

I Colin Prentice

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

283
papers

59,094
citations

109
h-index

242
g-index

376
ext. papers

67,156
ext. citations

9.7
avg, IF

7.3
L-index

#	Paper	IF	Citations
283	Ecosystem Photosynthesis in Land-Surface Models: A First-Principles Approach Incorporating Acclimation. <i>Journal of Advances in Modeling Earth Systems</i> , 2022 , 14,	7.1	2
282	Atmospheric dryness reduces photosynthesis along a large range of soil water deficits.. <i>Nature Communications</i> , 2022 , 13, 989	17.4	6
281	Rising CO and warming reduce global canopy demand for nitrogen.. <i>New Phytologist</i> , 2022 ,	9.8	4
280	CO fertilization of terrestrial photosynthesis inferred from site to global scales.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2115627119	11.5	3
279	Accounting for atmospheric carbon dioxide variations in pollen-based reconstruction of past hydroclimates. <i>Global and Planetary Change</i> , 2022 , 211, 103790	4.2	1
278	Reconstructing burnt area during the Holocene: an Iberian case study. <i>Climate of the Past</i> , 2022 , 18, 1189-1201	3.9	0
277	Optimality-based modelling of climate impacts on global potential wheat yield. <i>Environmental Research Letters</i> , 2021 , 16, 114013	6.2	3
276	Global decadal variability of plant carbon isotope discrimination and its link to gross primary production. <i>Global Change Biology</i> , 2021 ,	11.4	3
275	Global climate and nutrient controls of photosynthetic capacity. <i>Communications Biology</i> , 2021 , 4, 462	6.7	6
274	The importance of antecedent vegetation and drought conditions as global drivers of burnt area. <i>Biogeosciences</i> , 2021 , 18, 3861-3879	4.6	4
273	The impact of methodological decisions on climate reconstructions using WA-PLS. <i>Quaternary Research</i> , 2021 , 99, 341-356	1.9	4
272	Predictability of leaf traits with climate and elevation: a case study in Gongga Mountain, China. <i>Tree Physiology</i> , 2021 , 41, 1336-1352	4.2	5
271	Dry corridors opened by fire and low CO ₂ in Amazonian rainforest during the Last Glacial Maximum. <i>Nature Geoscience</i> , 2021 , 14, 578-585	18.3	4
270	Eco-evolutionary optimality as a means to improve vegetation and land-surface models. <i>New Phytologist</i> , 2021 , 231, 2125-2141	9.8	10
269	Coordination of plant hydraulic and photosynthetic traits: confronting optimality theory with field measurements. <i>New Phytologist</i> , 2021 , 232, 1286-1296	9.8	3
268	Global variation in the fraction of leaf nitrogen allocated to photosynthesis. <i>Nature Communications</i> , 2021 , 12, 4866	17.4	5
267	Vegetation responses to climate extremes recorded by remotely sensed atmospheric formaldehyde. <i>Global Change Biology</i> , 2021 ,	11.4	3

