

# Andrew Ridgwell

## List of Publications by Citations

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178  
papers

12,155  
citations

59  
h-index

108  
g-index

194  
ext. papers

14,221  
ext. citations

10.1  
avg. IF

6.45  
L-index

#	Paper	IF	Citations
178	Global iron connections between desert dust, ocean biogeochemistry, and climate. <i>Science</i> , <b>2005</b> , 308, 67-71	33.3	1996
177	The geological record of ocean acidification. <i>Science</i> , <b>2012</b> , 335, 1058-63	33.3	649
176	Atmospheric Lifetime of Fossil Fuel Carbon Dioxide. <i>Annual Review of Earth and Planetary Sciences</i> , <b>2009</b> , 37, 117-134	15.3	483
175	Effect of iron supply on Southern Ocean CO <sub>2</sub> uptake and implications for glacial atmospheric CO <sub>2</sub> . <i>Nature</i> , <b>2000</b> , 407, 730-3	50.4	386
174	The role of the global carbonate cycle in the regulation and evolution of the Earth system. <i>Earth and Planetary Science Letters</i> , <b>2005</b> , 234, 299-315	5.3	340
173	Changing atmospheric CO <sub>2</sub> concentration was the primary driver of early Cenozoic climate. <i>Nature</i> , <b>2016</b> , 533, 380-4	50.4	243
172	A Cenozoic record of the equatorial Pacific carbonate compensation depth. <i>Nature</i> , <b>2012</b> , 488, 609-14	50.4	241
171	Anthropogenic carbon release rate unprecedented during the past 66 million years. <i>Nature Geoscience</i> , <b>2016</b> , 9, 325-329	18.3	225
170	A Mid Mesozoic Revolution in the regulation of ocean chemistry. <i>Marine Geology</i> , <b>2005</b> , 217, 339-357	3.3	191
169	Very large release of mostly volcanic carbon during the Palaeocene-Eocene Thermal Maximum. <i>Nature</i> , <b>2017</b> , 548, 573-577	50.4	186
168	Slow release of fossil carbon during the Palaeocene-Eocene Thermal Maximum. <i>Nature Geoscience</i> , <b>2011</b> , 4, 481-485	18.3	178
167	How well do global ocean biogeochemistry models simulate dissolved iron distributions?. <i>Global Biogeochemical Cycles</i> , <b>2016</b> , 30, 149-174	5.9	177
166	Sedimentary response to Paleocene-Eocene Thermal Maximum carbon release: A model-data comparison. <i>Geology</i> , <b>2008</b> , 36, 315	5	176
165	Climate model and proxy data constraints on ocean warming across the Paleocene-Eocene Thermal Maximum. <i>Earth-Science Reviews</i> , <b>2013</b> , 125, 123-145	10.2	170
164	Long-Term Climate Change Commitment and Reversibility: An EMIC Intercomparison. <i>Journal of Climate</i> , <b>2013</b> , 26, 5782-5809	4.4	165
163	Marine geochemical data assimilation in an efficient Earth System Model of global biogeochemical cycling. <i>Biogeosciences</i> , <b>2007</b> , 4, 87-104	4.6	160
162	Past constraints on the vulnerability of marine calcifiers to massive carbon dioxide release. <i>Nature Geoscience</i> , <b>2010</b> , 3, 196-200	18.3	159

