Andrew Ridgwell

List of Publications by Year in Descending Order

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	A model for marine sedimentary carbonate diagenesis and paleoclimate proxy signal tracking: IMP v1.0. *Geoscientific Model Development*, **2021**, 14, 5999-6023	6.3	0
177	Data-constrained assessment of ocean circulation changes since the middle Miocene in an Earth system model. *Climate of the Past*, **2021**, 17, 2223-2254	3.9	2
176	Decreasing Phanerozoic extinction intensity as a consequence of Earth surface oxygenation and metazoan ecophysiology. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	5
175	Temperature controls carbon cycling and biological evolution in the ocean twilight zone. *Science*, **2021**, 371, 1148-1152	33.3	10
174	Iron and sulfur cycling in the cGENIE.muffin Earth system model (v0.9.21). *Geoscientific Model Development*, **2021**, 14, 2713-2745	6.3	3
173	Ecosystem function after the K/Pg extinction: decoupling of marine carbon pump and diversity. *Proceedings of the Royal Society B: Biological Sciences*, **2021**, 288, 20210863	4.4	2
172	Investigating the benefits and costs of spines and diet on planktonic foraminifera distribution with a trait-based ecosystem model. *Marine Micropaleontology*, **2021**, 166, 102004	1.7	0
171	Inclusion of a suite of weathering tracers in the cGENIE Earth system model muffin release v.0.9.23. *Geoscientific Model Development*, **2021**, 14, 4187-4223	6.3	
170	The atmospheric bridge communicated the <i></i>¹³C decline during the last deglaciation to the global upper ocean. *Climate of the Past*, **2021**, 17, 1507-1521	3.9	2
169	Regional patterns and temporal evolution of ocean iron fertilization and CO2 drawdown during the last glacial termination. *Earth and Planetary Science Letters*, **2021**, 554, 116675	5.3	2
168	Calibration of temperature-dependent ocean microbial processes in the cGENIE.muffin (v0.9.13) Earth system model. *Geoscientific Model Development*, **2021**, 14, 125-149	6.3	7
167	A 35-million-year record of seawater stable Sr isotopes reveals a fluctuating global carbon cycle. *Science*, **2021**, 371, 1346-1350	33.3	9
166	Paleocene/Eocene carbon feedbacks triggered by volcanic activity. *Nature Communications*, **2021**, 12, 5186	17.4	6
165	Earth System Model Analysis of How Astronomical Forcing Is Imprinted Onto the Marine Geological Record: The Role of the Inorganic (Carbonate) Carbon Cycle and Feedbacks. *Paleoceanography and Paleoclimatology*, **2021**, 36, e2020PA004090	3.3	1
164	Orographic evolution of northern Tibet shaped vegetation and plant diversity in eastern Asia. *Science Advances*, **2021**, 7,	14.3	19
163	Overturning circulation, nutrient limitation, and warming in the Glacial North Pacific. *Science Advances*, **2020**, 6,	14.3	15
162	Past climates inform our future. *Science*, **2020**, 370,	33.3	70

161	Towards an understanding of the Ca isotopic signal related to ocean acidification and alkalinity overshoots in the rock record. *Chemical Geology*, **2020**, 547, 119672	4.2	5
160	Variable C□ composition of organic production and its effect on ocean carbon storage in glacial-like model simulations. *Biogeosciences*, **2020**, 17, 2219-2244	4.6	6
159	Evaluation of Paleocene-Eocene Thermal Maximum Carbon Isotope Record Completeness□An Illustration of the Potential of Dynamic Time Warping in Aligning Paleo-Proxy Records. *Geochemistry, Geophysics, Geosystems*, **2020**, 21, e2019GC008620	3.6	5
158	Oceanic and atmospheric methane cycling in the cGENIE Earth system model **2020**,		2
157	The impact of marine nutrient abundance on early eukaryotic ecosystems. *Geobiology*, **2020**, 18, 139-151	4.3	26