266	AusTraits, a curated plant trait database for the Australian flora. <i>Scientific Data</i> , 2021 , 8, 254	8.2	6
265	A constraint on historic growth in global photosynthesis due to increasing CO ₂ . <i>Nature</i> , 2021 , 600, 253-258	10.4	5
264	The climatic space of European pollen taxa. <i>Ecology</i> , 2020 , 101, e03055	4.6	3
263	Organizing principles for vegetation dynamics. <i>Nature Plants</i> , 2020 , 6, 444-453	11.5	32
262	When and where soil is important to modify the carbon and water economy of leaves. <i>New Phytologist</i> , 2020 , 228, 121-135	9.8	6
261	P-model v1.0: an optimality-based light use efficiency model for simulating ecosystem gross primary production. <i>Geoscientific Model Development</i> , 2020 , 13, 1545-1581	6.3	32
260	A new multivariable benchmark for Last Glacial Maximum climate simulations. <i>Climate of the Past</i> , 2020 , 16, 699-712	3.9	9
259	Components of leaf-trait variation along environmental gradients. <i>New Phytologist</i> , 2020 , 228, 82-94	9.8	33
258	Acclimation of leaf respiration consistent with optimal photosynthetic capacity. <i>Global Change Biology</i> , 2020 , 26, 2573	11.4	37
257	Extending a first-principles primary production model to predict wheat yields. <i>Agricultural and Forest Meteorology</i> , 2020 , 287, 107932	5.8	6
256	A theory of plant function helps to explain leaf-trait and productivity responses to elevation. <i>New Phytologist</i> , 2020 , 226, 1274-1284	9.8	15
255	Quantitative assessment of fire and vegetation properties in simulations with fire-enabled vegetation models from the Fire Model Intercomparison Project. <i>Geoscientific Model Development</i> , 2020 , 13, 3299-3318	6.3	31
254	Recent trends in gross primary production and their drivers: analysis and modelling at flux-site and global scales. <i>Environmental Research Letters</i> , 2020 , 15, 124050	6.2	11
253	Historical changes in the stomatal limitation of photosynthesis: empirical support for an optimality principle. <i>New Phytologist</i> , 2020 , 225, 2484-2497	9.8	28
252	TRY plant trait database - enhanced coverage and open access. <i>Global Change Biology</i> , 2020 , 26, 119-188	11.4	399
251	Impacts of soil water stress on the acclimated stomatal limitation of photosynthesis: Insights from stable carbon isotope data. <i>Global Change Biology</i> , 2020 , 26, 7158-7172	11.4	13
250	Forest production efficiency increases with growth temperature. <i>Nature Communications</i> , 2020 , 11, 5322	7.4	21
249	An improved statistical approach for reconstructing past climates from biotic assemblages. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2020 , 476, 20200346	2.4	3

248	N ₂ and O ₂ changes from the Last Glacial Maximum to the preindustrial (Part 2): terrestrial N ₂ and O ₂ emissions and carbon-nitrogen cycle interactions. <i>Biogeosciences</i> , 2020 , 17, 3511-3543	4.6	3
247	Plant respiration: Controlled by photosynthesis or biomass?. <i>Global Change Biology</i> , 2020 , 26, 1739-1753	11.4	26
246	A Method for Generating Coherent Spatially Explicit Maps of Seasonal Paleoclimates From Site-Based Reconstructions. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2019MS001630	7.1	2
245	P-model v1.0: An optimality-based light use efficiency model for simulating ecosystem gross primary production 2019 ,		1
244	Drought impacts on terrestrial primary production underestimated by satellite monitoring. <i>Nature Geoscience</i> , 2019 , 12, 264-270	18.3	154
243	Is NPP proportional to GPP? Waring's hypothesis 20 years on. <i>Tree Physiology</i> , 2019 , 39, 1473-1483	4.2	51
242	Observed and modelled historical trends in the water-use efficiency of plants and ecosystems. <i>Global Change Biology</i> , 2019 , 25, 2242-2257	11.4	49
241	Nitrogen and phosphorus constrain the CO ₂ fertilization of global plant biomass. <i>Nature Climate Change</i> , 2019 , 9, 684-689	21.4	125
240	Comment on "The global tree restoration potential". <i>Science</i> , 2019 , 366,	33.3	41
239	Quantifying leaf-trait covariation and its controls across climates and biomes. <i>New Phytologist</i> , 2019 , 221, 155-168	9.8	31
238	Global photosynthetic capacity is optimized to the environment. <i>Ecology Letters</i> , 2019 , 22, 506-517	10	80
237	The validity of optimal leaf traits modelled on environmental conditions. <i>New Phytologist</i> , 2019 , 221, 1409-1423	9.8	24
236	Bridging Drought Experiment and Modeling: Representing the Differential Sensitivities of Leaf Gas Exchange to Drought. <i>Frontiers in Plant Science</i> , 2018 , 9, 1965	6.2	16
235	Quantifying soil moisture impacts on light use efficiency across biomes. <i>New Phytologist</i> , 2018 , 218, 1430-1449	10.3	103
234	A continental-scale assessment of variability in leaf traits: Within species, across sites and between seasons. <i>Functional Ecology</i> , 2018 , 32, 1492-1506	5.6	35
233	The biomass burning contribution to climate-carbon-cycle feedback. <i>Earth System Dynamics</i> , 2018 , 9, 663-677	4.8	15
232	Global mapping of potential natural vegetation: an assessment of machine learning algorithms for estimating land potential. <i>PeerJ</i> , 2018 , 6, e5457	3.1	42
231	Ecosystem responses to elevated CO ₂ governed by plant-soil interactions and the cost of nitrogen acquisition. <i>New Phytologist</i> , 2018 , 217, 507-522	9.8	98

