Brief introduction to OpenAlex

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OpenAlex

A free index of the world's research ecosystem.

Inspired by the ancient library of Alexandria, OpenAlex catalogs 250M scholarly works, along with their citations, authors, institutional affiliations, and more — and we're 100% free and open source.
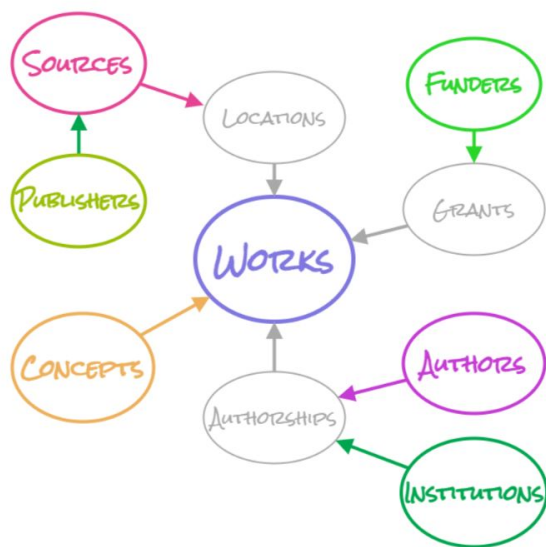
Try it!   **Learn more** ⬈

Comparison with other scholarly data sources

	Number of works	Open Access works	Citations	Price	Data Openness	Org structure
OpenAlex	243M	48M	1.9B	Freemium	Fully open, CC0 license	Non-profit
Scopus	87M	20.5M (ref)	1.8B	Subscription	Closed	For Profit
Web of Science (core)	87M (ref)	12M (ref)	1.8B	Subscription	Closed	For Profit
Dimensions	135M	29M (ref)	1.7B	Freemium	Partly open, personal use	For Profit
Google Scholar	389M (estimated)	?	?	Free	Closed	For Profit
Crossref	145M	20M	1.45B	Free	Fully open, CC0 license	Non-profit

Data structure

Learn more about the OpenAlex entities:

- Works: Scholarly documents like journal articles, books, datasets, and theses
- Authors: People who create works
- Sources: Where works are hosted (such as journals, conferences, and repositories)
- Institutions: Universities and other organizations to which authors claim affiliations
- Concepts: Topics assigned to works
- Publishers: Companies and organizations that distribute works
- Funders: Organizations that fund research
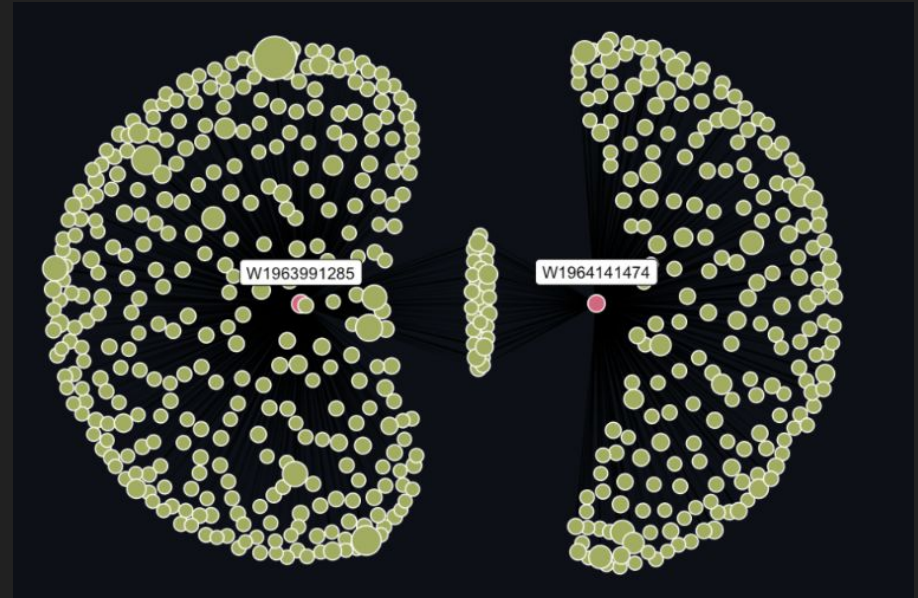- Geo: Where things are in the world

Uses

Literature search

Systematic literature review

Bibliographic research

1. Keyword search
e.g.
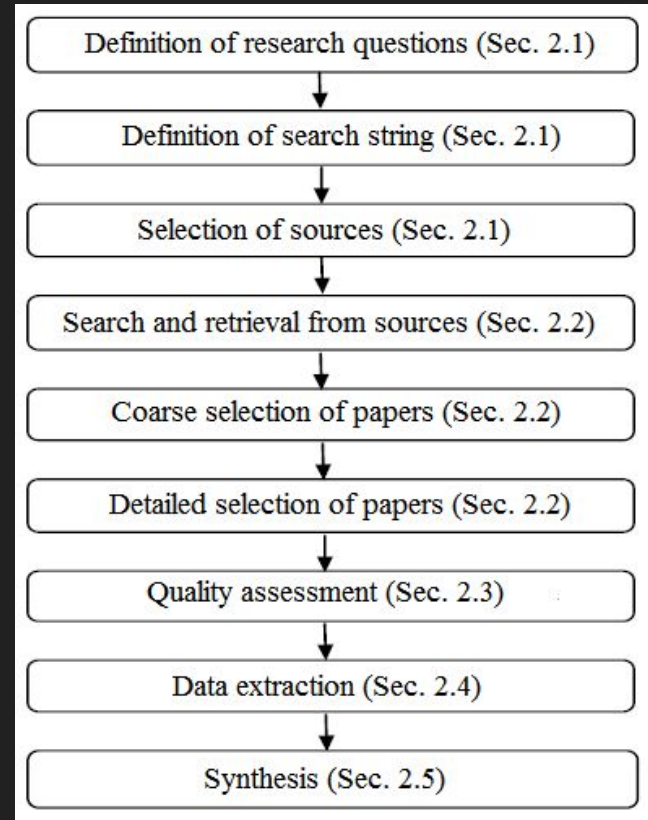"Axolotl conservation"

W1963991285   W1964141474

2. Snowball sampling

Uses

Literature search

Systematic literature review

Bibliographic research

Systematic review protocol

Uses

Literature search

Systematic literature review

Bibliographic research

- Scientifically maturity of a topic

- Network of research groups focusing on a given topic

- Journal's focus area

- Scientific publication bias
(e.g., journal selective preference for some institutions than others)

- …

Useful links

- OpenAlex Home Page: https://openalex.org/

- OpenAlex Tutorial: https://docs.openalex.org/quickstart-tutorial

- Manual for OpenAlexR package (for R): https://github.com/ropensci/openalexR

- Getting-started: https://github.com/TuanNguyen04/OpenAlexR-beginner