156	Oceanic and atmospheric methane cycling in the cGENIE Earth system model □release v0.9.14. *Geoscientific Model Development*, **2020**, 13, 5687-5706	6.3	5
155	Bistability in the redox chemistry of sediments and oceans. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 33043-33050	11.5	8
154	Unravelling the sources of carbon emissions at the onset of Oceanic Anoxic Event (OAE) 1a. *Earth and Planetary Science Letters*, **2020**, 530, 115947	5.3	13
153	Algal plankton turn to hunting to survive and recover from end-Cretaceous impact darkness. *Science Advances*, **2020**, 6,	14.3	9
152	Proxy evidence for state-dependence of climate sensitivity in the Eocene greenhouse. *Nature Communications*, **2020**, 11, 4436	17.4	22
151	Diversity decoupled from ecosystem function and resilience during mass extinction recovery. *Nature*, **2019**, 574, 242-245	50.4	31
150	Early Cenozoic Decoupling of Climate and Carbonate Compensation Depth Trends. *Paleoceanography and Paleoclimatology*, **2019**, 34, 930-945	3.3	15
149	A trait-based modelling approach to planktonic foraminifera ecology. *Biogeosciences*, **2019**, 16, 1469-1492	4.6	7
148	Mitigation of Extreme Ocean Anoxic Event Conditions by Organic Matter Sulfurization. *Paleoceanography and Paleoclimatology*, **2019**, 34, 476-489	3.3	9
147	Ice sheets matter for the global carbon cycle. *Nature Communications*, **2019**, 10, 3567	17.4	48
146	Coupled climate□arbon cycle simulation of the Last Glacial Maximum atmospheric CO₂ decrease using a large ensemble of modern plausible parameter sets. *Climate of the Past*, **2019**, 15, 1039-1062	3.9	0
145	Rapid ocean acidification and protracted Earth system recovery followed the end-Cretaceous Chicxulub impact. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 22500-22504	11.5	60
144	A lattice-automaton bioturbation simulator with coupled physics, chemistry, and biology in marine sediments (eLABS v0.2). *Geoscientific Model Development*, **2019**, 12, 4469-4496	6.3	1

143	Sensitivity of atmospheric CO₂ to regional variability in particulate organic matter remineralization depths. *Biogeosciences*, **2019**, 16, 2923-2936	4.6	3
142	Considering the Role of Adaptive Evolution in Models of the Ocean and Climate System. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 3343-3361	7.1	13
141	Fundamentally different global marine nitrogen cycling in response to severe ocean deoxygenation. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 24979-24984	11.5	13
140	Dynamics of sediment flux to a bathyal continental margin section through the Paleocene–Eocene Thermal Maximum. *Climate of the Past*, **2018**, 14, 1035-1049	3.9	17
139	OMEN-SED 1.0: a novel, numerically efficient organic matter sediment diagenesis module for coupling to Earth system models. *Geoscientific Model Development*, **2018**, 11, 2649-2689	6.3	15
138	Atmospheric Seasonality as an Exoplanet Biosignature. *Astrophysical Journal Letters*, **2018**, 858, L14	7.9	27
137	EcoGEnIE 1.0: plankton ecology in the cGEnIE Earth system model. *Geoscientific Model Development* , **2018**, 11, 4241-4267	6.3	16
136	Linking Marine Plankton Ecosystems and Climate: A New Modeling Approach to the Warm Early Eocene Climate. *Paleoceanography and Paleoclimatology*, **2018**, 33, 1439-1452	3.3	11
135	Strategies in times of crisis-insights into the benthic foraminiferal record of the Palaeocene-Eocene Thermal Maximum. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2018**, 376,	3	8
134	Late inception of a resiliently oxygenated upper ocean. *Science*, **2018**, 361, 174-177	33.3	82