230	The China Plant Trait Database: toward a comprehensive regional compilation of functional traits for land plants. <i>Ecology</i> , 2018 , 99, 500	4.6	32
229	Functional trait variation related to gap dynamics in tropical moist forests: A vegetation modelling perspective. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , 2018 , 35, 52-64	3	4
228	Thermal acclimation of leaf photosynthetic traits in an evergreen woodland, consistent with the coordination hypothesis. <i>Biogeosciences</i> , 2018 , 15, 3461-3474	4.6	20
227	Latitudinal limits to the predicted increase of the peatland carbon sink with warming. <i>Nature Climate Change</i> , 2018 , 8, 907-913	21.4	105
226	Frost and leaf-size gradients in forests: global patterns and experimental evidence. <i>New Phytologist</i> , 2018 , 219, 565-573	9.8	19
225	Response to Comment on "Mycorrhizal association as a primary control of the CO ₂ fertilization effect". <i>Science</i> , 2017 , 355, 358	33.3	3
224	Transforming conservation science and practice for a postnormal world. <i>Conservation Biology</i> , 2017 , 31, 1008-1017	6	68
223	Changes in biomass allocation buffer low CO ₂ effects on tree growth during the last glaciation. <i>Scientific Reports</i> , 2017 , 7, 43087	4.9	1
222	A roadmap for improving the representation of photosynthesis in Earth system models. <i>New Phytologist</i> , 2017 , 213, 22-42	9.8	245
221	Reconstructing ice-age palaeoclimates: Quantifying low-CO ₂ effects on plants. <i>Global and Planetary Change</i> , 2017 , 149, 166-176	4.2	21
220	Modelling the demand for new nitrogen fixation by terrestrial ecosystems. <i>Biogeosciences</i> , 2017 , 14, 2003-2017	4.6	14
219	The Fire Modeling Intercomparison Project (FireMIP), phase 1: experimental and analytical protocols with detailed model descriptions. <i>Geoscientific Model Development</i> , 2017 , 10, 1175-1197	6.3	106
218	Leaf nitrogen from first principles: field evidence for adaptive variation with climate. <i>Biogeosciences</i> , 2017 , 14, 481-495	4.6	43
217	Simple process-led algorithms for simulating habitats (SPLASH v.1.0): robust indices of radiation, evapotranspiration and plant-available moisture. <i>Geoscientific Model Development</i> , 2017 , 10, 689-708	6.3	43
216	Carbon-nitrogen interactions in idealized simulations with JSBACH (version 3.10). <i>Geoscientific Model Development</i> , 2017 , 10, 2009-2030	6.3	31
215	Global climatic drivers of leaf size. <i>Science</i> , 2017 , 357, 917-921	33.3	334
214	Biophysical homeostasis of leaf temperature: A neglected process for vegetation and land-surface modelling. <i>Global Ecology and Biogeography</i> , 2017 , 26, 998-1007	6.1	32
213	Photosynthetic responses to altitude: an explanation based on optimality principles. <i>New Phytologist</i> , 2017 , 213, 976-982	9.8	45

