

# Phil Renforth

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3094850/publications.pdf>

Version: 2024-02-01

36  
papers

2,898  
citations

304743

22  
h-index

377865

34  
g-index

38  
all docs

38  
docs citations

38  
times ranked

1974  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Enhanced chemical weathering as a geoengineering strategy to reduce atmospheric carbon dioxide, supply nutrients, and mitigate ocean acidification. <i>Reviews of Geophysics</i> , 2013, 51, 113-149.                      | 23.0 | 323       |
| 2  | Potential for large-scale CO <sub>2</sub> removal via enhanced rock weathering with croplands. <i>Nature</i> , 2020, 583, 242-248.   | 27.8 | 263       |
| 3  | Assessing ocean alkalinity for carbon sequestration. <i>Reviews of Geophysics</i> , 2017, 55, 636-674.   | 23.0 | 216       |
| 4  | Land-Management Options for Greenhouse Gas Removal and Their Impacts on Ecosystem Services and the Sustainable Development Goals. <i>Annual Review of Environment and Resources</i> , 2019, 44, 255-286.                   | 13.4 | 181       |
| 5  | The negative emission potential of alkaline materials. <i>Nature Communications</i> , 2019, 10, 1401.  | 12.8 | 166       |
| 6  | The potential of enhanced weathering in the UK. <i>International Journal of Greenhouse Gas Control</i> , 2012, 10, 229-243.  | 4.6  | 151       |
| 7  | Olivine Dissolution in Seawater: Implications for CO <sub>2</sub> Sequestration through Enhanced Weathering in Coastal Environments. <i>Environmental Science &amp; Technology</i> , 2017, 51, 3960-3972.                  | 10.0 | 139       |
| 8  | Carbonate precipitation in artificial soils as a sink for atmospheric carbon dioxide. <i>Applied Geochemistry</i> , 2009, 24, 1757-1764.   | 3.0  | 134       |
| 9  | Carbon Dioxide Efficiency of Terrestrial Enhanced Weathering. <i>Environmental Science &amp; Technology</i> , 2014, 48, 4809-4816.   | 10.0 | 119       |
| 10 | Behavior of Aluminum, Arsenic, and Vanadium during the Neutralization of Red Mud Leachate by HCl, Gypsum, or Seawater. <i>Environmental Science &amp; Technology</i> , 2013, 47, 6527-6535.                                | 10.0 | 115       |
| 11 | CO <sub>2</sub> Removal With Enhanced Weathering and Ocean Alkalinity Enhancement: Potential Risks and Co-benefits for Marine Pelagic Ecosystems. <i>Frontiers in Climate</i> , 2019, 1, .                                 | 2.8  | 107       |
| 12 | Investigating carbonate formation in urban soils as a method for capture and storage of atmospheric carbon. <i>Science of the Total Environment</i> , 2012, 431, 166-175.  | 8.0  | 101       |
| 13 | Ambient weathering of magnesium oxide for CO <sub>2</sub> removal from air. <i>Nature Communications</i> , 2020, 11, 3299.   | 12.8 | 95        |
| 14 | Engineered carbon mineralization in ultramafic rocks for CO <sub>2</sub> removal from air: Review and new insights. <i>Chemical Geology</i> , 2020, 550, 119628.   | 3.3  | 90        |
| 15 | Rapid Removal of Atmospheric CO <sub>2</sub> by Urban Soils. <i>Environmental Science &amp; Technology</i> , 2015, 49, 5434-5440.  | 10.0 | 76        |
| 16 | Carbonate precipitation in artificial soils produced from basaltic quarry fines and composts: An opportunity for passive carbon sequestration. <i>International Journal of Greenhouse Gas Control</i> , 2013, 17, 309-317. | 4.6  | 74        |
| 17 | Passive Sequestration of Atmospheric CO <sub>2</sub> through Coupled Plant-Mineral Reactions in Urban soils. <i>Environmental Science &amp; Technology</i> , 2013, 47, 135-141.  | 10.0 | 74        |
| 18 | Engineering challenges of ocean liming. <i>Energy</i> , 2013, 60, 442-452.   | 8.8  | 68        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Atmospheric CO <sub>2</sub> Sequestration in Iron and Steel Slag: Consett, County Durham, United Kingdom. <i>Environmental Science &amp; Technology</i> , 2018, 52, 7892-7900.                                     | 10.0 | 52        |
| 20 | Substantial carbon drawdown potential from enhanced rock weathering in the United Kingdom. <i>Nature Geoscience</i> , 2022, 15, 382-389.   | 12.9 | 48        |
| 21 | Atmospheric Carbon Capture Performance of Legacy Iron and Steel Waste. <i>Environmental Science &amp; Technology</i> , 2019, 53, 9502-9511.  | 10.0 | 39        |
| 22 | Towards a business case for CO <sub>2</sub> mineralisation in the cement industry. <i>Communications Earth &amp; Environment</i> , 2022, 3, .  | 6.8  | 32        |
| 23 | Legacy iron and steel wastes in the UK: Extent, resource potential, and management futures. <i>Journal of Geochemical Exploration</i> , 2020, 219, 106630.   | 3.2  | 28        |
| 24 | Global Carbon Dioxide Removal Potential of Waste Materials From Metal and Diamond Mining. <i>Frontiers in Climate</i> , 2021, 3, .   | 2.8  | 28        |
| 25 | The potential environmental response to increasing ocean alkalinity for negative emissions. <i>Mitigation and Adaptation Strategies for Global Change</i> , 2019, 24, 1191-1211.                                   | 2.1  | 26        |
| 26 | Laboratory carbonation of artificial silicate gels enhanced by citrate: Implications for engineered pedogenic carbonate formation. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 1578-1586.    | 4.6  | 22        |
| 27 | Potential of Maritime Transport for Ocean Liming and Atmospheric CO <sub>2</sub> Removal. <i>Frontiers in Climate</i> , 2021, 3, .   | 2.8  | 21        |
| 28 | Geochemical Negative Emissions Technologies: Part I. Review. <i>Frontiers in Climate</i> , 0, 4, .   | 2.8  | 20        |
| 29 | The role of soils in the regulation of ocean acidification. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2021, 376, 20200174.   | 4.0  | 17        |
| 30 | Designing a carbon capture function into urban soils. <i>Proceedings of the Institution of Civil Engineers: Urban Design and Planning</i> , 2011, 164, 121-128.  | 0.7  | 16        |
| 31 | Soil-derived Nature's Contributions to People and their contribution to the UN Sustainable Development Goals. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2021, 376, 20200185. | 4.0  | 15        |
| 32 | The Dissolution of Olivine Added to Soil at 4Å°C: Implications for Enhanced Weathering in Cold Regions. <i>Frontiers in Climate</i> , 2022, 4, .   | 2.8  | 12        |
| 33 | Potential of enhanced weathering of calcite in packed bubble columns with seawater for carbon dioxide removal. <i>Chemical Engineering Journal</i> , 2022, 431, 134096.  | 12.7 | 11        |
| 34 | The lithium and magnesium isotope signature of olivine dissolution in soil experiments. <i>Chemical Geology</i> , 2021, 560, 120008.   | 3.3  | 9         |
| 35 | Buffered accelerated weathering of limestone for storing CO <sub>2</sub> : Chemical background. <i>International Journal of Greenhouse Gas Control</i> , 2021, 112, 103517.  | 4.6  | 7         |
| 36 | Introduction to keeping lessons alive in engineering geology. <i>Quarterly Journal of Engineering Geology and Hydrogeology</i> , 2019, 52, 399-400.  | 1.4  | 0         |