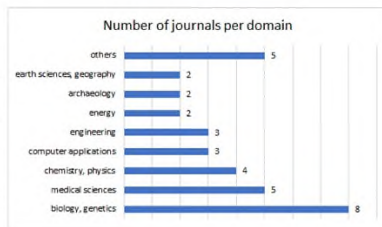


# Data Papers as a New Form of Knowledge Organization in the Field of Research Data

Data papers are authored, peer reviewed and citable articles in academic or scholarly journals, whose main content is a description of published research datasets, along with contextual information about the production and the acquisition of the datasets, with the purpose to facilitate the findability, availability and reuse of research data; they are part of the research data management and crosslinked to data repositories.

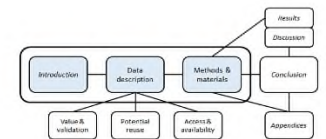
## Disciplines and Publishers

- Most data journals are from STEM domains, in particular from life and medical sciences, including genetics
- Except for Taylor & Francis, all big five academic publishers (Elsevier, Springer-Nature, Wiley-Blackwell and SAGE) have their own data journals.
- Other data journals are published or hosted by newcomers, especially by OA publishers such as Ubiquity Press, BioMed Central, Hindawi, MDPI, Copernicus Publications, Pensoft or Faculty of 1000.



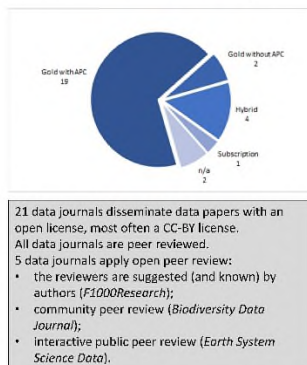
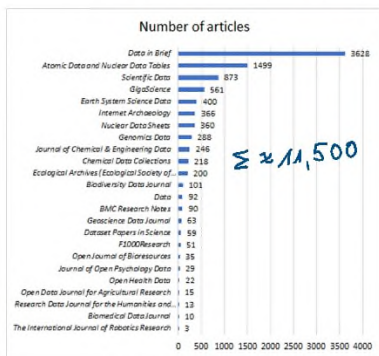
## Length and Structure

- It is generally assumed that data papers are short texts, up to 4 pages. In fact, this is only partly true.
- Most journals do not limit the length of submitted papers or make the usual recommendations (6-10 pages, or maximal 6,000 words).
- Up to 100 pages...



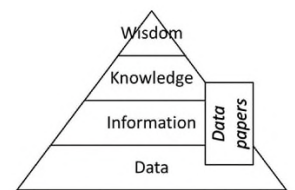
- A core structure with three central sections (in blue)
- Other, optional or peripheral sections
- some similar to regular papers (in italics)
- others characteristic for data papers (in white)

## Business Models, Selection, and Licensing



## Data, Information, Knowledge

- Data papers are essentially information, i.e. description of data (as defined by the DIKW model) but also partly contribute to the generation of knowledge and data on its own.



## FAIR Principles

- Along with metadata, data papers contribute to the compliance with FAIR principles.
- In particular to the two principles of findability and reusability, insofar they help people (and machines) finding datasets and inform about the provenance and reuse rights.
- Additionally, data papers contribute to another aspect, beyond the FAIR principles, i.e. the evaluation of the dataset's quality and value.
- In the context of open science, metadata has been considered fuel for economy. Data papers are a new infrastructure of refinement and dissemination of the metadata fuel.

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