212	Towards a universal model for carbon dioxide uptake by plants. <i>Nature Plants</i> , 2017 , 3, 734-741	11.5	139
211	Reduced streamflow in water-stressed climates consistent with CO ₂ effects on vegetation. <i>Nature Climate Change</i> , 2016 , 6, 75-78	21.4	146
210	What have we learnt from palaeoclimate simulations?. <i>Journal of Quaternary Science</i> , 2016 , 31, 363-385	2.3	42
209	A model analysis of climate and CO ₂ controls on tree growth and carbon allocation in a semi-arid woodland. <i>Ecological Modelling</i> , 2016 , 342, 175-185	3	5
208	Recent pause in the growth rate of atmospheric CO due to enhanced terrestrial carbon uptake. <i>Nature Communications</i> , 2016 , 7, 13428	17.4	195
207	Increased light-use efficiency in northern terrestrial ecosystems indicated by CO ₂ and greening observations. <i>Geophysical Research Letters</i> , 2016 , 43, 11,339	4.9	23
206	A test of the One-point method for estimating maximum carboxylation capacity from field-measured, light-saturated photosynthesis. <i>New Phytologist</i> , 2016 , 210, 1130-44	9.8	92
205	Mycorrhizal association as a primary control of the CO ₂ fertilization effect. <i>Science</i> , 2016 , 353, 72-4	33.3	277
204	Long-term water stress leads to acclimation of drought sensitivity of photosynthetic capacity in xeric but not riparian Eucalyptus species. <i>Annals of Botany</i> , 2016 , 117, 133-44	4.1	39
203	The global spectrum of plant form and function. <i>Nature</i> , 2016 , 529, 167-71	50.4	1191
202	Terrestrial biosphere changes over the last 120 kyr. <i>Climate of the Past</i> , 2016 , 12, 51-73	3.9	31
201	Role of zooplankton dynamics for Southern Ocean phytoplankton biomass and global biogeochemical cycles. <i>Biogeosciences</i> , 2016 , 13, 4111-4133	4.6	53
200	Climate-driven expansion of blanket bogs in Britain during the Holocene. <i>Climate of the Past</i> , 2016 , 12, 129-136	3.9	14
199	The status and challenge of global fire modelling. <i>Biogeosciences</i> , 2016 , 13, 3359-3375	4.6	193
198	Terrestrial nitrogen cycling in Earth system models revisited. <i>New Phytologist</i> , 2016 , 210, 1165-8	9.8	22
197	Vegetation plays an important role in mediating future water resources. <i>Environmental Research Letters</i> , 2016 , 11, 094022	6.2	14
196	Satellite based estimates underestimate the effect of CO ₂ fertilization on net primary productivity. <i>Nature Climate Change</i> , 2016 , 6, 892-893	21.4	52
195	Species-specific photorespiratory rate, drought tolerance and isoprene emission rate in plants. <i>Plant Signaling and Behavior</i> , 2015 , 10, e990830	2.5	11

194	Optimal stomatal behaviour around the world. <i>Nature Climate Change</i> , 2015 , 5, 459-464	21.4	264
193	Global effects of soil and climate on leaf photosynthetic traits and rates. <i>Global Ecology and Biogeography</i> , 2015 , 24, 706-717	6.1	179
192	Morphological and moisture availability controls of the leaf area-to-sapwood area ratio: analysis of measurements on Australian trees. <i>Ecology and Evolution</i> , 2015 , 5, 1263-70	2.8	19
191	Reliable, robust and realistic: the three R's of next-generation land-surface modelling. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 5987-6005	6.8	118
190	Effects of fire and CO ₂ on biogeography and primary production in glacial and modern climates. <i>New Phytologist</i> , 2015 , 208, 987-94	9.8	22
189	Do land surface models need to include differential plant species responses to drought? Examining model predictions across a mesic-xeric gradient in Europe. <i>Biogeosciences</i> , 2015 , 12, 7503-7518	4.6	52
188	Responses of leaf traits to climatic gradients: adaptive variation versus compositional shifts. <i>Biogeosciences</i> , 2015 , 12, 5339-5352	4.6	33
187	Using ecosystem experiments to improve vegetation models. <i>Nature Climate Change</i> , 2015 , 5, 528-534	21.4	191
186	Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. <i>New Phytologist</i> , 2015 , 206, 614-36	9.8	244
185	Climate model benchmarking with glacial and mid-Holocene climates. <i>Climate Dynamics</i> , 2014 , 43, 671-688	6.8	145
184	A model of plant isoprene emission based on available reducing power captures responses to atmospheric CO ₂ . <i>New Phytologist</i> , 2014 , 203, 125-39	9.8	64
183	Balancing the costs of carbon gain and water transport: testing a new theoretical framework for plant functional ecology. <i>Ecology Letters</i> , 2014 , 17, 82-91	10	220
182	Evolution of isoprene emission capacity in plants. <i>Trends in Plant Science</i> , 2014 , 19, 439-46	13.1	35
181	Comprehensive ecosystem model-data synthesis using multiple data sets at two temperate forest free-air CO ₂ enrichment experiments: Model performance at ambient CO ₂ concentration. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014 , 119, 937-964	3.7	83
180	Climate versus carbon dioxide controls on biomass burning: a model analysis of the glacial-interglacial contrast. <i>Biogeosciences</i> , 2014 , 11, 6017-6027	4.6	8
179	Simulation of tree-ring widths with a model for primary production, carbon allocation, and growth. <i>Biogeosciences</i> , 2014 , 11, 6711-6724	4.6	33
178	Causal relationships versus emergent patterns in the global controls of fire frequency. <i>Biogeosciences</i> , 2014 , 11, 5087-5101	4.6	88
177	Biophysical constraints on gross primary production by the terrestrial biosphere. <i>Biogeosciences</i> , 2014 , 11, 5987-6001	4.6	50

