DataCite

CONNECTING RESEARCH,
ADVANCING KNOWLEDGE

Building an Interconnected Scholarly Ecosystem with Persistent Identifiers (PIDs)

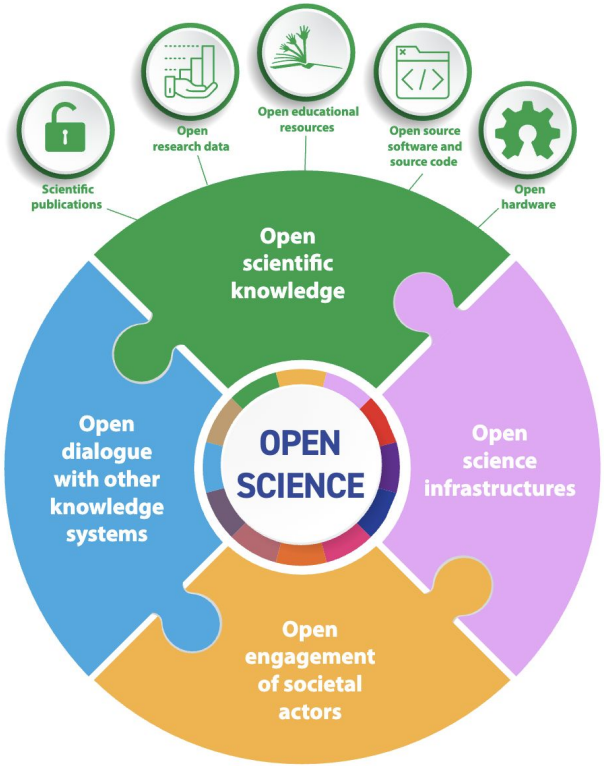
Gabriela Mejias and Mohamad Mostafa

@gabioshka
@_MohamadMostafa
@datacite

Global Young Academy Open Science Lecture Series, Open Science First Fridays
6 September 2024, Online

Open Science

Open Science Pillars



Source: UNESCO Recommendation on Open Science, 2021
https://doi.org/10.54677/MNMH8546

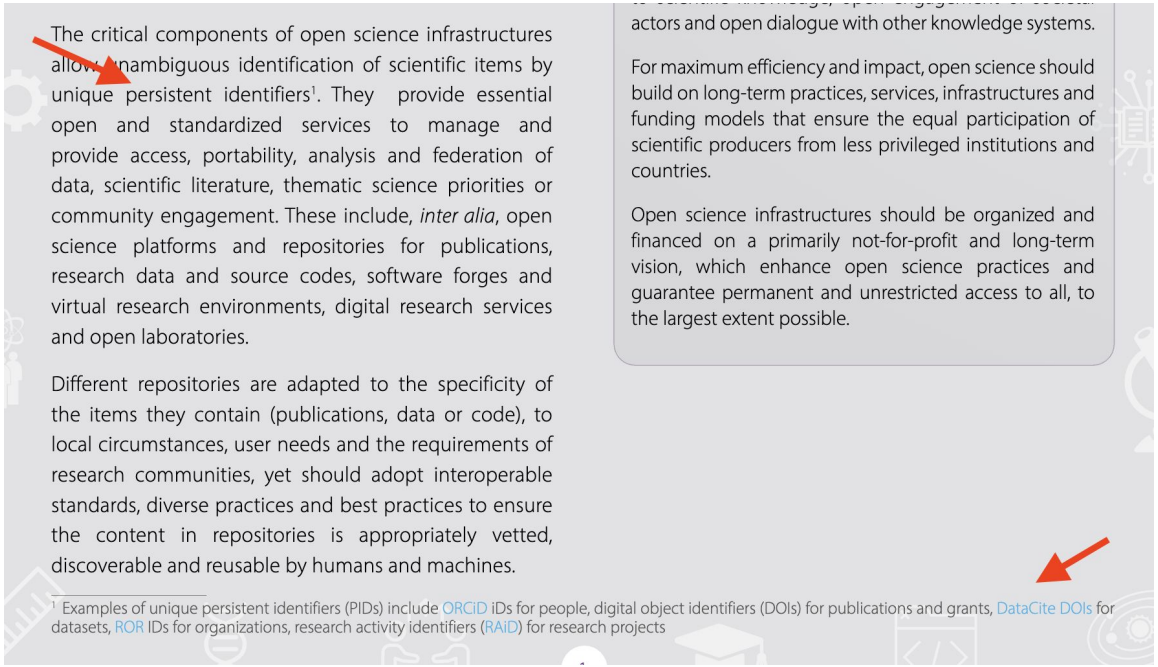
Open Research Infrastructure

UNESCO defines open research (or open science) infrastructures as "*shared research infrastructures that are needed to support open science and serve the needs of different communities*".

Open research infrastructures are often built by *non-profit organizations* and are governed, driven, and sustained by their *communities*, ensuring long-term sustainability. The goal is to increase transparency, equity, and fairness, better serving the interests of the scholarly community and the public by building a trusted research ecosystem.