161	Consumption of atmospheric methane by soils: A process-based model. <i>Global Biogeochemical Cycles</i> , <b>1999</b> , 13, 59-70	5.9	155
160	Gas hydrates: past and future geohazard?. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2010</b> , 368, 2369-93	3	153
159	Potential methane reservoirs beneath Antarctica. <i>Nature</i> , <b>2012</b> , 488, 633-7	50.4	138
158	Ocean Acidification in Deep Time. <i>Oceanography</i> , <b>2009</b> , 22, 94-107	2.3	137
157	Historical and idealized climate model experiments: an intercomparison of Earth system models of intermediate complexity. <i>Climate of the Past</i> , <b>2013</b> , 9, 1111-1140	3.9	127
156	Carbonate deposition, climate stability, and Neoproterozoic ice ages. <i>Science</i> , <b>2003</b> , 302, 859-62	33.3	125
155	Nutrients as the dominant control on the spread of anoxia and euxinia across the Cenomanian-Turonian oceanic anoxic event (OAE2): Model-data comparison. <i>Paleoceanography</i> , <b>2012</b> , 27,		122
154	Regulation of atmospheric CO <sub>2</sub> by deep-sea sediments in an Earth system model. <i>Global Biogeochemical Cycles</i> , <b>2007</b> , 21, n/a-n/a	5.9	121
153	Why marine phytoplankton calcify. <i>Science Advances</i> , <b>2016</b> , 2, e1501822	14.3	121
152	Biogeochemical controls on photic-zone euxinia during the end-Permian mass extinction. <i>Geology</i> , <b>2008</b> , 36, 747	5	113
151	Enhanced weathering strategies for stabilizing climate and averting ocean acidification. <i>Nature Climate Change</i> , <b>2016</b> , 6, 402-406	21.4	106
150	Modelling dispersal and connectivity of broadcast spawning corals at the global scale. <i>Global Ecology and Biogeography</i> , <b>2014</b> , 23, 1-11	6.1	105
149	Marine ecosystem responses to Cenozoic global change. <i>Science</i> , <b>2013</b> , 341, 492-8	33.3	104
148	From laboratory manipulations to Earth system models: scaling calcification impacts of ocean acidification. <i>Biogeosciences</i> , <b>2009</b> , 6, 2611-2623	4.6	104
147	Tackling regional climate change by leaf albedo bio-geoengineering. <i>Current Biology</i> , <b>2009</b> , 19, 146-50	6.3	95
146	A model for orbital pacing of methane hydrate destabilization during the Palaeogene. <i>Nature Geoscience</i> , <b>2011</b> , 4, 775-778	18.3	92
145	CO <sub>2</sub> -driven ocean circulation changes as an amplifier of Paleocene-Eocene thermal maximum hydrate destabilization. <i>Geology</i> , <b>2010</b> , 38, 875-878	5	91
144	Assessing the potential long-term increase of oceanic fossil fuel CO <sub>2</sub> uptake due to CO <sub>2</sub> -calcification feedback. <i>Biogeosciences</i> , <b>2007</b> , 4, 481-492	4.6	88

143	A neoproterozoic transition in the marine nitrogen cycle. <i>Current Biology</i> , <b>2014</b> , 24, 652-7	6.3	87
142	Deep water formation in the North Pacific and deglacial CO <sub>2</sub> rise. <i>Paleoceanography</i> , <b>2014</b> , 29, 645-667		84
141	Selective environmental stress from sulphur emitted by continental flood basalt eruptions. <i>Nature Geoscience</i> , <b>2016</b> , 9, 77-82	18.3	82
140	Are there pre-Quaternary geological analogues for a future greenhouse warming?. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2011</b> , 369, 933-56	3	82
139	Dust in the Earth system: the biogeochemical linking of land, air and sea. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2002</b> , 360, 2905-24	3	82
138	Late inception of a resiliently oxygenated upper ocean. <i>Science</i> , <b>2018</b> , 361, 174-177	33.3	82
137	Bunshade World—A fully coupled GCM evaluation of the climatic impacts of geoengineering. <i>Geophysical Research Letters</i> , <b>2008</b> , 35, n/a-n/a	4.9	80
136	Implications of coral reef buildup for the controls on atmospheric CO <sub>2</sub> since the Last Glacial Maximum. <i>Paleoceanography</i> , <b>2003</b> , 18, n/a-n/a		79
135	The role of ocean transport in the uptake of anthropogenic CO <sub>2</sub> . <i>Biogeosciences</i> , <b>2009</b> , 6, 375-390	4.6	78
134	Feedback between aeolian dust, climate, and atmospheric CO <sub>2</sub> in glacial time. <i>Paleoceanography</i> , <b>2002</b> , 17, 11-1-11-11		74
133	Millennial timescale carbon cycle and climate change in an efficient Earth system model. <i>Climate Dynamics</i> , <b>2006</b> , 26, 687-711	4.2	72
132	Combustion of available fossil fuel resources sufficient to eliminate the Antarctic Ice Sheet. <i>Science Advances</i> , <b>2015</b> , 1, e1500589	14.3	71
131	Past climates inform our future. <i>Science</i> , <b>2020</b> , 370,	33.3	70
130	Mid-Pleistocene revolution and the 'eccentricity myth'. <i>Geological Society Special Publication</i> , <b>2005</b> , 247, 19-34	1.7	69
129	Antarctic ice sheet fertilises the Southern Ocean. <i>Biogeosciences</i> , <b>2014</b> , 11, 2635-2643	4.6	68
128	Sensitivity of climate to cumulative carbon emissions due to compensation of ocean heat and carbon uptake. <i>Nature Geoscience</i> , <b>2015</b> , 8, 29-34	18.3	67
127	Glacial-Interglacial Variability in Atmospheric CO <sub>2</sub> . <i>Geophysical Monograph Series</i> , <b>2009</b> , 251-286	1.1	64
126	Interpreting transient carbonate compensation depth changes by marine sediment core modeling. <i>Paleoceanography</i> , <b>2007</b> , 22, n/a-n/a		64

