

Table 1: Specifications table (overview of the study design).

Subject	Phytolith research
Specific subject areas	Archaeology/Ecology/Geochemistry/Methodology (related to phytoliths)/Palaeoecology/Palaeontology/Plant physiology
Dataset description	This dataset contains information collected from 100 phytolith articles to inform guidelines for implementing the FAIR data principles in phytolith research - 50 selected from European studies and 50 selected from South American studies, over a 5 year publication time period (2016-2020).
Data format	Primary and secondary data
Type of data	Qualitative data
How data were acquired	<p>Data were collected by six assessors in total (Emma Karoune, Carla Lancelotti, Juan José García-Granero, Javier Ruiz-Pérez, Marco Madella, Céline Kerfant). A trial of FAIR variables was conducted on five articles to check the criteria relevance by five assessors while the main data collection was carried out by four assessors.</p> <p>Access to the literature was carried out using <i>Publish or Perish</i> software (Harzing, A.W. (2007) <i>Publish or Perish, available</i>) to conduct two searches using the decided criteria ('phytoliths' and 'Europe' or 'South America') to produce a static list of papers. The first 100 articles selected from these lists using the inclusion criteria ('primary data', 'phytoliths' and 'Europe' or 'South America') were assessed on the basis of the availability and format of data and metadata presented. The R package <i>roadoi</i> (version 0.7.2) was used to transparently assess the accessibility of the articles. The languages of most of the studies are English and Spanish.</p>
Open science tools used	<p><i>Publish or Perish</i> software (Harzing, A.W. (2007) <i>Publish or Perish, available</i>) - https://harzing.com/resources/publish-or-perish</p> <p><i>roadoi</i> R package (version 0.7.2) - Ropensci/roadoi https://cran.r-project.org/web/packages/roadoi/roadoi.pdf</p> <p>GitHub and Zenodo repositories</p>
Data availability	<p>GitHub repository GitHub - open-phytoliths/FAIR-assessment-data-paper-documentation: DATA PAPER</p>

	Zenodo DOI - Data is available under the Creative Commons Attribution 4.0 International licence
--	---