Source: UNESCO Recommendation on Open Science, 2021
https://doi.org/10.54677/MNMH8546

Open Research Infrastructure



The critical components of open science infrastructures allow unambiguous identification of scientific items by unique persistent identifiers[1]. They provide essential open and standardized services to manage and provide access, portability, analysis and federation of data, scientific literature, thematic science priorities or community engagement. These include, *inter alia*, open science platforms and repositories for publications, research data and source codes, software forges and virtual research environments, digital research services and open laboratories.

Different repositories are adapted to the specificity of the items they contain (publications, data or code), to local circumstances, user needs and the requirements of research communities, yet should adopt interoperable standards, diverse practices and best practices to ensure the content in repositories is appropriately vetted, discoverable and reusable by humans and machines.

actors and open dialogue with other knowledge systems.

For maximum efficiency and impact, open science should build on long-term practices, services, infrastructures and funding models that ensure the equal participation of scientific producers from less privileged institutions and countries.

Open science infrastructures should be organized and financed on a primarily not-for-profit and long-term vision, which enhance open science practices and guarantee permanent and unrestricted access to all, to the largest extent possible.

[1] Examples of unique persistent identifiers (PIDs) include ORCiD iDs for people, digital object identifiers (DOIs) for publications and grants, DataCite DOIs for datasets, ROR IDs for organizations, research activity identifiers (RAiD) for research projects

Source: UNESCO, Bolstering Open Science Infrastructures for all, 2022
https://doi.org/10.54677/QZPQ1991

Principles of Open Scholarly Infrastructure

DataCite

First developed in a 2015 blog post,POSI offers a set of guidelines **(governance, sustainability, technical insurance)** by which open scholarly infrastructure organisations and initiatives that support the research community can be run and sustained.

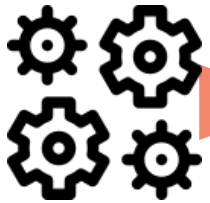
https://openscholarlyinfrastructure.org/

Persistent Identifiers (PIDs)

PIDs

What is a persistent identifier (PID)?

https://doi.org/10.34848/GJO6SY



https://research-data.urosario.edu.co/dataset.xhtml?persistentId=doi:10.34848/GJO6SY

Unique alphanumeric string referring to a digital resource.

Always points to the same resource (a metadata representation)

DOIs for research outputs and resources
https://doi.org/10.5281/zenodo.3630248

ORCID iDs for researchers
https://orcid.org/0000-0001-6622-4910

ROR IDs for research organizations
https://ror.org/01y2jtd41

PIDs for People

ORCID
Connecting research and researchers

Gabriela Mejias

Gabi Mejias; Габриела Мехеяс

https://orcid.org/0000-0002-1598-7181

DataCite Global Access Program (GAP) مقدمة عن داتاسيت وبرنامج الوصول العالمي

Zenodo
2023-09-05 | Other
DOI: 10.5281/zenodo.8319145
CONTRIBUTORS: Mohamad Mostafa

Source: DataCite

PIDs for Research Organizations

DataCite

https://ror.org/049tgcd06

Indian Institute of Technology Delhi

OTHER NAMES: IIT Delhi, IITD, Institut indien de technologie de delhi (fr), भारतीय तंत्रज्ञान संस्था (mr), भारतीय प्रौद्योगिकी संस्थान दिल्ली (hi), இந்திய தொழில்நுட்பக் கழகம் தில்லி (ta), ఇండియన్ ఇన్స్టిట్యూట్ ఆఫ్ టెక్నాలజీ ఢిల్లీ (te), ಇಂಡಿಯನ್ ಇನ್ ಸ್ಟಿಟ್ಯೂಟ್ ಆಫ್ ಟೆಕ್ನಾಲಜಿ ದೆಹಲಿ (kn), ഇന്ത്യൻ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് ടെക്നോളജി ഡെൽഹി (ml)

ORGANIZATION TYPES

Education, Funder

LOCATIONS

New Delhi (GeoNames ID 1261481), India

WEBSITE

http://www.iitd.ac.in/

OTHER IDENTIFIERS

GRID grid.417967.a
ISNI 0000 0004 0558 8755
Crossref Funder ID 501100007488
Wikidata Q1194650

https://ror.org/013pajk64

Universidade Fundação Mineira de Educação e Cultura

OTHER NAMES: FUMEC, FUMEC University (en), Universidade FUMEC (pt)