125	The influence of the biological pump on ocean chemistry: implications for long-term trends in marine redox chemistry, the global carbon cycle, and marine animal ecosystems. <i>Geobiology</i> , <b>2016</b> , 14, 207-19	4.3	62
124	Rapid ocean acidification and protracted Earth system recovery followed the end-Cretaceous Chicxulub impact. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 22500-22504	11.5	60
123	A Palaeogene perspective on climate sensitivity and methane hydrate instability. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2010</b> , 368, 2395-415	3	60
122	Is the spectral signature of the 100 kyr glacial cycle consistent with a Milankovitch origin?. <i>Paleoceanography</i> , <b>1999</b> , 14, 437-440		60
121	Assessing the regional disparities in geoengineering impacts. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	59
120	Sensitivity of the global submarine hydrate inventory to scenarios of future climate change. <i>Earth and Planetary Science Letters</i> , <b>2013</b> , 367, 105-115	5.3	56
119	Development of a novel empirical framework for interpreting geological carbon isotope excursions, with implications for the rate of carbon injection across the PETM. <i>Earth and Planetary Science Letters</i> , <b>2016</b> , 435, 1-13	5.3	54
118	The potential role of the Antarctic Ice Sheet in global biogeochemical cycles. <i>Earth and Environmental Science Transactions of the Royal Society of Edinburgh</i> , <b>2013</b> , 104, 55-67	0.9	54
117	Future habitat suitability for coral reef ecosystems under global warming and ocean acidification. <i>Global Change Biology</i> , <b>2013</b> , 19, 3592-606	11.4	54
116	Assessment of the spatial variability in particulate organic matter and mineral sinking fluxes in the ocean interior: Implications for the ballast hypothesis. <i>Global Biogeochemical Cycles</i> , <b>2012</b> , 26, n/a-n/a	5.9	53
115	An abyssal carbonate compensation depth overshoot in the aftermath of the Palaeocene-Eocene Thermal Maximum. <i>Nature Geoscience</i> , <b>2016</b> , 9, 575-580	18.3	50
114	Ice sheets matter for the global carbon cycle. <i>Nature Communications</i> , <b>2019</b> , 10, 3567	17.4	48
113	Temperature-dependent remineralization and carbon cycling in the warm Eocene oceans. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , <b>2014</b> , 413, 158-166	2.9	48
112	The Rock Geochemical Model (RokGeM) v0.9. <i>Geoscientific Model Development</i> , <b>2013</b> , 6, 1543-1573	6.3	47
111	Climatic effects of surface albedo geoengineering. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		47
110	On the displacive character of the phase transition in quartz: a hard-mode spectroscopy study. <i>Journal of Physics Condensed Matter</i> , <b>1992</b> , 4, 571-577	1.8	46
109	Ocean warming, not acidification, controlled coccolithophore response during past greenhouse climate change. <i>Geology</i> , <b>2016</b> , 44, 59-62	5	45
108	Modeling the response of the oceanic Si inventory to perturbation, and consequences for atmospheric CO <sub>2</sub> . <i>Global Biogeochemical Cycles</i> , <b>2002</b> , 16, 19-1-19-25	5.9	44

