## Andrew Ridgwell

List of Publications by Year in descending order

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|          |                | 18436        | 18606          |
|----------|----------------|--------------|----------------|
| 170      | 15,922         | 62           | 119            |
| papers   | citations      | h-index      | g-index        |
|          |                |              |                |
|          |                |              |                |
|          |                |              |                |
| 194      | 194            | 194          | 14574          |
| all docs | docs citations | times ranked | citing authors |

| #        | Article  | IF          | CITATIONS |
|----------|--|-------------|-----------|
| 1        | Global Iron Connections Between Desert Dust, Ocean Biogeochemistry, and Climate. Science, 2005, 308, 67-71.  | 6.0         | 2,365     |
| 2        | The Geological Record of Ocean Acidification. Science, 2012, 335, 1058-1063.   | 6.0         | 828       |
| 3        | Atmospheric Lifetime of Fossil Fuel Carbon Dioxide. Annual Review of Earth and Planetary Sciences, 2009, 37, 117-134.                                | 4.6         | 627       |
| 4        | 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. | 1.8         | 460       |
| 5        | Effect of iron supply on Southern Ocean CO2 uptake and implications for glacial atmospheric CO2.<br>Nature, 2000, 407, 730-733.                      | 13.7        | 449       |
| 6        | A Cenozoic record of the equatorial Pacific carbonate compensation depth. Nature, 2012, 488, 609-614.  | 13.7        | 342       |
| 7        | Changing atmospheric CO2 concentration was the primary driver of early Cenozoic climate. Nature, 2016, 533, 380-384.                                 | 13.7        | 327       |
| 8        | Anthropogenic carbon release rate unprecedented during the past 66 million years. Nature Geoscience, 2016, 9, 325-329.                               | <b>5.</b> 4 | 295       |
| 9        | Very large release of mostly volcanic carbon during the Palaeocene–Eocene Thermal Maximum.<br>Nature, 2017, 548, 573-577.                            | 13.7        | 277       |
| 10       | Past climates inform our future. Science, 2020, 370, .   | 6.0         | 253       |
| 11       | A Mid Mesozoic Revolution in the regulation of ocean chemistry. Marine Geology, 2005, 217, 339-357.  | 0.9         | 241       |
| 12       | How well do global ocean biogeochemistry models simulate dissolved iron distributions?. Global Biogeochemical Cycles, 2016, 30, 149-174.             | 1.9         | 230       |
| 13       | Slow release of fossil carbon during the Palaeocene–Eocene Thermal Maximum. Nature Geoscience, 2011, 4, 481-485.                                     | 5.4         | 214       |
| 14       | Climate model and proxy data constraints on ocean warming across the Paleocene–Eocene Thermal Maximum. Earth-Science Reviews, 2013, 125, 123-145.    | 4.0         | 214       |
| 15       |  |             |           |
|          | Long-Term Climate Change Commitment and Reversibility: An EMIC Intercomparison. Journal of Climate, 2013, 26, 5782-5809.                             | 1.2         | 208       |
| 16       |  | 1.2         | 208       |
| 16<br>17 | Cas hydrates: past and future geohazard?. Philosophical Transactions Series A, Mathematical, Physical,   |             |           |

| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Past constraints on the vulnerability of marine calcifiers to massive carbon dioxide release. Nature Geoscience, 2010, 3, 196-200.  | 5.4  | 186       |
| 20 | Potential methane reservoirs beneath Antarctica. Nature, 2012, 488, 633-637.  | 13.7 | 184       |