133	Climate–carbon cycle uncertainties and the Paris Agreement. *Nature Climate Change*, **2018**, 8, 609-613	21.4	42
132	The influence of the ocean circulation state on ocean carbon storage and CO₂ drawdown potential in an Earth system model. *Biogeosciences*, **2018**, 15, 1367-1393	4.6	21
131	Quantifying the influence of the terrestrial biosphere on glacial–interglacial climate dynamics. *Climate of the Past*, **2017**, 13, 1381-1401	3.9	15
130	Very large release of mostly volcanic carbon during the Palaeocene-Eocene Thermal Maximum. *Nature*, **2017**, 548, 573-577	50.4	186
129	A probabilistic assessment of the rapidity of PETM onset. *Nature Communications*, **2017**, 8, 353	17.4	35
128	Understanding the causes and consequences of past marine carbon cycling variability through models. *Earth-Science Reviews*, **2017**, 171, 349-382	10.2	36
127	Emulation of long-term changes in global climate: application to the late Pliocene and future. *Climate of the Past*, **2017**, 13, 1539-1571	3.9	11
126	An abyssal carbonate compensation depth overshoot in the aftermath of the Palaeocene–Eocene Thermal Maximum. *Nature Geoscience*, **2016**, 9, 575-580	18.3	50

125	Expanded oxygen minimum zones during the late Paleocene-early Eocene: Hints from multiproxy comparison and ocean modeling. *Paleoceanography*, **2016**, 31, 1532-1546		27
124	El Niño and coral larval dispersal across the eastern Pacific marine barrier. *Nature Communications*, **2016**, 7, 12571	17.4	42
123	An impulse response function for the "long tail" of excess atmospheric CO2 in an Earth system model. *Global Biogeochemical Cycles*, **2016**, 30, 2-17	5.9	38
122	Development of a novel empirical framework for interpreting geological carbon isotope excursions, with implications for the rate of carbon injection across the PETM. *Earth and Planetary Science Letters*, **2016**, 435, 1-13	5.3	54
121	Ocean warming, not acidification, controlled coccolithophore response during past greenhouse climate change. *Geology*, **2016**, 44, 59-62	5	45
120	Anthropogenic carbon release rate unprecedented during the past 66 million years. *Nature Geoscience*, **2016**, 9, 325-329	18.3	225
119	Comparative carbon cycle dynamics of the present and last interglacial. *Quaternary Science Reviews*, **2016**, 137, 15-32	3.9	19
118	Enhanced weathering strategies for stabilizing climate and averting ocean acidification. *Nature Climate Change*, **2016**, 6, 402-406	21.4	106
117	Selective environmental stress from sulphur emitted by continental flood basalt eruptions. *Nature Geoscience*, **2016**, 9, 77-82	18.3	82
116	Why marine phytoplankton calcify. *Science Advances*, **2016**, 2, e1501822	14.3	121
115	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. *Geobiology*, **2016**, 14, 207-19	4.3	62
114	Changing atmospheric CO2 concentration was the primary driver of early Cenozoic climate. *Nature*, **2016**, 533, 380-4	50.4	243
113	How well do global ocean biogeochemistry models simulate dissolved iron distributions?. *Global Biogeochemical Cycles*, **2016**, 30, 149-174	5.9	177
112	The time scale of the silicate weathering negative feedback on atmospheric CO2. *Global Biogeochemical Cycles*, **2015**, 29, 583-596	5.9	42
111	Upper ocean oxygenation dynamics from I/Ca ratios during the Cenomanian-Turonian OAE 2. *Paleoceanography*, **2015**, 30, 510-526		42
110	Why Dissolved Organics Matter **2015**, 1-20		13
109	Sensitivity of climate to cumulative carbon emissions due to compensation of ocean heat and carbon uptake. *Nature Geoscience*, **2015**, 8, 29-34	18.3	67
108	Changes in benthic ecosystems and ocean circulation in the Southeast Atlantic across Eocene Thermal Maximum 2. *Paleoceanography*, **2015**, 30, 1059-1077		22