176	Short-term water stress impacts on stomatal, mesophyll and biochemical limitations to photosynthesis differ consistently among tree species from contrasting climates. <i>Tree Physiology</i> , 2014 , 34, 1035-46	4.2	85
175	Improved simulation of fire-vegetation interactions in the Land surface Processes and eXchanges dynamic global vegetation model (LPX-Mv1). <i>Geoscientific Model Development</i> , 2014 , 7, 2411-2433	6.3	24
174	Where does the carbon go? A model-data intercomparison of vegetation carbon allocation and turnover processes at two temperate forest free-air CO ₂ enrichment sites. <i>New Phytologist</i> , 2014 , 203, 883-99	9.8	194
173	Evaluation of 11 terrestrial carbon-nitrogen cycle models against observations from two temperate Free-Air CO ₂ Enrichment studies. <i>New Phytologist</i> , 2014 , 202, 803-822	9.8	300
172	Increased ratio of electron transport to net assimilation rate supports elevated isoprenoid emission rate in eucalypts under drought. <i>Plant Physiology</i> , 2014 , 166, 1059-72	6.6	19
171	Isoprene emissions track the seasonal cycle of canopy temperature, not primary production: evidence from remote sensing. <i>Biogeosciences</i> , 2014 , 11, 3437-3451	4.6	7
170	Untangling the confusion around land carbon science and climate change mitigation policy. <i>Nature Climate Change</i> , 2013 , 3, 552-557	21.4	160
169	Volatile isoprenoid emissions from plastid to planet. <i>New Phytologist</i> , 2013 , 197, 49-57	9.8	116
168	The optimal stomatal response to atmospheric CO ₂ concentration: Alternative solutions, alternative interpretations. <i>Agricultural and Forest Meteorology</i> , 2013 , 182-183, 200-203	5.8	56
167	Multiple greenhouse-gas feedbacks from the land biosphere under future climate change scenarios. <i>Nature Climate Change</i> , 2013 , 3, 666-672	21.4	161
166	Blanket peat biome endangered by climate change. <i>Nature Climate Change</i> , 2013 , 3, 152-155	21.4	91
165	How should we model plant responses to drought? An analysis of stomatal and non-stomatal responses to water stress. <i>Agricultural and Forest Meteorology</i> , 2013 , 182-183, 204-214	5.8	190
164	Dynamic Global Vegetation Models 2013 , 670-689		19
163	Forest water use and water use efficiency at elevated CO ₂ : a model-data intercomparison at two contrasting temperate forest FACE sites. <i>Global Change Biology</i> , 2013 , 19, 1759-79	11.4	271
162	Data-based modelling and environmental sensitivity of vegetation in China. <i>Biogeosciences</i> , 2013 , 10, 5817-5830	4.6	18
161	Precipitation scaling with temperature in warm and cold climates: An analysis of CMIP5 simulations. <i>Geophysical Research Letters</i> , 2013 , 40, 4018-4024	4.9	44
160	Stable isotope and modelling evidence for CO ₂ as a driver of glacial-interglacial vegetation shifts in southern Africa. <i>Biogeosciences</i> , 2013 , 10, 2001-2010	4.6	25
159	A comprehensive benchmarking system for evaluating global vegetation models. <i>Biogeosciences</i> , 2013 , 10, 3313-3340	4.6	101