| 21 | Enhanced weathering strategies for stabilizing climate and averting ocean acidification. Nature Climate Change, 2016, 6, 402-406.   | 8.1  | 184       |
| 22 | Why marine phytoplankton calcify. Science Advances, 2016, 2, e1501822.  | 4.7  | 181       |
| 23 | Consumption of atmospheric methane by soils: A process-based model. Global Biogeochemical Cycles, 1999, 13, 59-70.  | 1.9  | 176       |
| 24 | Ocean Acidification in Deep Time. Oceanography, 2009, 22, 94-107.   | 0.5  | 173       |
| 25 | Historical and idealized climate model experiments: an intercomparison of Earth system models of intermediate complexity. Climate of the Past, 2013, 9, 1111-1140.  | 1.3  | 157       |
| 26 | Nutrients as the dominant control on the spread of anoxia and euxinia across the Cenomanianâ€Turonian oceanic anoxic event (OAE2): Modelâ€data comparison. Paleoceanography, 2012, 27,                                | 3.0  | 153       |
| 27 | Regulation of atmospheric CO2by deep-sea sediments in an Earth system model. Global Biogeochemical Cycles, 2007, 21, n/a-n/a.   | 1.9  | 152       |
| 28 | Carbonate Deposition, Climate Stability, and Neoproterozoic Ice Ages. Science, 2003, 302, 859-862.  | 6.0  | 143       |
| 29 | Marine Ecosystem Responses to Cenozoic Global Change. Science, 2013, 341, 492-498.  | 6.0  | 140       |
| 30 | Biogeochemical controls on photic-zone euxinia during the end-Permian mass extinction. Geology, 2008, 36, 747.  | 2.0  | 139       |
| 31 | Modelling dispersal and connectivity of broadcast spawning corals at the global scale. Global Ecology and Biogeography, 2014, 23, 1-11.   | 2.7  | 139       |
| 32 | From laboratory manipulations to Earth system models: scaling calcification impacts of ocean acidification. Biogeosciences, 2009, 6, 2611-2623.   | 1.3  | 122       |
| 33 | A model for orbital pacing of methane hydrate destabilization during the Palaeogene. Nature Geoscience, 2011, 4, 775-778.   | 5.4  | 119       |
| 34 | Late inception of a resiliently oxygenated upper ocean. Science, 2018, 361, 174-177.  | 6.0  | 117       |
| 35 | 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. | 3.3  | 116       |
| 36 | Tackling Regional Climate Change By Leaf Albedo Bio-geoengineering. Current Biology, 2009, 19, 146-150.   | 1.8  | 115       |

| #  | Article  | IF  | Citations |
|----|--|-----|-----------|
| 37 | A Neoproterozoic Transition in the Marine Nitrogen Cycle. Current Biology, 2014, 24, 652-657.  | 1.8 | 113       |
| 38 | Assessing the potential long-term increase of oceanic fossil fuel CO <sub>2</sub> uptake due to CO <sub>2</sub> -calcification feedback. Biogeosciences, 2007, 4, 481-492.                                   | 1.3 | 103       |
| 39 | CO2-driven ocean circulation changes as an amplifier of Paleocene-Eocene thermal maximum hydrate destabilization. Geology, 2010, 38, 875-878.  | 2.0 | 100       |
| 40 | Dust in the Earth system: the biogeochemical linking of land, air and sea. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2002, 360, 2905-2924.                      | 1.6 | 99        |
| 41 | Deep water formation in the North Pacific and deglacial CO <sub>2</sub> rise. Paleoceanography, 2014, 29, 645-667.   | 3.0 | 99        |
| 42 | "Sunshade World― A fully coupled GCM evaluation of the climatic impacts of geoengineering.<br>Geophysical Research Letters, 2008, 35, .  | 1.5 | 93        |
| 43 | The role of ocean transport in the uptake of anthropogenic CO <sub>2</sub> . Biogeosciences, 2009, 6, 375-390.   | 1.3 | 93        |
| 44 | Selective environmental stress from sulphur emitted by continental flood basalt eruptions. Nature Geoscience, 2016, 9, 77-82.  | 5.4 | 92        |
| 45 | Feedback between aeolian dust, climate, and atmospheric CO2in glacial time. Paleoceanography, 2002, 17, 11-1-11.   | 3.0 | 91        |