107	The time scale of the silicate weathering negative feedback on atmospheric CO <sub>2</sub> . <i>Global Biogeochemical Cycles</i> , <b>2015</b> , 29, 583-596	5.9	42
106	Upper ocean oxygenation dynamics from I/Ca ratios during the Cenomanian-Turonian OAE 2. <i>Paleoceanography</i> , <b>2015</b> , 30, 510-526		42
105	El Niño and coral larval dispersal across the eastern Pacific marine barrier. <i>Nature Communications</i> , <b>2016</b> , 7, 12571	17.4	42
104	Environmental controls on the global distribution of shallow-water coral reefs. <i>Journal of Biogeography</i> , <b>2012</b> , 39, 1508-1523	4.1	42
103	Climate-carbon cycle uncertainties and the Paris Agreement. <i>Nature Climate Change</i> , <b>2018</b> , 8, 609-613	21.4	42
102	Surviving rapid climate change in the deep sea during the Paleogene hyperthermals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 9273-6	11.5	41
101	An oceanic origin for the increase of atmospheric radiocarbon during the Younger Dryas. <i>Geophysical Research Letters</i> , <b>2008</b> , 35,	4.9	40
100	An impulse response function for the long tail of excess atmospheric CO <sub>2</sub> in an Earth system model. <i>Global Biogeochemical Cycles</i> , <b>2016</b> , 30, 2-17	5.9	38
99	Onset of carbon isotope excursion at the Paleocene-Eocene thermal maximum took millennia, not 13 years. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, E1062-3	11.5	37
98	Initial assessment of the carbon emission rate and climatic consequences during the end-Permian mass extinction. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , <b>2013</b> , 389, 128-136	2.9	36
97	Understanding the causes and consequences of past marine carbon cycling variability through models. <i>Earth-Science Reviews</i> , <b>2017</b> , 171, 349-382	10.2	36
96	Implications of the glacial CO <sub>2</sub> iron hypothesis for Quaternary climate change. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2003</b> , 4, n/a-n/a	3.6	36
95	A probabilistic assessment of the rapidity of PETM onset. <i>Nature Communications</i> , <b>2017</b> , 8, 353	17.4	35
94	Climate sensitivity to the carbon cycle modulated by past and future changes in ocean chemistry. <i>Nature Geoscience</i> , <b>2009</b> , 2, 145-150	18.3	35
93	An end to the rain ratio reign?. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2003</b> , 4, n/a-n/a	3.6	35
92	Assessing the benefits of crop albedo bio-geoengineering. <i>Environmental Research Letters</i> , <b>2009</b> , 4, 045109	16.0	33
91	The fate of the Greenland Ice Sheet in a geoengineered, high CO <sub>2</sub> world. <i>Environmental Research Letters</i> , <b>2009</b> , 4, 045109	6.2	33
90	Diversity decoupled from ecosystem function and resilience during mass extinction recovery. <i>Nature</i> , <b>2019</b> , 574, 242-245	50.4	31