158	Evaluation of biospheric components in Earth system models using modern and palaeo-observations: the state-of-the-art. <i>Biogeosciences</i> , 2013 , 10, 8305-8328	4.6	10
157	A worldwide analysis of trends in water-balance evapotranspiration. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 4177-4187	5.5	46
156	Climate-related changes in peatland carbon accumulation during the last millennium. <i>Biogeosciences</i> , 2013 , 10, 929-944	4.6	209
155	Relationships between human population density and burned area at continental and global scales. <i>PLoS ONE</i> , 2013 , 8, e81188	3.7	53
154	Modelling terrestrial nitrous oxide emissions and implications for climate feedback. <i>New Phytologist</i> , 2012 , 196, 472-488	9.8	87
153	A global model for the uptake of atmospheric hydrogen by soils. <i>Global Biogeochemical Cycles</i> , 2012 , 26,	5.9	9
152	Predictability of biomass burning in response to climate changes. <i>Global Biogeochemical Cycles</i> , 2012 , 26, n/a-n/a	5.9	161
151	Large inert carbon pool in the terrestrial biosphere during the Last Glacial Maximum. <i>Nature Geoscience</i> , 2012 , 5, 74-79	18.3	120
150	Primary production in forests and grasslands of China: contrasting environmental responses of light- and water-use efficiency models. <i>Biogeosciences</i> , 2012 , 9, 4689-4705	4.6	12
149	A framework for benchmarking land models. <i>Biogeosciences</i> , 2012 , 9, 3857-3874	4.6	238
148	Modeling fire and the terrestrial carbon balance. <i>Global Biogeochemical Cycles</i> , 2011 , 25, n/a-n/a	5.9	132
147	Beyond predictions: biodiversity conservation in a changing climate. <i>Science</i> , 2011 , 332, 53-8	33.3	1160
146	Improving assessment and modelling of climate change impacts on global terrestrial biodiversity. <i>Trends in Ecology and Evolution</i> , 2011 , 26, 249-59	10.9	230
145	Evaluation of global continental hydrology as simulated by the Land-surface Processes and eXchanges Dynamic Global Vegetation Model. <i>Hydrology and Earth System Sciences</i> , 2011 , 15, 91-105	5.5	37
144	Constraining global methane emissions and uptake by ecosystems. <i>Biogeosciences</i> , 2011 , 8, 1643-1665	4.6	168
143	Reconciling the optimal and empirical approaches to modelling stomatal conductance. <i>Global Change Biology</i> , 2011 , 17, 2134-2144	11.4	595
142	TRY  global database of plant traits. <i>Global Change Biology</i> , 2011 , 17, 2905-2935	11.4	1623
141	Evidence of a universal scaling relationship for leaf CO ₂ drawdown along an aridity gradient. <i>New Phytologist</i> , 2011 , 190, 169-180	9.8	90

140	Global vegetation and terrestrial carbon cycle changes after the last ice age. <i>New Phytologist</i> , 2011 , 189, 988-998	9.8	208
139	Herbivores enable plant survival under nutrient limited conditions in a model grazing system. <i>Ecological Modelling</i> , 2011 , 222, 381-397	3	6
138	Pollen-based continental climate reconstructions at 6 and 21 ka: a global synthesis. <i>Climate Dynamics</i> , 2011 , 37, 775-802	4.2	414
137	Ecophysiological and bioclimatic foundations for a global plant functional classification. <i>Journal of Vegetation Science</i> , 2010 , 21, 300-317	3.1	150
136	The influence of vegetation, fire spread and fire behaviour on biomass burning and trace gas emissions: results from a process-based model. <i>Biogeosciences</i> , 2010 , 7, 1991-2011	4.6	301
135	From biota to chemistry and climate: towards a comprehensive description of trace gas exchange between the biosphere and atmosphere. <i>Biogeosciences</i> , 2010 , 7, 121-149	4.6	74
134	Implementation and evaluation of a new methane model within a dynamic global vegetation model: LPJ-WHyMe v1.3.1. <i>Geoscientific Model Development</i> , 2010 , 3, 565-584	6.3	217
133	Atmospheric science. The burning issue. <i>Science</i> , 2010 , 330, 1636-7	33.3	20
132	Palaeovegetation in China during the late Quaternary: Biome reconstructions based on a global scheme of plant functional types. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2010 , 289, 44-61	2.9	126
131	Ecosystem effects of CO ₂ concentration: evidence from past climates. <i>Climate of the Past</i> , 2009 , 5, 297-307	3.9	93
130	Trends in the sources and sinks of carbon dioxide. <i>Nature Geoscience</i> , 2009 , 2, 831-836	18.3	1453
129	Integrating peatlands and permafrost into a dynamic global vegetation model: 1. Evaluation and sensitivity of physical land surface processes. <i>Global Biogeochemical Cycles</i> , 2009 , 23, n/a-n/a	5.9	140
128	Integrating peatlands and permafrost into a dynamic global vegetation model: 2. Evaluation and sensitivity of vegetation and carbon cycle processes. <i>Global Biogeochemical Cycles</i> , 2009 , 23, n/a-n/a	5.9	109
127	Fire in the Earth system. <i>Science</i> , 2009 , 324, 481-4	33.3	1799
126	Lessons Learned from IPCC AR4: Scientific Developments Needed to Understand, Predict, and Respond to Climate Change. <i>Bulletin of the American Meteorological Society</i> , 2009 , 90, 497-514	6.1	38
125	CO ₂ fertilization in temperate FACE experiments not representative of boreal and tropical forests. <i>Global Change Biology</i> , 2008 , 14, 1531-1542	11.4	249
124	Terrestrial nitrogen cycle simulation with a dynamic global vegetation model. <i>Global Change Biology</i> , 2008 , 14, 1745-1764	11.4	132
123	Evaluation of the terrestrial carbon cycle, future plant geography and climate-carbon cycle feedbacks using five Dynamic Global Vegetation Models (DGVMs). <i>Global Change Biology</i> , 2008 , 14, 2015-2039	11.4	955