| 46 | Combustion of available fossil fuel resources sufficient to eliminate the Antarctic Ice Sheet. Science Advances, 2015, 1, e1500589.  | 4.7 | 91        |
| 47 | Implications of coral reef buildup for the controls on atmospheric CO2since the Last Glacial Maximum. Paleoceanography, 2003, $18$ , $n/a$ - $n/a$ .   | 3.0 | 90        |
| 48 | Mid-Pleistocene revolution and the †eccentricity myth'. Geological Society Special Publication, 2005, 247, 19-34.  | 0.8 | 90        |
| 49 | The influence of the biological pump on ocean chemistry: implications for longâ€ŧerm trends in marine redox chemistry, the global carbon cycle, and marine animal ecosystems. Geobiology, 2016, 14, 207-219. | 1.1 | 90        |
| 50 | Are there pre-Quaternary geological analogues for a future greenhouse warming? Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 933-956.                    | 1.6 | 88        |
| 51 | Antarctic ice sheet fertilises the Southern Ocean. Biogeosciences, 2014, 11, 2635-2643.  | 1.3 | 88        |
| 52 | Ice sheets matter for the global carbon cycle. Nature Communications, 2019, 10, 3567.  | 5.8 | 87        |
| 53 | Sensitivity of climate to cumulative carbon emissions due to compensation of ocean heat and carbon uptake. Nature Geoscience, 2015, 8, 29-34.  | 5.4 | 85        |
| 54 | Millennial timescale carbon cycle and climate change in an efficient Earth system model. Climate Dynamics, 2006, 26, 687-711.  | 1.7 | 79        |

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|----|---|-----|-----------|
| 55 | Glacial-interglacial variability in atmospheric CO2. Geophysical Monograph Series, 2009, , 251-286.   | 0.1 | 77        |
| 56 | Is the spectral signature of the 100 kyr glacial cycle consistent with a Milankovitch origin?. Paleoceanography, 1999, 14, 437-440.   | 3.0 | 74        |
| 57 | Interpreting transient carbonate compensation depth changes by marine sediment core modeling.<br>Paleoceanography, 2007, 22, .  | 3.0 | 74        |
| 58 | The societal challenge of ocean acidification. Marine Pollution Bulletin, 2010, 60, 787-792.  | 2.3 | 73        |
| 59 | An abyssal carbonate compensation depth overshoot in the aftermath of the Palaeocene–Eocene Thermal Maximum. Nature Geoscience, 2016, 9, 575-580.   | 5.4 | 73        |
| 60 | A Palaeogene perspective on climate sensitivity and methane hydrate instability. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2395-2415.                               | 1.6 | 71        |
| 61 | Sensitivity of the global submarine hydrate inventory to scenarios of future climate change. Earth and Planetary Science Letters, 2013, 367, 105-115.   | 1.8 | 71        |
| 62 | Future habitat suitability for coral reef ecosystems under global warming and ocean acidification. Global Change Biology, 2013, 19, 3592-3606.  | 4.2 | 71        |
| 63 | Assessing the regional disparities in geoengineering impacts. Geophysical Research Letters, 2010, 37, .   | 1.5 | 69        |
| 64 | The time scale of the silicate weathering negative feedback on atmospheric CO <sub>2</sub> . Global Biogeochemical Cycles, 2015, 29, 583-596.   | 1.9 | 66        |
| 65 | Orographic evolution of northern Tibet shaped vegetation and plant diversity in eastern Asia. Science Advances, 2021, 7, .  | 4.7 | 66        |
| 66 | 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.  | 0.3 | 65        |
| 67 | 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. | 1.8 | 63        |
| 68 | On the displacive character of the phase transition in quartz: a hard-mode spectroscopy study. Journal of Physics Condensed Matter, 1992, 4, 571-577.   | 0.7 | 62        |
| 69 | 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, .                    | 1.9 | 61        |
| 70 | Temperature-dependent remineralization and carbon cycling in the warm Eocene oceans. Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 413, 158-166.   | 1.0 | 61        |