89	Expanded oxygen minimum zones during the late Paleocene-early Eocene: Hints from multiproxy comparison and ocean modeling. <i>Paleoceanography</i> , <b>2016</b> , 31, 1532-1546		27
88	Atmospheric Seasonality as an Exoplanet Biosignature. <i>Astrophysical Journal Letters</i> , <b>2018</b> , 858, L14	7.9	27
87	Recovering the true size of an Eocene hyperthermal from the marine sedimentary record. <i>Paleoceanography</i> , <b>2013</b> , 28, 700-712		27
86	The impact of marine nutrient abundance on early eukaryotic ecosystems. <i>Geobiology</i> , <b>2020</b> , 18, 139-151	4.3	26
85	Evaluation of coral reef carbonate production models at a global scale. <i>Biogeosciences</i> , <b>2015</b> , 12, 1339-1356	4.6	24
84	Assessing the controllability of Arctic sea ice extent by sulfate aerosol geoengineering. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 1223-1231	4.9	24
83	Controls on the spatial distribution of oceanic $\delta^{13}C_{org}$ and $\delta^{13}C_{DIC}$ . <i>Biogeosciences</i> , <b>2013</b> , 10, 1815-1833	4.6	24
82	Response of deep-sea CaCO <sub>3</sub> sedimentation to Atlantic meridional overturning circulation shutdown. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		24
81	Characterizing post-industrial changes in the ocean carbon cycle in an Earth system model. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2010</b> , 62, 296-313	3.3	23
80	Evolution of the ocean's "biological pump". <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 16485-6	11.5	23
79	Changes in benthic ecosystems and ocean circulation in the Southeast Atlantic across Eocene Thermal Maximum 2. <i>Paleoceanography</i> , <b>2015</b> , 30, 1059-1077		22
78	Proxy evidence for state-dependence of climate sensitivity in the Eocene greenhouse. <i>Nature Communications</i> , <b>2020</b> , 11, 4436	17.4	22
77	How warming and steric sea level rise relate to cumulative carbon emissions. <i>Geophysical Research Letters</i> , <b>2012</b> , 39,	4.9	21
76	Warm climates of the past--a lesson for the future?. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2013</b> , 371, 20130146	3	21
75	The influence of the ocean circulation state on ocean carbon storage and CO <sub>2</sub> drawdown potential in an Earth system model. <i>Biogeosciences</i> , <b>2018</b> , 15, 1367-1393	4.6	21
74	Comparative carbon cycle dynamics of the present and last interglacial. <i>Quaternary Science Reviews</i> , <b>2016</b> , 137, 15-32	3.9	19
73	Ocean-atmosphere partitioning of anthropogenic carbon dioxide on multimillennial timescales. <i>Global Biogeochemical Cycles</i> , <b>2010</b> , 24, n/a-n/a	5.9	19
72	Orographic evolution of northern Tibet shaped vegetation and plant diversity in eastern Asia. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	19

71	Dynamics of sediment flux to a bathyal continental margin section through the Paleocene-Eocene Thermal Maximum. <i>Climate of the Past</i> , <b>2018</b> , 14, 1035-1049	3.9	17
70	A factorial analysis of the marine carbon cycle and ocean circulation controls on atmospheric CO <sub>2</sub> . <i>Global Biogeochemical Cycles</i> , <b>2005</b> , 19, n/a-n/a	5.9	17
69	Reduced effectiveness of terrestrial carbon sequestration due to an antagonistic response of ocean productivity. <i>Geophysical Research Letters</i> , <b>2002</b> , 29, 19-1-19-4	4.9	17
68	EcoGENIE 1.0: plankton ecology in the cGENIE Earth system model. <i>Geoscientific Model Development</i> , <b>2018</b> , 11, 4241-4267	6.3	16
67	Early Cenozoic Decoupling of Climate and Carbonate Compensation Depth Trends. <i>Paleoceanography and Paleoclimatology</i> , <b>2019</b> , 34, 930-945	3.3	15
66	Overturning circulation, nutrient limitation, and warming in the Glacial North Pacific. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	15
65	Quantifying the influence of the terrestrial biosphere on glacial-interglacial climate dynamics. <i>Climate of the Past</i> , <b>2017</b> , 13, 1381-1401	3.9	15
64	OMEN-SED 1.0: a novel, numerically efficient organic matter sediment diagenesis module for coupling to Earth system models. <i>Geoscientific Model Development</i> , <b>2018</b> , 11, 2649-2689	6.3	15
63	Tropical coral reef habitat in a geoengineered, high-CO <sub>2</sub> world. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 1799-1805	4.9	15
62	Why Dissolved Organics Matter <b>2015</b> , 1-20		13
61	Comment on Modern-age buildup of CO <sub>2</sub> and its effects on seawater acidity and salinity by Hugo A. Loizeiga. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,	4.9	13
60	Unravelling the sources of carbon emissions at the onset of Oceanic Anoxic Event (OAE) 1a. <i>Earth and Planetary Science Letters</i> , <b>2020</b> , 530, 115947	5.3	13
59	Considering the Role of Adaptive Evolution in Models of the Ocean and Climate System. <i>Journal of Advances in Modeling Earth Systems</i> , <b>2019</b> , 11, 3343-3361	7.1	13
58	Fundamentally different global marine nitrogen cycling in response to severe ocean deoxygenation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 24979-24984	11.5	13
57	Emulation of long-term changes in global climate: application to the late Pliocene and future. <i>Climate of the Past</i> , <b>2017</b> , 13, 1539-1571	3.9	11
56	Geological carbon sinks.74-97		11
55	Linking Marine Plankton Ecosystems and Climate: A New Modeling Approach to the Warm Early Eocene Climate. <i>Paleoceanography and Paleoclimatology</i> , <b>2018</b> , 33, 1439-1452	3.3	11
54	Flooding of the continental shelves as a contributor to deglacial CH <sub>4</sub> rise. <i>Journal of Quaternary Science</i> , <b>2012</b> , 27, 800-806	2.3	10



