-116.	1.2	46

#	Article	IF	Citations
73	Foliar trait contrasts between African forest and savanna trees: genetic versus environmental effects. Functional Plant Biology, 2015, 42, 63.	1.1	23
74	Geological evidence for the Anthropocene. Science, 2015, 349, 246-247.	6.0	8
75	Hyperdominance in Amazonian forest carbon cycling. Nature Communications, 2015, 6, 6857.	5.8	214
76	Biome-specific effects of nitrogen and phosphorus on the photosynthetic characteristics of trees at a forest-savanna boundary in Cameroon. Oecologia, 2015, 178, 659-672.	0.9	25
77	Defining the Anthropocene. Nature, 2015, 519, 171-180.	13.7	2,143
78	Increasing human dominance of tropical forests. Science, 2015, 349, 827-832.	6.0	551
79	Geological evidence for the Anthropocene. Science, 2015, 349, 246-247.	6.0	2
80	Scientist-versus-activist debates mislead the public. Nature, 2014, 506, 409-409.	13.7	1
81	Markedly divergent estimates of <scp>A</scp>mazon forest carbon density from ground plots and satellites. Global Ecology and Biogeography, 2014, 23, 935-946.	2.7	248
82	Stand structure and species co-occurrence in mixed and monodominant Central African tropical forests. Journal of Tropical Ecology, 2014, 30, 447-455.	0.5	10
83	Methods to estimate aboveground wood productivity from long-term forest inventory plots. Forest Ecology and Management, 2014, 320, 30-38.	1.4	75
84	Forests are more than sticks of carbon. Nature, 2014, 507, 306-306.	13.7	4
85	Fast demographic traits promote high diversification rates of Amazonian trees. Ecology Letters, 2014, 17, 527-536.	3.0	63
86	Tropical forest wood production: a crossâ€continental comparison. Journal of Ecology, 2014, 102, 1025-1037.	1.9	77
87	Evaluating the tropical forest carbon sink. Global Change Biology, 2014, 20, 2039-2041.	4.2	39
88	Shifting dynamics of climate-functional groups in old-growth Amazonian forests. Plant Ecology and Diversity, 2014, 7, 267-279.	1.0	18
89	Quantifying and understanding carbon storage and sequestration within the Eastern Arc Mountains of Tanzania, a tropical biodiversity hotspot. Carbon Balance and Management, 2014, 9, 2.	1.4	26
90	Recent changes in tropical forest biomass and dynamics. , 2014, , 77-108.		10

#	Article	IF	Citations
91	Mixed-Forest Species Establishment in a Monodominant Forest in Central Africa: Implications for Tropical Forest Invasibility. PLoS ONE, 2014, 9, e97585.	1.1	23
92	Residence times of woody biomass in tropical forests. Plant Ecology and Diversity, 2013, 6, 139-157.	1.0	104
93	Neogene origins and implied warmth tolerance of Amazon tree species. Ecology and Evolution, 2013, 3, 162-169.	0.8	38
94	TESSA: A toolkit for rapid assessment of ecosystem services at sites of biodiversity conservation importance. Ecosystem Services, 2013, 5, 51-57.	2.3	153
95	Simulated resilience of tropical rainforests to CO2-induced climate change. Nature Geoscience, 2013, 6, 268-273.	5.4	358
96	On the delineation of tropical vegetation types with an emphasis on forest/savanna transitions. Plant Ecology and Diversity, 2013, 6, 101-137.	1.0	105
97	The past, present and future of Africa's rainforests. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120293.	1.8	20
98	African rainforests: past, present and future. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120312.	1.8	131
99	Above-ground biomass and structure of 260 African tropical forests. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120295.	1.8	264
100	Predictive systems ecology. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131452.	1.2	114
101	Changing Tropical Forest Dynamics and Their Effects on Canopy Geometry and Tropical Forest Biodiversity. , 2013, , 247-260.		1
102	We must set planetary boundaries wisely. Nature, 2012, 485, 417-417.	13.7	62
103	Conservation implications of recent advances in biodiversityâ€“functioning research. Biological Conservation, 2012, 151, 26-31.	1.9	19
104	Investigating diversity dependence of tropical forest litter decomposition: experiments and observations from Central Africa. Journal of Vegetation Science, 2012, 23, 223-235.	1.1	21
105	Droughtâ€induced shifts in the floristic and functional composition of tropical forests in Ghana. Ecology Letters, 2012, 15, 1120-1129.	3.0	205
106	Towards Regional, Error-Bounded Landscape Carbon Storage Estimates for Data-Deficient Areas of the World. PLoS ONE, 2012, 7, e44795.	1.1	27
107	A Large and Persistent Carbon Sink in the Worldâ€™s Forests. Science, 2011, 333, 988-993.	6.0	5,393
108	Implementation and opportunity costs of reducing deforestation and forest degradation in Tanzania. Nature Climate Change, 2011, 1, 161-164.	8.1	117