| 71 | Upper ocean oxygenation dynamics from I/Ca ratios during the Cenomanianâ€Turonian OAE 2.<br>Paleoceanography, 2015, 30, 510-526.  | 3.0 | 60        |
| 72 | Proxy evidence for state-dependence of climate sensitivity in the Eocene greenhouse. Nature Communications, 2020, 11, 4436.   | 5.8 | 57        |

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|----|--|------|-----------|
| 73 | Climatic effects of surface albedo geoengineering. Journal of Geophysical Research, 2011, 116, n/a-n/a.  | 3.3  | 56        |
| 74 | Environmental controls on the global distribution of shallowâ€water coral reefs. Journal of Biogeography, 2012, 39, 1508-1523.   | 1.4  | 55        |
| 75 | Understanding the causes and consequences of past marine carbon cycling variability through models. Earth-Science Reviews, 2017, 171, 349-382.   | 4.0  | 55        |
| 76 | Climate–carbon cycle uncertainties and the Paris Agreement. Nature Climate Change, 2018, 8, 609-613.   | 8.1  | 55        |
| 77 | An impulse response function for the "long tail―of excess atmospheric CO <sub>2</sub> in an Earth system model. Global Biogeochemical Cycles, 2016, 30, 2-17.  | 1.9  | 54        |
| 78 | The Rock Geochemical Model (RokGeM) v0.9. Geoscientific Model Development, 2013, 6, 1543-1573.   | 1.3  | 52        |
| 79 | 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, 9273-9276.                    | 3.3  | 51        |
| 80 | Modeling the response of the oceanic Si inventory to perturbation, and consequences for atmospheric CO2. Global Biogeochemical Cycles, 2002, 16, 19-1-19-25.   | 1.9  | 50        |
| 81 | El Ni $	ilde{A}\pm o$ and coral larval dispersal across the eastern Pacific marine barrier. Nature Communications, 2016, 7, 12571.   | 5.8  | 50        |
| 82 | Ocean warming, not acidification, controlled coccolithophore response during past greenhouse climate change. Geology, 2016, 44, 59-62.   | 2.0  | 49        |
| 83 | Diversity decoupled from ecosystem function and resilience during mass extinction recovery. Nature, 2019, 574, 242-245.  | 13.7 | 49        |
| 84 | A probabilistic assessment of the rapidity of PETM onset. Nature Communications, 2017, 8, 353.   | 5.8  | 48        |
| 85 | An oceanic origin for the increase of atmospheric radiocarbon during the Younger Dryas.<br>Geophysical Research Letters, 2008, 35, .   | 1.5  | 44        |
| 86 | 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. | 3.3  | 44        |
| 87 | Implications of the glacial CO2"iron hypothesis―for Quaternary climate change. Geochemistry,<br>Geophysics, Geosystems, 2003, 4, n/a-n/a.  | 1.0  | 43        |
| 88 | Climate sensitivity to the carbon cycle modulated by past and future changes in ocean chemistry. Nature Geoscience, 2009, 2, 145-150.  | 5.4  | 43        |
| 89 | Initial assessment of the carbon emission rate and climatic consequences during the end-Permian mass extinction. Palaeogeography, Palaeoclimatology, Palaeoecology, 2013, 389, 128-136.                      | 1.0  | 43        |
| 90 | Assessing the benefits of crop albedo bio-geoengineering. Environmental Research Letters, 2009, 4, 045110.   | 2.2  | 42        |

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|-----|--|-----|-----------|
| 91  | The fate of the Greenland Ice Sheet in a geoengineered, high CO <sub>2</sub> world. Environmental Research Letters, 2009, 4, 045109.   | 2.2 | 41        |
| 92  | Temperature controls carbon cycling and biological evolution in the ocean twilight zone. Science, 2021, 371, 1148-1152.  | 6.0 | 41        |
| 93  | Expanded oxygen minimum zones during the late Paleoceneâ€early Eocene: Hints from multiproxy comparison and ocean modeling. Paleoceanography, 2016, 31, 1532-1546.   | 3.0 | 40        |