53	Geographical variations in the effectiveness and side effects of deep ocean carbon sequestration. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	10
52	Geoengineering: taking control of our planet's climate?. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2012</b> , 370, 4163-5	3	10
51	Historical and idealized climate model experiments: an EMIC intercomparison		10
50	Temperature controls carbon cycling and biological evolution in the ocean twilight zone. <i>Science</i> , <b>2021</b> , 371, 1148-1152	33.3	10
49	Mitigation of Extreme Ocean Anoxic Event Conditions by Organic Matter Sulfurization. <i>Paleoceanography and Paleoclimatology</i> , <b>2019</b> , 34, 476-489	3.3	9
48	Algal plankton turn to hunting to survive and recover from end-Cretaceous impact darkness. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	9
47	A 35-million-year record of seawater stable Sr isotopes reveals a fluctuating global carbon cycle. <i>Science</i> , <b>2021</b> , 371, 1346-1350	33.3	9
46	Application of sediment core modelling to interpreting the glacial-interglacial record of Southern Ocean silica cycling. <i>Climate of the Past</i> , <b>2007</b> , 3, 387-396	3.9	8
45	Antarctic Ice Sheet fertilises the Southern Ocean		8
44	Bistability in the redox chemistry of sediments and oceans. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 33043-33050	11.5	8
43	Strategies in times of crisis-insights into the benthic foraminiferal record of the Palaeocene-Eocene Thermal Maximum. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2018</b> , 376,	3	8
42	A trait-based modelling approach to planktonic foraminifera ecology. <i>Biogeosciences</i> , <b>2019</b> , 16, 1469-1492	7	7
41	'Geoengineering'--taking control of our planet's climate. <i>Science Progress</i> , <b>2009</b> , 92, 139-62	1.1	7
40	Vertical decoupling in Late Ordovician anoxia due to reorganization of ocean circulation. <i>Nature Geoscience</i> ,	18.3	7
39	Calibration of temperature-dependent ocean microbial processes in the cGENIE.muffin (v0.9.13) Earth system model. <i>Geoscientific Model Development</i> , <b>2021</b> , 14, 125-149	6.3	7
38	Variable CB composition of organic production and its effect on ocean carbon storage in glacial-like model simulations. <i>Biogeosciences</i> , <b>2020</b> , 17, 2219-2244	4.6	6
37	Spatial and temporal patterns of oceanacidification during the end-Permian mass extinction in Earth system model evaluation291-306		6
36	Reply to 'Constraints on hyperthermals'. <i>Nature Geoscience</i> , <b>2012</b> , 5, 231-232	18.3	6