107	The 'long tail' of anthropogenic CO2 decline in the atmosphere and its consequences for post-closure performance assessments for disposal of radioactive wastes. *Mineralogical Magazine*, **2015**, 79, 1613-1623	1.7	5
106	Can organic matter flux profiles be diagnosed using remineralisation rates derived from observed tracers and modelled ocean transport rates?. *Biogeosciences*, **2015**, 12, 5547-5562	4.6	2
105	Evaluation of coral reef carbonate production models at a global scale. *Biogeosciences*, **2015**, 12, 1339-1356	4.6	24
104	Assessing the controllability of Arctic sea ice extent by sulfate aerosol geoengineering. *Geophysical Research Letters*, **2015**, 42, 1223-1231	4.9	24
103	Combustion of available fossil fuel resources sufficient to eliminate the Antarctic Ice Sheet. *Science Advances*, **2015**, 1, e1500589	14.3	71
102	A neoproterozoic transition in the marine nitrogen cycle. *Current Biology*, **2014**, 24, 652-7	6.3	87
101	Temperature-dependent remineralization and carbon cycling in the warm Eocene oceans. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **2014**, 413, 158-166	2.9	48
100	Deep water formation in the North Pacific and deglacial CO2 rise. *Paleoceanography*, **2014**, 29, 645-667		84
99	Antarctic ice sheet fertilises the Southern Ocean. *Biogeosciences*, **2014**, 11, 2635-2643	4.6	68
98	Onset of carbon isotope excursion at the Paleocene-Eocene thermal maximum took millennia, not 13 years. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E1062-3	11.5	37
97	Modelling dispersal and connectivity of broadcast spawning corals at the global scale. *Global Ecology and Biogeography*, **2014**, 23, 1-11	6.1	105
96	Long-Term Climate Change Commitment and Reversibility: An EMIC Intercomparison. *Journal of Climate*, **2013**, 26, 5782-5809	4.4	165
95	Climate model and proxy data constraints on ocean warming across the Paleocene–Eocene Thermal Maximum. *Earth-Science Reviews*, **2013**, 125, 123-145	10.2	170
94	Marine ecosystem responses to Cenozoic global change. *Science*, **2013**, 341, 492-8	33.3	104
93	Initial assessment of the carbon emission rate and climatic consequences during the end-Permian mass extinction. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **2013**, 389, 128-136	2.9	36
92	Sensitivity of the global submarine hydrate inventory to scenarios of future climate change. *Earth and Planetary Science Letters*, **2013**, 367, 105-115	5.3	56
91	Tropical coral reef habitat in a geoengineered, high-CO2 world. *Geophysical Research Letters*, **2013**, 40, 1799-1805	4.9	15
90	Secular Changes in the Importance of Neritic Carbonate Deposition as a Control on the Magnitude and Stability of Neoproterozoic Ice Ages. *Geophysical Monograph Series*, **2013**, 55-72	1.1	1

89	Warm climates of the past--a lesson for the future?. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2013**, 371, 20130146	3	21
88	The potential role of the Antarctic Ice Sheet in global biogeochemical cycles. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **2013**, 104, 55-67	0.9	54
87	The Rock Geochemical Model (RokGeM) v0.9. *Geoscientific Model Development*, **2013**, 6, 1543-1573	6.3	47
86	Future habitat suitability for coral reef ecosystems under global warming and ocean acidification. *Global Change Biology*, **2013**, 19, 3592-606	11.4	54
85	Surviving rapid climate change in the deep sea during the Paleogene hyperthermals. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 9273-6	11.5	41
84	Recovering the true size of an Eocene hyperthermal from the marine sedimentary record. *Paleoceanography*, **2013**, 28, 700-712		27
