

July 2023



OpenAIRE
Graph

eBook





Welcome

An open and transparent knowledge graph for all.

The OpenAIRE Graph is a **metadata knowledge graph collection** representing the Open Science scholarly communication record at the **global** scale.

The Graph embraces the **Open Science principles** by publishing its metadata collection as a dataset while following FAIR and Open Access (CC-BY 4.0) practices.



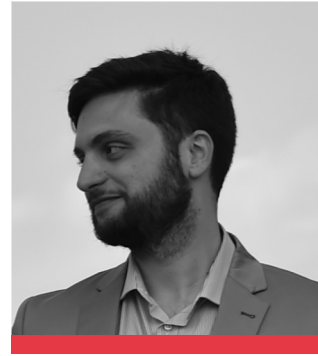
Claudio Atzori

“The OpenAIRE Graph embraces the Open Science principles by providing an up-to-date, enriched, comprehensive picture of the whole scholarly communication record, including publications, research data, research software, other products, and links between them. Graph data repositories are available as Open Access to all.”

Product Manager



Core Team



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Tap into one of the world's largest scientific knowledge graphs

The landscape of research is evolving, favoring a shift towards Open Science.

The OpenAIRE Graph has been instrumental from the beginning in facilitating this shift along with the European Commission and is the authoritative source for the European Open Science Cloud.



+232M

Research Products

Including publications, research data, research software, and other research products.

+26

Funders

More funders information available, as it is crucial for transparency, accountability, and collaboration.

+3M

Projects

Projects are characterized by a list of funding streams, which identify the strands of funding.

+1.3B

Citations

Access to information on citations allows researchers to get a sense of how their work is being used and how it is contributing to the advancement of knowledge.

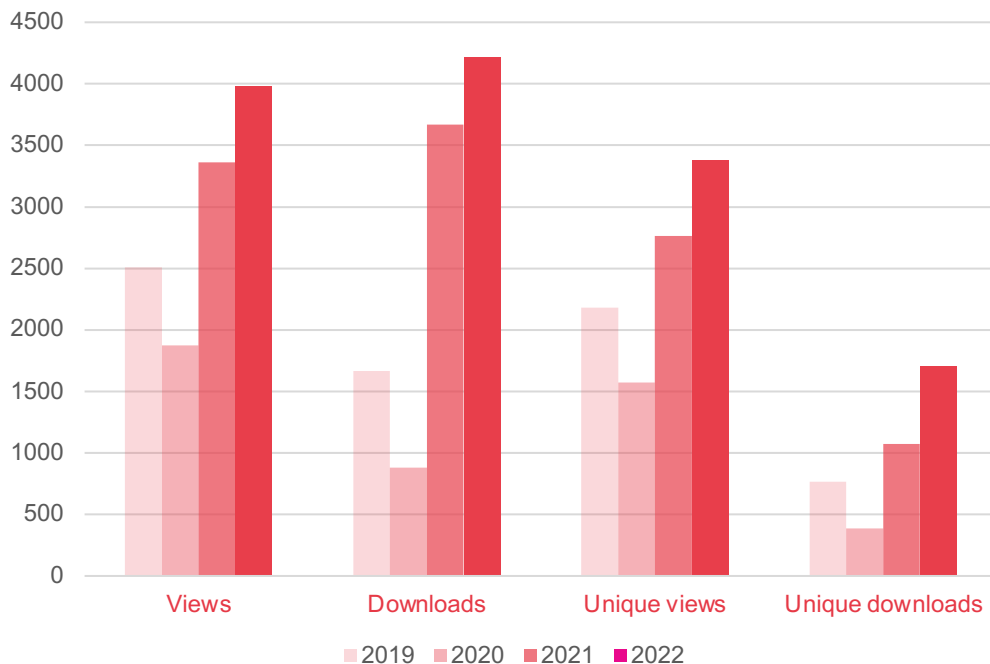
+97%

OpenAIRE Graph datasets growth

From its conception in 2012, the OpenAIRE Graph has grown into a champion of Open Science and remains one of the authoritative sources for the European Open Science Cloud (EOSC).