#	Article	IF	Citations
109	The 2010 Amazon Drought. Science, 2011, 331, 554-554.	6.0	912
110	Benchmark map of forest carbon stocks in tropical regions across three continents. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9899-9904.	3.3	1,659
111	Soil Does Not Explain Monodominance in a Central African Tropical Forest. PLoS ONE, 2011, 6, e16996.	1.1	47
112	Predicting alpha diversity of African rain forests: models based on climate and satellite-derived data do not perform better than a purely spatial model. Journal of Biogeography, 2011, 38, 1164-1176.	1.4	30
113	Carbon storage, structure and composition of miombo woodlands in Tanzaniaâ€™s Eastern Arc Mountains. African Journal of Ecology, 2011, 49, 332-342.	0.4	69
114	Mechanisms of monodominance in diverse tropical tree-dominated systems. Journal of Ecology, 2011, 99, 891-898.	1.9	137
115	ForestPlots.net: a web application and research tool to manage and analyse tropical forest plot data. Journal of Vegetation Science, 2011, 22, 610-613.	1.1	157
116	Measuring, modeling and mapping ecosystem services in the Eastern Arc Mountains of Tanzania. Progress in Physical Geography, 2011, 35, 595-611.	1.4	84
117	The high value of logged tropical forests: lessons from northern Borneo. Biodiversity and Conservation, 2010, 19, 985-997.	1.2	253
118	Droughtâ€“mortality relationships for tropical forests. New Phytologist, 2010, 187, 631-646.	3.5	487
119	Diversity and aboveground biomass in three tropical forest types in the Dja Biosphere Reserve, Cameroon. African Journal of Ecology, 2010, 48, 1053-1063.	0.4	61
120	Implications of future climate and atmospheric CO₂ content for regional biogeochemistry, biogeography and ecosystem services across East Africa. Global Change Biology, 2010, 16, 617-640.	4.2	71
121	Getting ready for REDD+ in Tanzania: a case study of progress and challenges. Oryx, 2010, 44, 339-351.	0.5	103
122	How to beat the media in the climate street fight. Nature, 2010, 468, 7-7.	13.7	9
123	Predictable waves of sequential forest degradation and biodiversity loss spreading from an African city. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14556-14561.	3.3	263
124	Changes in Amazonian forest biomass, dynamics, and composition, 1980â€“2002. Geophysical Monograph Series, 2009, , 373-387.	0.1	16
125	Increasing carbon storage in intact African tropical forests. Nature, 2009, 457, 1003-1006.	13.7	816
126	Towards a worldwide wood economics spectrum. Ecology Letters, 2009, 12, 351-366.	3.0	2,219

#	Article	IF	Citations
127	Are the dynamics of tropical forests dominated by large and rare disturbance events?. Ecology Letters, 2009, 12, E19-21; discussion E22-5.	3.0	37
128	Changing Ecology of Tropical Forests: Evidence and Drivers. Annual Review of Ecology, Evolution, and Systematics, 2009, 40, 529-549.	3.8	229
129	Drought Sensitivity of the Amazon Rainforest. Science, 2009, 323, 1344-1347.	6.0	1,443
130	Carbon emissions: the poorest forest dwellers could suffer. Nature, 2009, 462, 567-567.	13.7	3
131	The production, storage, and flow of carbon in Amazonian forests. Geophysical Monograph Series, 2009, , 355-372.	0.1	19
132	The changing Amazon forest. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1819-1827.	1.8	188
133	The odd man out? Might climate explain the lower tree Î±â€diversity of African rain forests relative to Amazonian rain forests?. Journal of Ecology, 2007, 95, 1058-1071.	1.9	115
134	Impacts of global atmospheric change on tropical forests. Trends in Ecology and Evolution, 2006, 21, 173-174.	4.2	27
135	The regional variation of aboveground live biomass in old-growth Amazonian forests. Global Change Biology, 2006, 12, 1107-1138.	4.2	497
136	Tropical forests and the changing earth system. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 195-210.	1.8	262
137	Predicting the impacts of global environmental changes on tropical forests. , 2005, , 41-56.		1
138	Late twentieth-century patterns and trends in Amazon tree turnover. , 2005, , 107-128.		3
139	Late twentieth-century trends in the biomass of Amazonian forest plots. , 2005, , 129-142.		2
140	Late twentieth-century trends in the structure and dynamics of South American forests. , 2005, , 143-154.		0
141	Increasing biomass in Amazonian forest plots. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 353-365.	1.8	405
142	Fingerprinting the impacts of global change on tropical forests. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 437-462.	1.8	213
143	Variation in wood density determines spatial patterns inAmazonian forest biomass. Global Change Biology, 2004, 10, 545-562.	4.2	633
144	The above-ground coarse wood productivity of 104 Neotropical forest plots. Global Change Biology, 2004, 10, 563-591.	4.2	436

#	Article	IF	Citations
145	Tropical forest tree mortality, recruitment and turnover rates: calculation, interpretation and comparison when census intervals vary. Journal of Ecology, 2004, 92, 929-944.	1.9	181
146	Increasing dominance of large lianas in Amazonian forests. Nature, 2002, 418, 770-774.	13.7	500
147	EFFECTS OF ABOVE- AND BELOWGROUND COMPETITION ON GROWTH AND SURVIVAL OF RAIN FOREST TREE SEEDLINGS. Ecology, 2000, 81, 2525-2538.	1.5	119
148	EFFECTS OF ABOVE- AND BELOWGROUND COMPETITION ON GROWTH AND SURVIVAL OF RAIN FOREST TREE SEEDLINGS. , 2000, 81, 2525.		3