ORGANIZATION TYPES

Education

LOCATIONS

Belo Horizonte (GeoNames ID 3470127), Brazil

WEBSITE

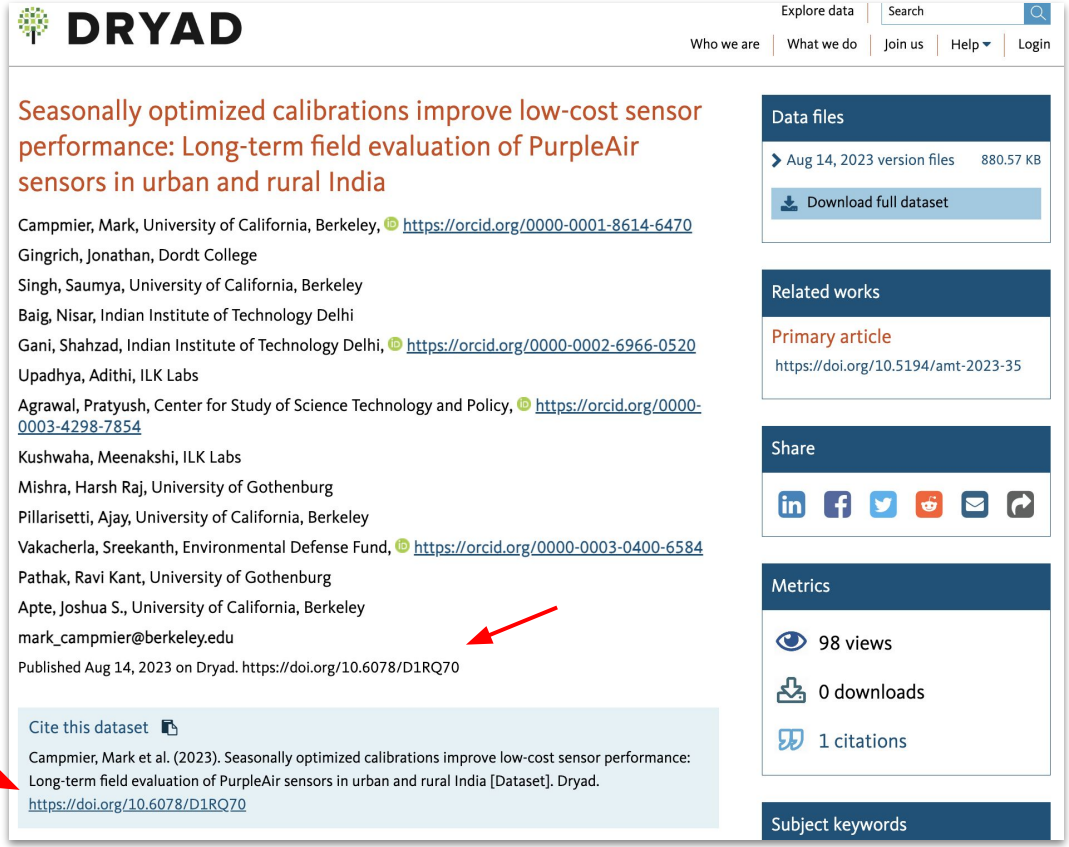
http://www.fumec.br/

OTHER IDENTIFIERS

GRID grid.442091.a
ISNI 0000 0004 4684 7338
Wikidata Q10387822

PIDs for Research Objects

DataCite



DataCite

About DataCite

We are a global community that shares a common interest: to ensure that research outputs and resources are openly available and connected so that their reuse can advance knowledge across and between disciplines, now and in the future.

As a community, we make research more effective with metadata that connects research outputs and resources–**from samples and images to data and preprints**. We enable the creation and management of persistent identifiers (PIDs), integrate services to improve research workflows, and facilitate the discovery and reuse of research outputs and resources.

A non profit organization registered in Hannover, Germany since 2009.

Our Community

DataCite

3200+

Repositories

55

Countries

60m+

DOIs

1400+

Organizations

(August 2024)

Types of
Research Outputs

DataCite

DataCite DOIs are suitable for a wide range of research outputs:

1. Research datasets and collections, associated workflows, software, images, and models

2. Grey literature such as theses, dissertations, reports, unpublished conference papers, newsletters, preprint journal articles, technical standards, and specifications for which the institutional repository is the primary publication point.

Resource Types in DataCite Registry

DataCite

Dataset	18,248,664
Physical Object	14,557,874
Text	13,351,070
Image	4,629,226
Other	2,593,132
Journal Article	1,343,094
Preprint	1,214,131
Collection	1,018,531
Software	516,469
Audiovisual	482,345
Dissertation	200,101
Report	130,052
Conference Paper	124,251
Project	109,450
Interactive Resource	109,130

Book	97,050
Event	79,156
Sound	55,402
Book Chapter	46,879
Model	18,762
Data Paper	16,238
Journal	13,780
Workflow	6,843
Conference Proceeding	5,874
Output Management Plan	4,325
Standard	2,900
Peer Review	2,744
Computational Notebook	1,700
Service	444
Study Registration	76

(May 2024)

DOIs for Various Outputs

DataCite

สำนักงานการวิจัยแห่งชาติ
NATIONAL RESEARCH COUNCIL OF THAILAND

หน้าแรก | เกี่ยวกับเรา | GIS | รหัสดีโอไอ

รหัสดีโอไอ

รหัสดีโอไอ	10.14457/TU.the.2022.1015
Title	แนวทางการออกแบบทางเดินคนข้ามทางม้าลายเพื่อส่งเสริมความปลอดภัยทางถนนในเขตกรุงเทพมหานคร
Creator	พงศ์เทพ วงศ์แหลมทอง
Contributor	ภาวิณี เอี่ยมตระกูล, ที่ปรึกษา
Publisher	มหาวิทยาลัยธรรมศาสตร์
Publication Year	2565
Keyword	การออกแบบทางเดินคนข้าม, ความปลอดภัยทางถนน, ทางม้าลายในกรุงเทพมหานคร, Pedestrian crossing design, Road safet crossing in Bangkok

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ScholarBank@NUS / 1. Staff / Staff Publications

Please use this identifier to cite or link to this item: https://doi.org/10.25818/8xh7-kj52

