

NEXUS

# OpenAIRE Graph and OpenCitations: integration and news

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CNR - ISTI

# Outline

- New documentation website
  - <https://graph.openaire.eu/docs/>
- Building the graph and integration with OC (COCI)
- New dumps published on Zenodo
- Beginner's kit
  - Zenodo [upload](#)
  - Have a look at the [Zeppelin notebook](#)

# Graph Dumps

- Complete (<https://doi.org/10.5281/zenodo.3516917>)
  - 148M publications, 19M datasets, 300K software, 6M other research products, 4.6B relations, 2.9M projects,...
- Sub-graph dumps
  - OpenAIRE COVID-19 (<https://doi.org/10.5281/zenodo.3980490>)
  - Funded products (<https://doi.org/10.5281/zenodo.4559725>)
  - Delta projects (<https://zenodo.org/record/7561801>)
  - Research communities, initiatives and infrastructures (<https://doi.org/10.5281/zenodo.3974604>)

# Beginner's Kit

- A dataset of six months of published results, their connected entities, and relations (<https://zenodo.org/record/7490192>)
  - 2.6M publications, 128K datasets, 27K software, 22.7K other research products, 15.7K projects, 14M relations, ...
- A Zeppelin notebook (<https://zeppelin.apache.org/>) to analyze the data and reply to research questions
  - Have a look at the [Zeppelin notebook](#)

# Outlook and next steps

- Integration of OC – POCI (pmid – pmid)

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Dataset Open Access Edit

## OpenAIRE Research Graph: Dump of funded products

Manghi, Paolo; Atzori, Claudio; Bardi, Alessia; Baglioni, Miriam; Schirrwagen, Jochen; Dimitropoulos, Harry; La Bruzzo, Sandro; Foufoulas, Ioannis; Czerniak, Andreas; Horst, Marek; Kiatropoulou, Katerina; Kokogiannaki, Argiro; De Bonis, Michele; Artini, Michele; Lempesis, Antonis; Mannocci, Andrea; Ioannidis, Alexandros; Vergoulis, Thanasis; Chatzopoulos, Serafeim; Pierrakos, Dimitris

This dataset contains the metadata records about research products (research literature, data, software, other types of research products) with funding information available in the OpenAIRE Research Graph produced on December 2022. Records are grouped by funder in a dedicated archive file (<funder acronym>.tar).

Funder acronym	Funder name
AKA	Academy of Finland
ANR	French National Research Agency

1,586 views 196,557 downloads

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Dataset Open Access Edit

## OpenAIRE Research Graph Dump

Manghi, Paolo; Atzori, Claudio; Bardi, Alessia; Baglioni, Miriam; Schirrwagen, Jochen; Dimitropoulos, Harry; La Bruzzo, Sandro; Foufoulas, Ioannis; Maninocci, Andrea; Horst, Marek; Czerniak, Andreas; Iatropoulou, Katerina; Kokogiannaki, Argiro; De Bonis, Michele; Artini, Michele; Lempesis, Antonis; Ioannidis, Alexandros; Manola, Natalia; Principe, Pedro; Vergoulis, Thanasis; Chatzopoulos, Serafeim; Pierrakos, Dimitris

The OpenAIRE Research Graph is exported as several dumps, so you can download the parts you are interested into.

**publication\_[part].tar**: metadata records about research literature (includes types of publications listed [here](#))

**dataset\_[part].tar**: metadata records about research data (includes the subtypes listed [here](#))

**software.tar**: metadata records about research software (includes the subtypes listed [here](#))

**otherresearchproduct\_[part].tar**: metadata records about research products that cannot be classified as research literature, data or software (includes types of products listed [here](#))

**organization.tar**: metadata records about organizations involved in the research life-cycle, such as universities, research organizations, funders.

**datasource.tar**: metadata records about data sources whose content is available in the OpenAIRE Research Graph. They include institutional and thematic repositories, journals, aggregators, funders' databases.

**project.tar**: metadata records about project grants.

**relation\_[part].tar**: metadata records about relations between entities in the graph.

**communities\_infrastructures.tar**: metadata records about research communities and research infrastructures

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Other Open Access Edit

## OpenAIRE Research Graph Beginner's Kit

Baglioni, Miriam; Atzori, Claudio; Bardi, Alessia; Manghi, Paolo; Dimitropoulos, Harry; La Bruzzo, Sandro; Foufoulas, Ioannis; Horst, Marek; De Bonis, Michele; Artini, Michele; Vergoulis, Thanasis; Chatzopoulos, Serafeim; Pierrakos, Dimitris; Lempesis, Antonis; Czerniak, Andreas; Schirrwagen, Jochen; Mannocci, Andrea; Ioannidis, Alexandros; Iatropoulou, Katerina; Kokogiannaki, Argiro

The OpenAIRE Research Graph is an Open Access dataset containing metadata about research products (literature, datasets, software, etc.) linked to other entities of the research ecosystem like organisations, project grants, and data sources.

The large size of the OpenAIRE Research Graph is a major impediment for beginners to familiarise with the underlying data model and explore its contents. Working with the Graph in its full size typically requires access to a huge distributed computing infrastructure which cannot be easily accessible to everyone.

The OpenAIRE Beginner's Kit aims to address this issue. It consists of two components:

- A subset of the Graph composed of the research products published between 2022-06-29 and 2022-12-29, all the entities connected to them and the respective relationships. The subset is composed of the following parts:

73 views 33 downloads

See more details...

# THANKS

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