83	Historical and idealized climate model experiments: an intercomparison of Earth system models of intermediate complexity. *Climate of the Past*, **2013**, 9, 1111-1140	3.9	127
82	Controls on the spatial distribution of oceanic ¹³C_{DIC}. *Biogeosciences*, **2013**, 10, 1815-1833	4.6	24
81	Environmental controls on the global distribution of shallow-water coral reefs. *Journal of Biogeography*, **2012**, 39, 1508-1523	4.1	42
80	A Cenozoic record of the equatorial Pacific carbonate compensation depth. *Nature*, **2012**, 488, 609-14	50.4	241
79	Flooding of the continental shelves as a contributor to deglacial CH4 rise. *Journal of Quaternary Science*, **2012**, 27, 800-806	2.3	10
78	Methane Hydrate Instability: A View from the Palaeogene **2012**, 278-304		
77	Potential methane reservoirs beneath Antarctica. *Nature*, **2012**, 488, 633-7	50.4	138
76	Assessment of the spatial variability in particulate organic matter and mineral sinking fluxes in the ocean interior: Implications for the ballast hypothesis. *Global Biogeochemical Cycles*, **2012**, 26, n/a-n/a	5.9	53
75	How warming and steric sea level rise relate to cumulative carbon emissions. *Geophysical Research Letters*, **2012**, 39,	4.9	21
74	Nutrients as the dominant control on the spread of anoxia and euxinia across the Cenomanian-Turonian oceanic anoxic event (OAE2): Model-data comparison. *Paleoceanography*, **2012**, 27,		122
73	The geological record of ocean acidification. *Science*, **2012**, 335, 1058-63	33.3	649
72	The Rock Geochemical Model (RokGeM) v0.9 **2012**,		1

71	Reply to 'Constraints on hyperthermals'. *Nature Geoscience*, **2012**, 5, 231-232	18.3	6
70	Geoengineering: taking control of our planet's climate?. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2012**, 370, 4163-5	3	10
69	Geographical variations in the effectiveness and side effects of deep ocean carbon sequestration. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	10
68	Climatic effects of surface albedo geoengineering. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		47
67	Ocean acidification in the freezer. *Antarctic Science*, **2011**, 23, 417-417	1.7	
66	Are there pre-Quaternary geological analogues for a future greenhouse warming?. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2011**, 369, 933-56	3	82
65	Evolution of the ocean's "biological pump". *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 16485-6	11.5	23
64	Slow release of fossil carbon during the Palaeocene-Eocene Thermal Maximum. *Nature Geoscience*, **2011**, 4, 481-485	18.3	178
63	A model for orbital pacing of methane hydrate destabilization during the Palaeogene. *Nature Geoscience*, **2011**, 4, 775-778	18.3	92
62	Characterizing post-industrial changes in the ocean carbon cycle in an Earth system model. *Tellus, Series B: Chemical and Physical Meteorology*, **2010**, 62, 296-313	3.3	23
61	Past constraints on the vulnerability of marine calcifiers to massive carbon dioxide release. *Nature Geoscience*, **2010**, 3, 196-200	18.3	159
60	CO2-driven ocean circulation changes as an amplifier of Paleocene-Eocene thermal maximum hydrate destabilization. *Geology*, **2010**, 38, 875-878	5	91
59	Ocean-atmosphere partitioning of anthropogenic carbon dioxide on multimillennial timescales. *Global Biogeochemical Cycles*, **2010**, 24, n/a-n/a	5.9	19
58	Assessing the regional disparities in geoengineering impacts. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	59
57	A Palaeogene perspective on climate sensitivity and methane hydrate instability. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2010**, 368, 2395-415	3	60