Title:	The Year in Review: Policy and Political Developments in 2021
Authors:	Avinash, R
Issue Date:	Apr-2022
Citation:	Avinash, R (2022-04). The Year in Review: Policy and Political Developments in 2021 : 1-46. ScholarBank@NUS Repository. https://doi.org/10.25818/8xh7-kj52

Koori critical storying: re-imagining to re-connect with memories, archives, and Country

Wendy Somerville

Student thesis: Doctoral Thesis

Abstract

This thesis introduces Koori Critical Storying as an approach to the recovery and revitalisation of Koori connection to Country, history and knowledge. The dispossession and displacement of Kooris following colonisation has meant many Kooris have lost the close connection to Country and the affinity with people and community that their ancestors experienced. As a consequence, a fracturing of knowledge and of relationality to Country and people has occurred. In an effort to help bridge these fissures in knowledge and loss, this thesis develops Koori Critical Storying as a methodological tool that offers possible pathways to re-connection of relationality to Country and people. Storying brings vitality to Koori culture. It is key to the transfer of knowledge and culture from generation to generation. Koori Critical Storying, through its mobilisation of varied storying registers that underpin diverse modes of wayfinding, empowers Koori research into family in Koori Country through re-storying with Country, archives, memories, and yarning. This new methodological approach is needed to tell the stories of us in our ways grounded in experiential Koori contexts.

Documents

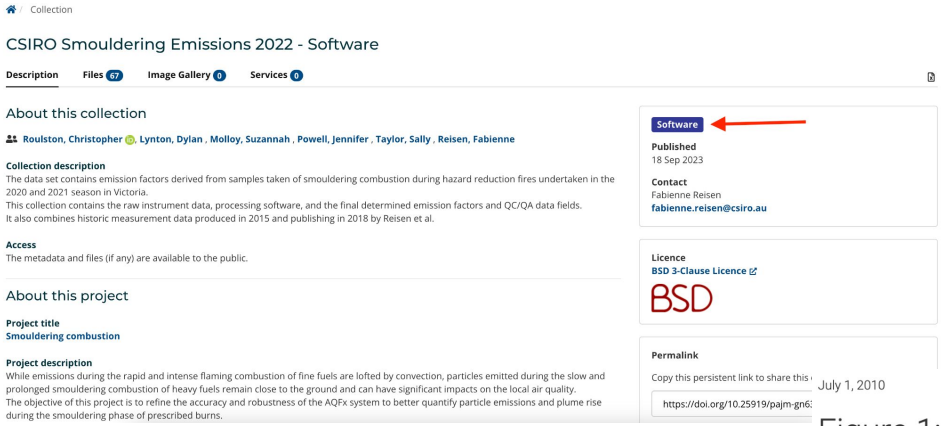
Somerville, Wendy
File: application/pdf, 4.29 MB
Type: Full Text