The OpenAIRE Graph is exported as several dumps, that are published every six months, so you can download the parts you are interested into.

The content is openly available on [Zenodo](#).



Vision

The OpenAIRE Graph delivers an open, up-to-date, and global “map of science” across disciplines and countries.

The landscape is changing and stakeholders in the research ecosystem need a tool to help them navigate through the vast information space created by the continuously growing amount of open and interconnected scholarly records.

The Graph makes this latent knowledge accessible.

Effective Solution

A single point of access that improves discoverability, tracking, and collaboration.

The OpenAIRE Graph offers a centralized access point to diverse research data, such as publications, citations, datasets, and software. By linking these elements, it enhances research discoverability, enabling researchers to easily find relevant information and understand its connections to other studies.

The Graph also enables the tracking and monitoring of funding streams through linking, and project developments and research impact through citation frequency and dataset usage; providing valuable insights for researchers, funders, project managers, and other stakeholders.

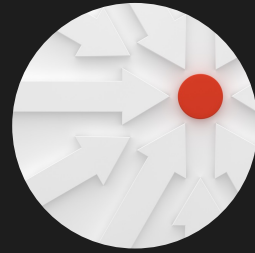
Collaboration is fostered through the platform by offering researchers a space to share data, software, and ideas, ultimately enhancing their effectiveness and producing higher-quality research.



1

Monitor

Monitoring capabilities not only allow providers and funders to **oversee the impact and return on investment** of their projects, but also enables the **monitoring** of **compliance with Open Access publishing mandates**.



2

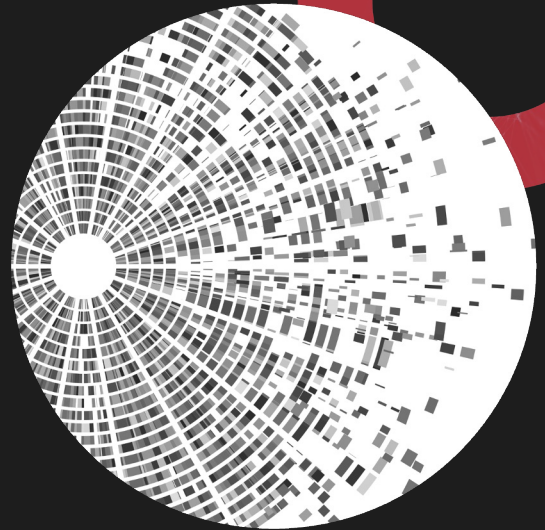
Identify

The Graph is able to **identify** incompliance with these practices; helping to locate where further **developments in Open Science** and its workflows are **needed**.

3

React

With the issues identified, the Graph can be used to **propose interventions** on the **local or global scale**. These interventions can then be spearheaded by our **NOADs** or even **your own organization** if you uncover a problem within.



Benefits

Instrumental in advancing Open Science.

The epitome of a **community** driven-
effort and **technological**
advancement.



Since 2012, the Graph has been a catalyst for changing the landscape of research and being a force contributing to the international adoption of Open Science principles.



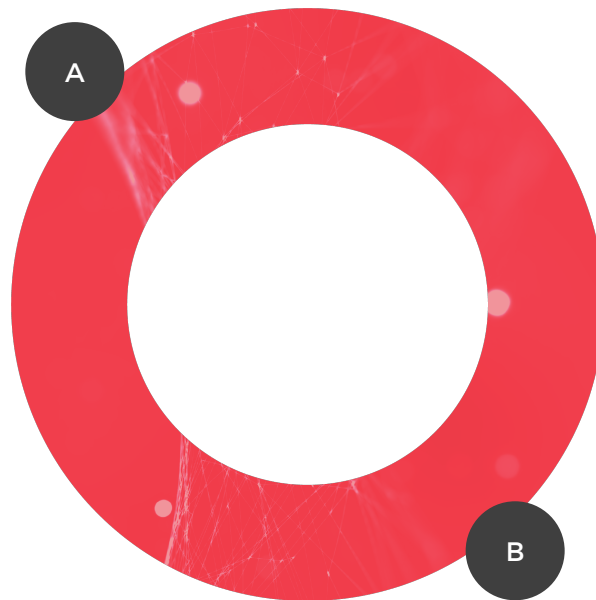
To keep up to date with developments in the Graph, whether it be past, present, or future, visit the roadmap: <https://trello.com/b/lzQFFisn/openaire-graph-roadmap>



Graph history

Network is our power.