56	Gas hydrates: past and future geohazard?. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2010**, 368, 2369-93	3	153
55	A high-resolution record from Svalbard of carbon release during the Paleocene-Eocene thermal maximum. *Journal of Earth Science (Wuhan, China)*, **2010**, 21, 190-190	2.2	1
54	The role of ocean transport in the uptake of anthropogenic CO₂. *Biogeosciences*, **2009**, 6, 375-390	4.6	78

53	From laboratory manipulations to Earth system models: scaling calcification impacts of ocean acidification. *Biogeosciences*, **2009**, 6, 2611-2623	4.6	104
52	Assessing the benefits of crop albedo bio-geoengineering. *Environmental Research Letters*, **2009**, 4, 045108	1.0	33
51	The fate of the Greenland Ice Sheet in a geoengineered, high CO 2 world. *Environmental Research Letters*, **2009**, 4, 045109	6.2	33
50	'Geoengineering'--taking control of our planet's climate. *Science Progress*, **2009**, 92, 139-62	1.1	7
49	Tackling regional climate change by leaf albedo bio-geoengineering. *Current Biology*, **2009**, 19, 146-50	6.3	95
48	Climate and climate change. *Current Biology*, **2009**, 19, R563-6	6.3	3
47	Climate sensitivity to the carbon cycle modulated by past and future changes in ocean chemistry. *Nature Geoscience*, **2009**, 2, 145-150	18.3	35
46	Atmospheric Lifetime of Fossil Fuel Carbon Dioxide. *Annual Review of Earth and Planetary Sciences*, **2009**, 37, 117-134	15.3	483
45	Glacial-Interglacial Variability in Atmospheric CO2. *Geophysical Monograph Series*, **2009**, 251-286	1.1	64
44	Global Dust Cycle. *Geophysical Monograph Series*, **2009**, 37-55	1.1	5
43	Ocean Acidification in Deep Time. *Oceanography*, **2009**, 22, 94-107	2.3	137
42	Biogeochemical controls on photic-zone euxinia during the end-Permian mass extinction. *Geology*, **2008**, 36, 747	5	113
41	Response of deep-sea CaCO3 sedimentation to Atlantic meridional overturning circulation shutdown. *Journal of Geophysical Research*, **2008**, 113,		24
40	Sedimentary response to Paleocene-Eocene Thermal Maximum carbon release: A model-data comparison. *Geology*, **2008**, 36, 315	5	176
39	Sunshade World□A fully coupled GCM evaluation of the climatic impacts of geoengineering. *Geophysical Research Letters*, **2008**, 35, n/a-n/a	4.9	80
38	An oceanic origin for the increase of atmospheric radiocarbon during the Younger Dryas. *Geophysical Research Letters*, **2008**, 35,	4.9	40
37	Regulation of atmospheric CO2 by deep-sea sediments in an Earth system model. *Global Biogeochemical Cycles*, **2007**, 21, n/a-n/a	5.9	121
36	Interpreting transient carbonate compensation depth changes by marine sediment core modeling. *Paleoceanography*, **2007**, 22, n/a-n/a		64

35	Application of sediment core modelling to interpreting the glacial-interglacial record of Southern Ocean silica cycling. *Climate of the Past*, **2007**, 3, 387-396	3.9	8
34	Marine geochemical data assimilation in an efficient Earth System Model of global biogeochemical cycling. *Biogeosciences*, **2007**, 4, 87-104	4.6	160
33	Assessing the potential long-term increase of oceanic fossil fuel CO₂ uptake due to CO₂-calcification feedback. *Biogeosciences*, **2007**, 4, 481-492	4.6	88
32	Comment on "Modern-age buildup of CO2 and its effects on seawater acidity and salinity" by Hugo A. Loáiciga. *Geophysical Research Letters*, **2007**, 34,	4.9	13
31	Dust in the Earth System: The Biogeochemical Linking of Land, Air, and Sea. *Series on Iraq War and Its Consequences*, **2007**, 51-68		2
30	Millennial timescale carbon cycle and climate change in an efficient Earth system model. *Climate Dynamics*, **2006**, 26, 687-711	4.2	72