122	Climate and human influences on global biomass burning over the past two millennia. <i>Nature Geoscience</i> , 2008 , 1, 697-702	18.3	584
121	Mid- to Late Holocene climate change: an overview. <i>Quaternary Science Reviews</i> , 2008 , 27, 1791-1828	3.9	1166
120	Changes in fire regimes since the Last Glacial Maximum: an assessment based on a global synthesis and analysis of charcoal data. <i>Climate Dynamics</i> , 2008 , 30, 887-907	4.2	487
119	Projected Changes in Terrestrial Carbon Storage in Europe under Climate and Land-use Change, 1990-2100. <i>Ecosystems</i> , 2007 , 10, 380-401	3.9	105
118	Process-based estimates of terrestrial ecosystem isoprene emissions: incorporating the effects of a direct CO ₂ -isoprene interaction. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 31-53	6.8	237
117	Dynamic Global Vegetation Modeling: Quantifying Terrestrial Ecosystem Responses to Large-Scale Environmental Change 2007 , 175-192		174
116	Impact of climate variability on present and Holocene vegetation: A model-based study. <i>Ecological Modelling</i> , 2006 , 191, 469-486	3	44
115	A climate-change risk analysis for world ecosystems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 13116-20	11.5	468
114	Implementing plant hydraulic architecture within the LPJ Dynamic Global Vegetation Model. <i>Global Ecology and Biogeography</i> , 2006 , 15, 567-577	6.1	120
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22	Simulation of tree ring-widths with a model for primary production, carbon allocation and growth		2
21	Climate vs. carbon dioxide controls on biomass burning: a model analysis of the glacial-interglacial contrast		5
20	Biophysical constraints on gross primary production by the terrestrial biosphere		3
19	Causal relationships vs. emergent patterns in the global controls of fire frequency		6
18	Role of zooplankton dynamics for Southern Ocean phytoplankton biomass and global biogeochemical cycles		3
17	Do land surface models need to include differential plant species responses to drought? Examining model predictions across a latitudinal gradient in Europe		11
16	A comprehensive benchmarking system for evaluating global vegetation models		8
15	Climate changes in interior semi-arid Spain from the last interglacial to the late Holocene		5

14	A new multi-variable benchmark for Last Glacial Maximum climate simulations		3
13	Climate-driven expansion of blanket bogs in Britain during the Holocene		2
12	The TRY Plant Trait Database - enhanced coverage and open access		8
11	Quantitative assessment of fire and vegetation properties in historical simulations with fire-enabled vegetation models from the Fire Model Intercomparison Project		2
10	Improved simulation of fire-vegetation interactions in the Land surface Processes and eXchanges dynamic global vegetation model (LPX-Mv1)		7
9	A worldwide analysis of trends in water-balance evapotranspiration		3
8	A universal model for carbon dioxide uptake by plants		3
7	Plant respiration: controlled by photosynthesis or biomass?		3
6	Responses of leaf traits to climatic gradients: adaptive variation vs. compositional shifts		1
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