| 94  | Atmospheric Seasonality as an Exoplanet Biosignature. Astrophysical Journal Letters, 2018, 858, L14.   | 3.0 | 40        |
| 95  | The impact of marine nutrient abundance on early eukaryotic ecosystems. Geobiology, 2020, 18, 139-151.   | 1.1 | 39        |
| 96  | An end to the "rain ratio―reign?. Geochemistry, Geophysics, Geosystems, 2003, 4, n/a-n/a.  | 1.0 | 38        |
| 97  | Comment on "Modernâ€age buildup of CO <sub>2</sub> and its effects on seawater acidity and salinity― by Hugo A. Loáiciga. Geophysical Research Letters, 2007, 34, .  | 1.5 | 36        |
| 98  | Overturning circulation, nutrient limitation, and warming in the Glacial North Pacific. Science Advances, 2020, 6, .   | 4.7 | 35        |
| 99  | Assessing the controllability of Arctic sea ice extent by sulfate aerosol geoengineering. Geophysical Research Letters, 2015, 42, 1223-1231.   | 1.5 | 34        |
| 100 | EcoGEnIE 1.0: plankton ecology in the cGEnIE Earth system model. Geoscientific Model Development, 2018, 11, 4241-4267.   | 1.3 | 33        |
| 101 | Evolution of the ocean's "biological pump― Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16485-16486.  | 3.3 | 32        |
| 102 | Recovering the true size of an Eocene hyperthermal from the marine sedimentary record. Paleoceanography, 2013, 28, 700-712.  | 3.0 | 32        |
| 103 | Paleocene/Eocene carbon feedbacks triggered by volcanic activity. Nature Communications, 2021, 12, 5186.   | 5.8 | 32        |
| 104 | A 35-million-year record of seawater stable Sr isotopes reveals a fluctuating global carbon cycle. Science, 2021, 371, 1346-1350.  | 6.0 | 31        |
| 105 | Warm climates of the past—a lesson for the future?. Philosophical Transactions Series A,<br>Mathematical, Physical, and Engineering Sciences, 2013, 371, 20130146.   | 1.6 | 30        |
| 106 | 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. | 3.3 | 30        |
| 107 | Unravelling the sources of carbon emissions at the onset of Oceanic Anoxic Event (OAE) 1a. Earth and Planetary Science Letters, 2020, 530, 115947.   | 1.8 | 30        |
| 108 | Vertical decoupling in Late Ordovician anoxia due to reorganization of ocean circulation. Nature Geoscience, 2021, 14, 868-873.  | 5.4 | 30        |

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|-----|---|-----|-----------|
| 109 | Response of deepâ€sea CaCO <sub>3</sub> sedimentation to Atlantic meridional overturning circulation shutdown. Journal of Geophysical Research, 2008, 113, .                      | 3.3 | 29        |
| 110 | Controls on the spatial distribution of oceanic Î' <sup>13</sup> C <sub>DIC</sub> . Biogeosciences, 2013, 10, 1815-1833.  | 1.3 | 29        |
| 111 | Characterizing post-industrial changes in the ocean carbon cycle in an Earth system model. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 296.                    | 0.8 | 28        |
| 112 | Changes in benthic ecosystems and ocean circulation in the Southeast Atlantic across Eocene Thermal Maximum 2. Paleoceanography, 2015, 30, 1059-1077.                             | 3.0 | 27        |
| 113 | How warming and steric sea level rise relate to cumulative carbon emissions. Geophysical Research Letters, 2012, 39, .  | 1.5 | 26        |
| 114 | Evaluation of coral reef carbonate production models at a global scale. Biogeosciences, 2015, 12, 1339-1356.  | 1.3 | 26        |
| 115 | Comparative carbon cycle dynamics of the present and last interglacial. Quaternary Science Reviews, 2016, 137, 15-32.   | 1.4 | 26        |
| 116 | Dynamics of sediment flux to a bathyal continental margin section through the Paleocene–Eocene Thermal Maximum. Climate of the Past, 2018, 14, 1035-1049.                         | 1.3 | 26        |
| 117 | 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. | 1.3 | 25        |