29	Mid-Pleistocene revolution and the "eccentricity myth". *Geological Society Special Publication*, **2005**, 247, 19-34	1.7	69
28	Global iron connections between desert dust, ocean biogeochemistry, and climate. *Science*, **2005**, 308, 67-71	33.3	1996
27	The role of the global carbonate cycle in the regulation and evolution of the Earth system. *Earth and Planetary Science Letters*, **2005**, 234, 299-315	5.3	340
26	A factorial analysis of the marine carbon cycle and ocean circulation controls on atmospheric CO2. *Global Biogeochemical Cycles*, **2005**, 19, n/a-n/a	5.9	17
25	A Mid Mesozoic Revolution in the regulation of ocean chemistry. *Marine Geology*, **2005**, 217, 339-357	3.3	191
24	Carbonate deposition, climate stability, and Neoproterozoic ice ages. *Science*, **2003**, 302, 859-62	33.3	125
23	An end to the "ain ratio" reign?. *Geochemistry, Geophysics, Geosystems*, **2003**, 4, n/a-n/a	3.6	35
22	Implications of the glacial CO2 "iron hypothesis" for Quaternary climate change. *Geochemistry, Geophysics, Geosystems*, **2003**, 4, n/a-n/a	3.6	36
21	Implications of coral reef buildup for the controls on atmospheric CO2 since the Last Glacial Maximum. *Paleoceanography*, **2003**, 18, n/a-n/a		79
20	Dust in the Earth system: the biogeochemical linking of land, air and sea. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2002**, 360, 2905-24	3	82
19	Feedback between aeolian dust, climate, and atmospheric CO2 in glacial time. *Paleoceanography*, **2002**, 17, 11-1-11-11		74
18	Modeling the response of the oceanic Si inventory to perturbation, and consequences for atmospheric CO2. *Global Biogeochemical Cycles*, **2002**, 16, 19-1-19-25	5.9	44

17	Reduced effectiveness of terrestrial carbon sequestration due to an antagonistic response of ocean productivity. *Geophysical Research Letters*, **2002**, 29, 19-1-19-4	4.9	17
16	Effect of iron supply on Southern Ocean CO2 uptake and implications for glacial atmospheric CO2. *Nature*, **2000**, 407, 730-3	50.4	386
15	Climatic effect of Southern Ocean Fe fertilization: Is the jury still out?. *Geochemistry, Geophysics, Geosystems*, **2000**, 1, n/a-n/a	3.6	4
14	Consumption of atmospheric methane by soils: A process-based model. *Global Biogeochemical Cycles*, **1999**, 13, 59-70	5.9	155
13	Is the spectral signature of the 100 kyr glacial cycle consistent with a Milankovitch origin?. *Paleoceanography*, **1999**, 14, 437-440		60
12	On the displacive character of the phase transition in quartz: a hard-mode spectroscopy study. *Journal of Physics Condensed Matter*, **1992**, 4, 571-577	1.8	46
11	Spatial and temporal patterns of oceanacidification during the end-Permian mass extinction an Earth system model evaluation291-306		6
10	Antarctic Ice Sheet fertilises the Southern Ocean		8
9	Significant long-term increase of fossil fuel CO₂ uptake from reduced marine calcification		4
8	The importance of ocean transport in the fate of anthropogenic CO₂		4
7	From laboratory manipulations to earth system models: predicting pelagic calcification and its consequences		4
6	Controls on the spatial distribution of oceanic ¹³C_{DIC}		1
5	Application of sediment core modelling to understanding climates of the past: An example from glacial-interglacial changes in Southern Ocean silica cycling		1
4	Historical and idealized climate model experiments: an EMIC intercomparison		10
3	Vertical decoupling in Late Ordovician anoxia due to reorganization of ocean circulation. *Nature Geoscience*,	18.3	7
2	Geological carbon sinks.74-97		11
1	Assessing the Past and Future Stability of Global Gas Hydrate Reservoirs250-277		