All users



On demand

Business Model

A

All users

Aligning with the evolving landscape of Open Science, the OpenAIRE Graph is **free** as an Open Access dataset on Zenodo for all, and via open and free OpenAIRE services (i.e., EXPLORE).

B

On demand

While access to the Graph remains free, users can request extra features such as REST API access and technical support. Depending on the request, a **fee** applies.

Graph online

Discover the Graph

Visit

<https://graph.openaire.eu/>

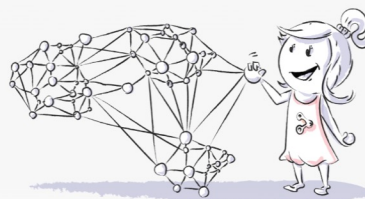


ABOUT RESOURCES SUPPORT

Open. Transparent. Interconnected.

OpenAIRE Graph is an open resource that aggregates a **collection of research data properties** (metadata, links) available within the OpenAIRE Open Science infrastructure for funders, organizations, researchers, research communities and publishers to interlink information by using a semantic graph database approach.

LEARN MORE



OpenAIRE Graph Case Studies

Brief presentations of success stories

Here are some instances where the Graph has helped other services grow and succeed.



European Commission Participant Portal

1

The OpenAIRE Graph acts as a reliable source to collect information and integrate it into the EC Participant Portal, facilitating and improving the reporting process of funded projects.

<https://www.openaire.eu/reporting-research-outputs-to-the-ec-using-the-openaire-api>

IntelComp

2

IntelComp, a European H2020 project, offers a variety of web-tools to assist policy makers and funders to monitor technological trends, track science findings, evaluate and benchmark quantitative results of funds with qualitative criteria, and AI, all in one place. OpenAIRE Graph is the core basis of the IntelComp Data Lake, accompanied by additional data (private reports, structured, unstructured).

<https://www.openaire.eu/openaire-graph-empower-the-intelcomp-sti-data-lake-for-scientific-technology-and-innovation-policy-making>



OpenAIRE Graph Case Studies

ORCID

3

Through OpenAIRE EXPLORE, an OpenAIRE service powered by the Graph, ORCID users can instantly identify their works, and quickly add them to their ORCID iD through a trusted and straightforward process.

<https://www.openaire.eu/openaire-explore-integration-with-the-orcid-search-and-link-wizard>

OpenOrgs

4

OpenAIRE responded to disambiguation of metadata, of scholarly works, allowing NOADs to curate data entries ingested in the OpenAIRE Graph from external resources.

<https://www.openaire.eu/curating-the-openaire-graph-disambiguating-greek-organisations-metadata-with-openorgs>

Community

Join our network!

The OpenAIRE Graph puts data sharing back in the hands of researchers.. This community is a driver for change in the field of research and how we look at knowledge sharing.

Be a part of that change and learn how to both benefit from and enrich the Graph.



+131 K

Data Sources

Publications, and research data, software, and other products are uploaded to the Graph via trusted sources.

These include repositories, Open Access and non-Open Access journals, publishers, registries (of authors, organizations, projects), aggregators, CRIS, pre-print servers, thematic repositories, data and software repositories, and partners such as:



Want to learn more?

If you are interested in learning more about the OpenAIRE Graph, you can visit our website or contact us directly.



Website:

<https://graph.openaire.eu/>

Catalogue:

<https://catalogue.openaire.eu/service/openaire.graph/overview>

Contact:

helpdesk@openaire.eu