| 118 | The influence of the ocean circulation state on ocean carbon storage and CO <sub>2</sub> drawdown potential in an Earth system model. Biogeosciences, 2018, 15, 1367-1393.        | 1.3 | 24        |
| 119 | Oceanâ€atmosphere partitioning of anthropogenic carbon dioxide on multimillennial timescales. Global Biogeochemical Cycles, 2010, 24, .   | 1.9 | 23        |
| 120 | Early Cenozoic Decoupling of Climate and Carbonate Compensation Depth Trends. Paleoceanography and Paleoclimatology, 2019, 34, 930-945.   | 1.3 | 23        |
| 121 | Why Dissolved Organics Matter. , 2015, , 1-20.  |     | 22        |
| 122 | Quantifying the influence of the terrestrial biosphere on glacial–interglacial climate dynamics. Climate of the Past, 2017, 13, 1381-1401.  | 1.3 | 22        |
| 123 | Linking Marine Plankton Ecosystems and Climate: A New Modeling Approach to the Warm Early Eocene Climate. Paleoceanography and Paleoclimatology, 2018, 33, 1439-1452.             | 1.3 | 22        |
| 124 | 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.                         | 1.3 | 22        |
| 125 | Algal plankton turn to hunting to survive and recover from end-Cretaceous impact darkness. Science Advances, 2020, 6, .   | 4.7 | 22        |
| 126 | Calibration of temperature-dependent ocean microbial processes in the cGENIE.muffin (v0.9.13) Earth system model. Geoscientific Model Development, 2021, 14, 125-149.             | 1.3 | 22        |

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|-----|--|------|-----------|
| 127 | Reduced effectiveness of terrestrial carbon sequestration due to an antagonistic response of ocean productivity. Geophysical Research Letters, 2002, 29, 19-1-19-4.  | 1.5  | 21        |
| 128 | Mitigation of Extreme Ocean Anoxic Event Conditions by Organic Matter Sulfurization. Paleoceanography and Paleoclimatology, 2019, 34, 476-489.   | 1.3  | 21        |
| 129 | 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, $118$ , .                   | 3.3  | 21        |
| 130 | A factorial analysis of the marine carbon cycle and ocean circulation controls on atmospheric CO2. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.  | 1.9  | 18        |
| 131 | A trait-based modelling approach to planktonic foraminifera ecology. Biogeosciences, 2019, 16, 1469-1492.  | 1.3  | 18        |
| 132 | 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.   | 3.3  | 18        |
| 133 | Tropical coral reef habitat in a geoengineered, highâ€CO <sub>2</sub> world. Geophysical Research Letters, 2013, 40, 1799-1805.  | 1.5  | 17        |
| 134 | End-Permian marine extinction due to temperature-driven nutrient recycling and euxinia. Nature Geoscience, 2021, 14, 862-867.  | 5.4  | 17        |
| 135 | Strategies in times of crisis—insights into the benthic foraminiferal record of the Palaeocene–Eocene<br>Thermal Maximum. Philosophical Transactions Series A, Mathematical, Physical, and Engineering<br>Sciences, 2018, 376, 20170328. | 1.6  | 16        |
| 136 | Post-extinction recovery of the Phanerozoic oceans and biodiversity hotspots. Nature, 2022, 607, 507-511.  | 13.7 | 15        |
| 137 | Geoengineering: taking control of our planet's climate?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 4163-4165.  | 1.6  | 14        |
| 138 | Flooding of the continental shelves as a contributor to deglacial CH <sub>4</sub> rise. Journal of Quaternary Science, 2012, 27, 800-806.  | 1.1  | 14        |
| 139 | Emulation of long-term changes in global climate: application to the late Pliocene and future. Climate of the Past, 2017, 13, 1539-1571.   | 1.3  | 14        |
| 140 | Geographical variations in the effectiveness and side effects of deep ocean carbon sequestration. Geophysical Research Letters, 2011, 38, n/a-n/a.   | 1.5  | 13        |
| 141 | Towards an understanding of the Ca isotopic signal related to ocean acidification and alkalinity overshoots in the rock record. Chemical Geology, 2020, 547, 119672.   | 1.4  | 13        |