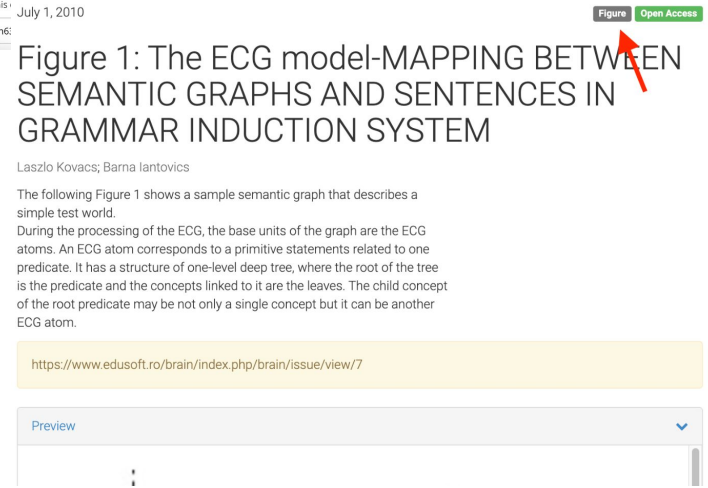
Links

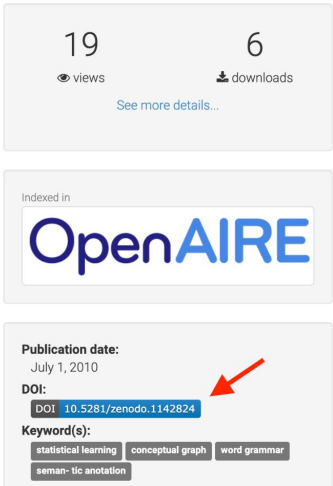
https://doi.org/10.26191/tref-rr40

DOIs for Various Outputs

DataCite

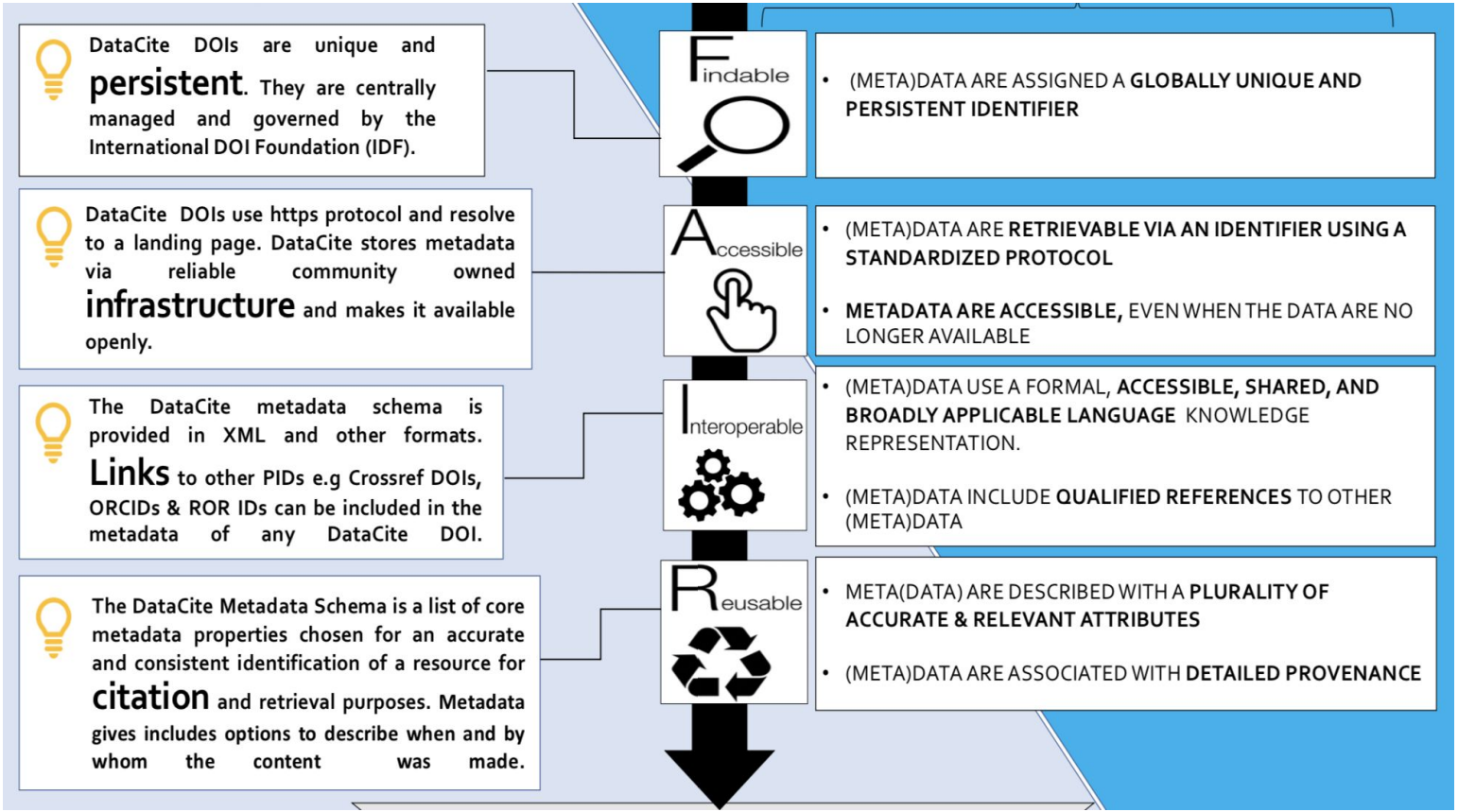






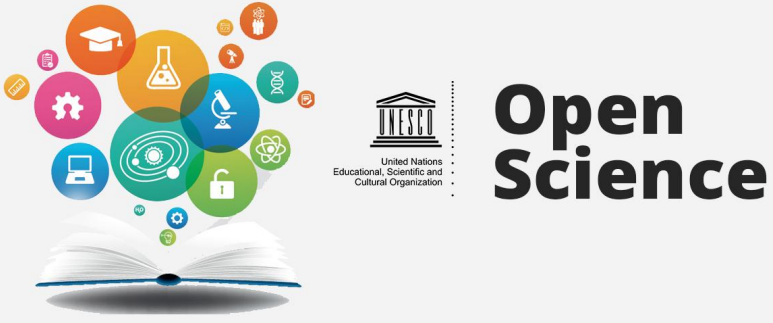
DOI Value & Impact

DOIs & FAIR


DataCite DOIs are unique and persistent. They are centrally managed and governed by the International DOI Foundation (IDF).
DataCite DOIs use https protocol and resolve to a landing page. DataCite stores metadata via reliable community owned infrastructure and makes it available openly.
The DataCite metadata schema is provided in XML and other formats. Links to other PIDs e.g Crossref DOIs, ORCIDs & ROR IDs can be included in the metadata of any DataCite DOI.
The DataCite Metadata Schema is a list of core metadata properties chosen for an accurate and consistent identification of a resource for citation and retrieval purposes. Metadata gives includes options to describe when and by whom the content was made.
Findable
• (META)DATA ARE ASSIGNED A GLOBALLY UNIQUE AND PERSISTENT IDENTIFIER
Accessible
• (META)DATA ARE RETRIEVABLE VIA AN IDENTIFIER USING A STANDARDIZED PROTOCOL
• METADATA ARE ACCESSIBLE, EVEN WHEN THE DATA ARE NO LONGER AVAILABLE
Interoperable
• (META)DATA USE A FORMAL, ACCESSIBLE, SHARED, AND BROADLY APPLICABLE LANGUAGE KNOWLEDGE REPRESENTATION.
• (META)DATA INCLUDE QUALIFIED REFERENCES TO OTHER (META)DATA
Reusable
• META(DATA) ARE DESCRIBED WITH A PLURALITY OF ACCURATE & RELEVANT ATTRIBUTES
• (META)DATA ARE ASSOCIATED WITH DETAILED PROVENANCE