35	Paleocene/Eocene carbon feedbacks triggered by volcanic activity. <i>Nature Communications</i> , <b>2021</b> , 12, 5186	17.4	6
34	Towards an understanding of the Ca isotopic signal related to ocean acidification and alkalinity overshoots in the rock record. <i>Chemical Geology</i> , <b>2020</b> , 547, 119672	4.2	5
33	Evaluation of Paleocene-Eocene Thermal Maximum Carbon Isotope Record Completeness: An Illustration of the Potential of Dynamic Time Warping in Aligning Paleo-Proxy Records. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2020</b> , 21, e2019GC008620	3.6	5
32	The 'long tail' of anthropogenic CO <sub>2</sub> decline in the atmosphere and its consequences for post-closure performance assessments for disposal of radioactive wastes. <i>Mineralogical Magazine</i> , <b>2015</b> , 79, 1613-1623	1.7	5
31	Global Dust Cycle. <i>Geophysical Monograph Series</i> , <b>2009</b> , 37-55	1.1	5
30	Oceanic and atmospheric methane cycling in the cGENIE Earth system model [release v0.9.14. <i>Geoscientific Model Development</i> , <b>2020</b> , 13, 5687-5706	6.3	5
29	Decreasing Phanerozoic extinction intensity as a consequence of Earth surface oxygenation and metazoan ecophysiology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	5
28	Climatic effect of Southern Ocean Fe fertilization: Is the jury still out?. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2000</b> , 1, n/a-n/a	3.6	4
27	Significant long-term increase of fossil fuel CO <sub>2</sub> uptake from reduced marine calcification		4
26	The importance of ocean transport in the fate of anthropogenic CO <sub>2</sub> ;		4
25	From laboratory manipulations to earth system models: predicting pelagic calcification and its consequences		4
24	Climate and climate change. <i>Current Biology</i> , <b>2009</b> , 19, R563-6	6.3	3
23	Iron and sulfur cycling in the cGENIE.muffin Earth system model (v0.9.21). <i>Geoscientific Model Development</i> , <b>2021</b> , 14, 2713-2745	6.3	3
22	Sensitivity of atmospheric CO <sub>2</sub> to regional variability in particulate organic matter remineralization depths. <i>Biogeosciences</i> , <b>2019</b> , 16, 2923-2936	4.6	3
21	Oceanic and atmospheric methane cycling in the cGENIE Earth system model <b>2020</b> ,		2
20	Can organic matter flux profiles be diagnosed using remineralisation rates derived from observed tracers and modelled ocean transport rates?. <i>Biogeosciences</i> , <b>2015</b> , 12, 5547-5562	4.6	2
19	Dust in the Earth System: The Biogeochemical Linking of Land, Air, and Sea. <i>Series on Iraq War and Its Consequences</i> , <b>2007</b> , 51-68		2
18	Data-constrained assessment of ocean circulation changes since the middle Miocene in an Earth system model. <i>Climate of the Past</i> , <b>2021</b> , 17, 2223-2254	3.9	2

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15	Regional patterns and temporal evolution of ocean iron fertilization and CO <sub>2</sub> drawdown during the last glacial termination. <i>Earth and Planetary Science Letters</i> , <b>2021</b> , 554, 116675	5.3	2
14	Secular Changes in the Importance of Neritic Carbonate Deposition as a Control on the Magnitude and Stability of Neoproterozoic Ice Ages. <i>Geophysical Monograph Series</i> , <b>2013</b> , 55-72	1.1	1
13	The Rock Geochemical Model (RokGeM) v0.9 <b>2012</b> ,		1
12	A high-resolution record from Svalbard of carbon release during the Paleocene-Eocene thermal maximum. <i>Journal of Earth Science (Wuhan, China)</i> , <b>2010</b> , 21, 190-190	2.2	1
11	Controls on the spatial distribution of oceanic $\delta^{13}C_{DIC}$ ;		1
10	Application of sediment core modelling to understanding climates of the past: An example from glacial-interglacial changes in Southern Ocean silica cycling		1
9	A lattice-automaton bioturbation simulator with coupled physics, chemistry, and biology in marine sediments (eLABS v0.2). <i>Geoscientific Model Development</i> , <b>2019</b> , 12, 4469-4496	6.3	1
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5	Investigating the benefits and costs of spines and diet on planktonic foraminifera distribution with a trait-based ecosystem model. <i>Marine Micropaleontology</i> , <b>2021</b> , 166, 102004	1.7	0
4	Methane Hydrate Instability: A View from the Palaeogene <b>2012</b> , 278-304		
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2	Assessing the Past and Future Stability of Global Gas Hydrate Reservoirs 250-277		
1	Inclusion of a suite of weathering tracers in the cGENIE Earth system model [muffin release v.0.9.23]. <i>Geoscientific Model Development</i> , <b>2021</b> , 14, 4187-4223	6.3	