| 142 | Iron and sulfur cycling in the cGENIE.muffin Earth system model (v0.9.21). Geoscientific Model Development, 2021, 14, 2713-2745.   | 1.3  | 12        |
| 143 | Geological carbon sinks, 0, , 74-97.   |      | 12        |
| 144 | Oceanic and atmospheric methane cycling in the cGENIE Earth system model – release v0.9.14.<br>Geoscientific Model Development, 2020, 13, 5687-5706.   | 1.3  | 12        |

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|-----|--|-----|-----------|
| 145 | Application of sediment core modelling to interpreting the glacial-interglacial record of Southern Ocean silica cycling. Climate of the Past, 2007, 3, 387-396.  | 1.3 | 9         |
| 146 | Variable Câ^P composition of organic production and its effect on ocean carbon storage in glacial-like model simulations. Biogeosciences, 2020, 17, 2219-2244.   | 1.3 | 9         |
| 147 | Evaluation of Paleoceneâ€Eocene Thermal Maximum Carbon Isotope Record Completeness—An<br>Illustration of the Potential of Dynamic Time Warping in Aligning Paleoâ€Proxy Records. Geochemistry,<br>Geophysics, Geosystems, 2020, 21, e2019GC008620.   | 1.0 | 9         |
| 148 | â€~Geoengineering'–taking Control of Our Planet's Climate. Science Progress, 2009, 92, 139-162.  | 1.0 | 8         |
| 149 | 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.   | 1.8 | 8         |
| 150 | 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.  | 0.6 | 7         |
| 151 | Spatial and temporal patterns of oceanacidification during the end-Permian mass extinction – an Earth system model evaluation. , 2015, , 291-306.  |     | 7         |
| 152 | Investigating the benefits and costs of spines and diet on planktonic foraminifera distribution with a trait-based ecosystem model. Marine Micropaleontology, 2021, 166, 102004.   | 0.5 | 7         |
| 153 | Data-constrained assessment of ocean circulation changes since the middle Miocene in an Earth system model. Climate of the Past, 2021, 17, 2223-2254.  | 1.3 | 7         |
| 154 | Reply to 'Constraints on hyperthermals'. Nature Geoscience, 2012, 5, 231-232.  | 5.4 | 6         |
| 155 | Global dust cycle. Geophysical Monograph Series, 2009, , 37-55.  | 0.1 | 5         |
| 156 | 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.   | 0.1 | 5         |
| 157 | Sensitivity of atmospheric CO& lt; sub& gt; 2& lt; sub& gt; to regional variability in particulate organic matter remineralization depths. Biogeosciences, 2019, 16, 2923-2936.  | 1.3 | 5         |
| 158 | Climatic effect of Southern Ocean Fe fertilization: Is the jury still out?. Geochemistry, Geophysics, Geosystems, 2000, $1$ , $n/a$ - $n/a$ .  | 1.0 | 4         |
| 159 | A lattice-automaton bioturbation simulator with coupled physics, chemistry, and biology in marine sediments (eLABS v0.2). Geoscientific Model Development, 2019, 12, 4469-4496.  | 1.3 | 4         |
| 160 | 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.  | 1.2 | 4         |
| 161 | The atmospheric bridge communicated the & amp; lt; likamp; gt; lik | 1.3 | 4         |
| 162 | Exploring the impact of climate change on the global distribution of nonâ€spinose planktonic foraminifera using a traitâ€based ecosystem model. Global Change Biology, 2021, , .   | 4.2 | 4         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | Climate and climate change. Current Biology, 2009, 19, R563-R566.   | 1.8 | 3         |
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| 167 | Coupled climate–carbon cycle simulation of the Last Glacial Maximum atmospheric<br>CO <sub>2</sub> decrease using a large ensemble of modern plausible<br>parameter sets. Climate of the Past, 2019, 15, 1039-1062. | 1.3 | 2         |
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