DOIs help to:

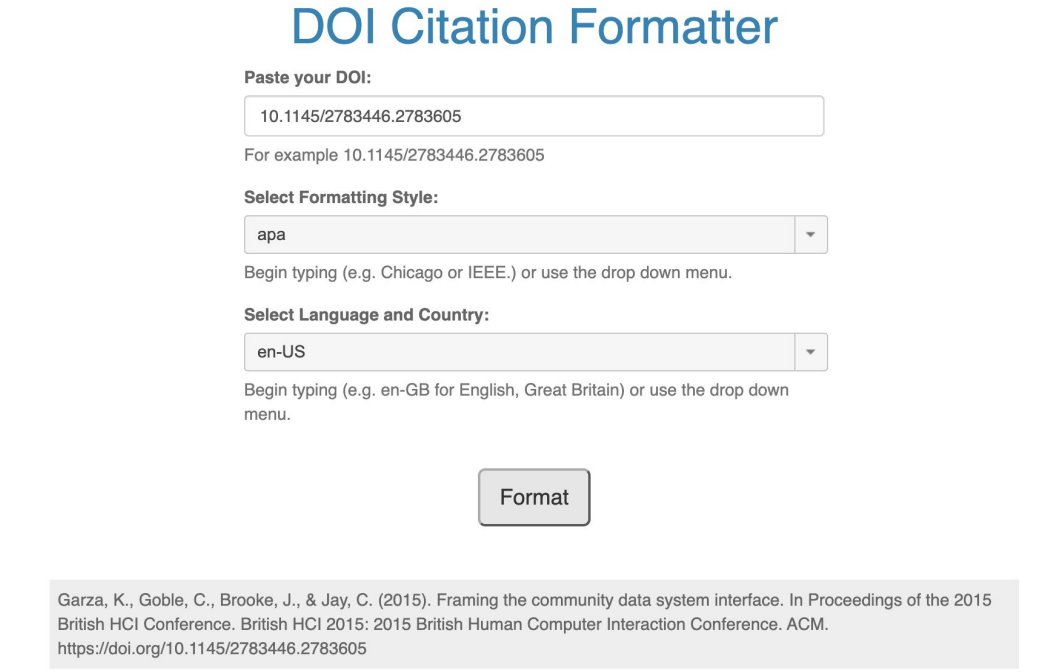
- Improve **visibility** and **discoverability**
- Enhance the **accessibility** of your outputs
- Make your research datasets **FAIR**
- Obtain recognition for **all** your research outputs beyond journal articles
- Increase **citations**
- Connect your research outputs and resources with the **global ecosystem**
- Increase the **impact** of your institution
- Promote **Open Research** practices & **FAIR Principles**



https://www.unesco.org/en/open-science/about

Retrieving DOI Metadata

DataCite

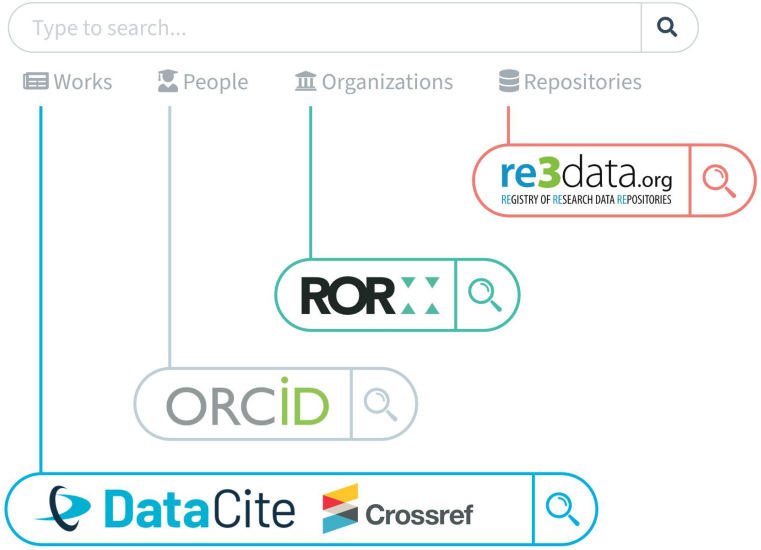


https://citation.crosscite.org/

Connecting Research

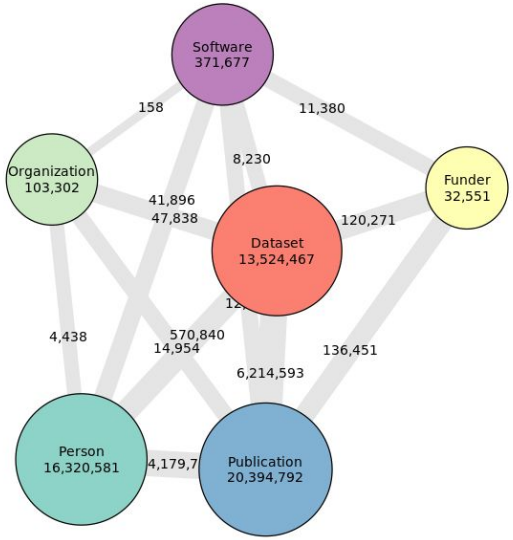
Find and Connect
Research

Find Research with DataCite Commons



PID Graph

Number of nodes and connections (7 March 2023)



https://commons.datacite.org/

Find a dataset

DataCite

DataCite Commons

comparative analysis of the S-locus and nuclear SSR

Pages Support Sign In

Works People Organizations

2 Works

Publication Year

- 2012 2

Work Type

- Dataset 1
- Text 1

License

- CC0-1.0 1

Language

- English 1

Registration Agency

- Crossref 1
- DataCite 1

Data from: Impact of negative frequency-dependent selection on mating pattern and genetic structure: a comparative analysis of the S-locus and nuclear SSR loci in Prunus lannesiana var. speciosa

Kato Shuri, Teruyoshi Nagamitsu, Hiroyoshi Iwata, Yoshihiko Tsumura, Yuzuru Mukai, K Michiharu, K Saika & K Junko
Version 1 of Dataset published 2012 in DRYAD

Mating processes of local demes and spatial genetic structure of island populations at the self-incompatibility (S-) locus under negative frequency-dependent selection (NFDS) were evaluated in Prunus lannesiana var. speciosa in comparison with nuclear simple sequence repeat (SSR) loci that seemed to be evolutionarily neutral. Our observations of local mating patterns indicated that male-female pair fecundity was influenced by not only self-incompatibility, but also various factors such as kinship, pollen production and flowering synchrony. In spite of the mating bias caused by these factors, the NFDS effect on changes in allele frequencies from potential mates to mating pollen was detected at the S-locus but not at the SSR loci although the changes from adult to juvenile cohorts were not apparent at any loci. Genetic differentiation and isolation-by-distance over various spatial scales were smaller at the S-locus than at the SSR loci, as expected under the NFDS. All ele sharing distributions among the populations also had a unimodal pattern at the S-locus, indicating the NFDS effect except for alleles unique to individual populations probably due to isolation among islands, although this pattern was not exhibited by the SSR loci. Our results suggest that the NFDS at the S-locus has an impact on both the mating patterns and the genetic structure in the P. lannesiana populations studied.

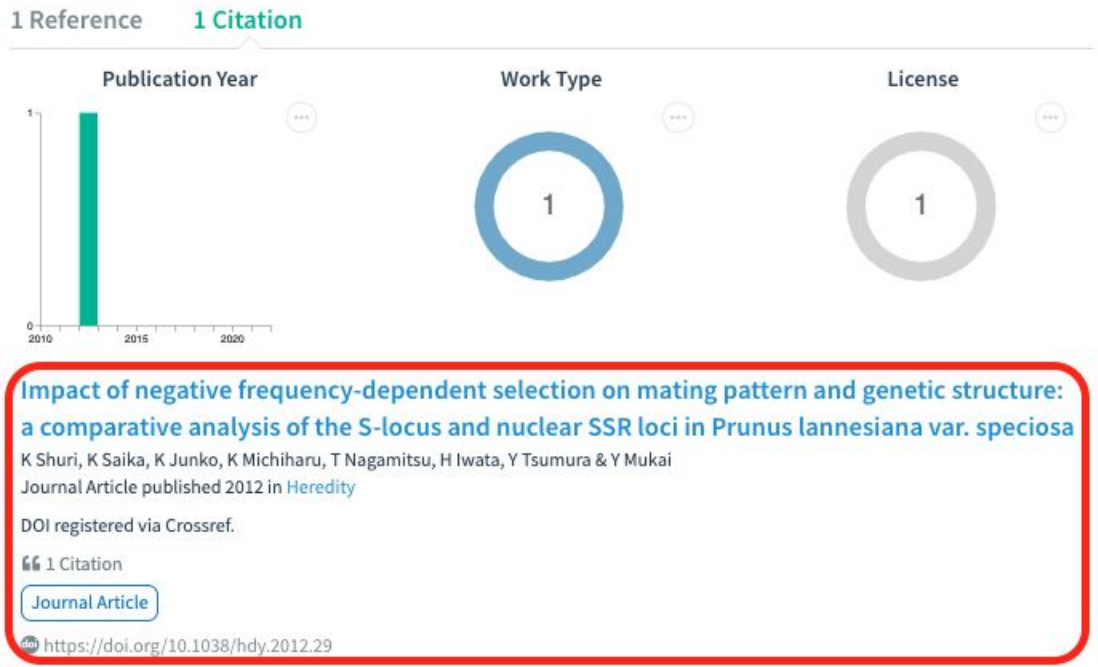
DOI registered April 17, 2012 via DataCite.

1 Citation 103 Views 16 Downloads

Dataset English

https://doi.org/10.5061/dryad.7c425

Bring citations to the surface



Organizations – citations and use

World Agroforestry Centre https://ror.org/01kmz4383

2,915	29	1,116	262
Works	**Citations**	**Views**	**Downloads**

Founded 1978

Links

Homepage
Wikipedia
Twitter

Geolocation

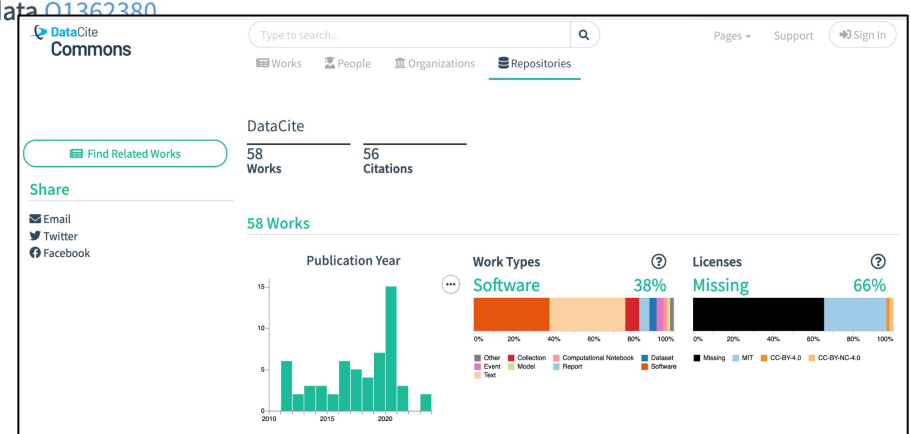
1° 14' 11.67" S36° 49' 08.4216" W

Kenya | Nonprofit | DataCite Consortium Organization

https://ror.org/01kmz4383

Other Identifiers

GRID grid.435643.3
Crossref Funder ID 10.13039/501100015769
ISNI 0000000099721350
Wikidata Q1362380



Benefits for researchers

DataCite & ORCID Auto update

📘 Requirements for ORCID auto-update

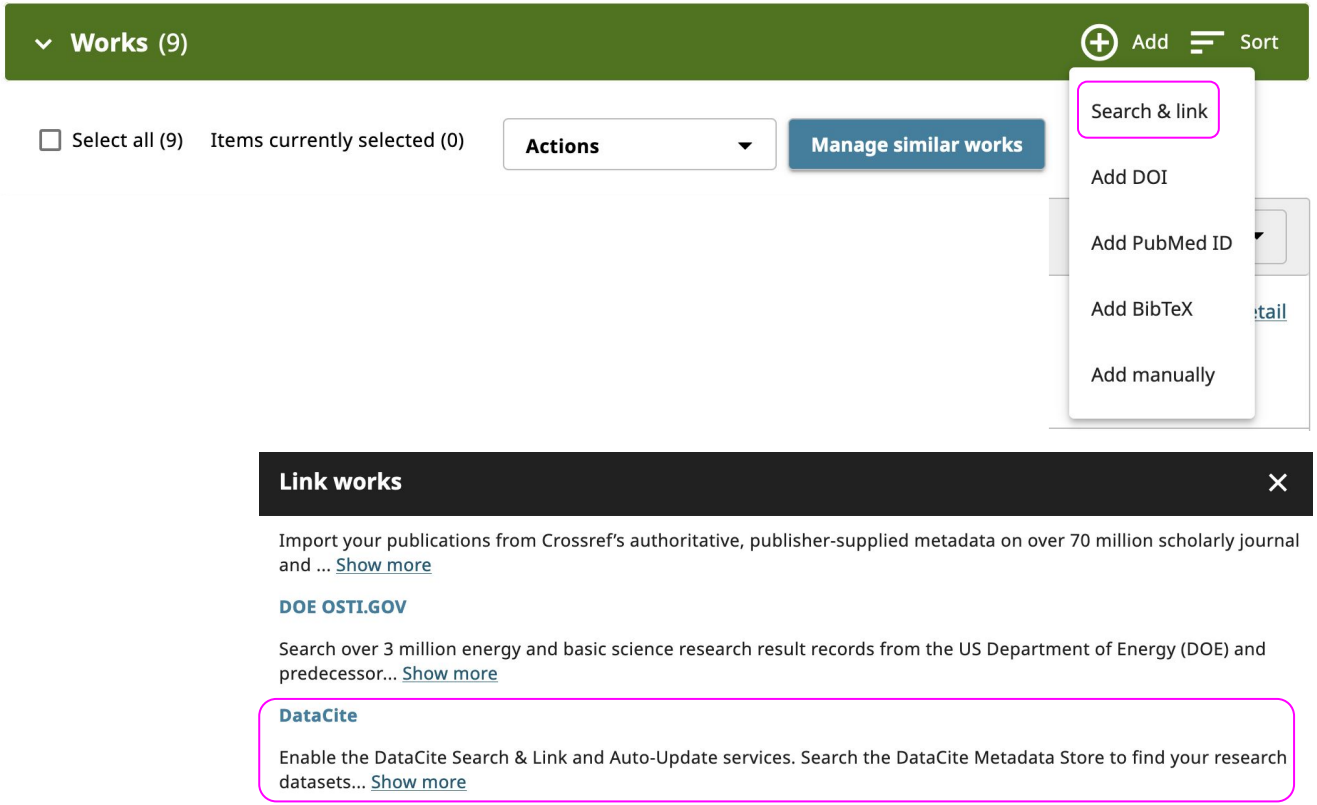
For the auto-update to work you will need:

- An ORCID record.
- A DataCite Profiles account with ORCID permissions enabled.
- The DOI metadata includes your ORCID iD.

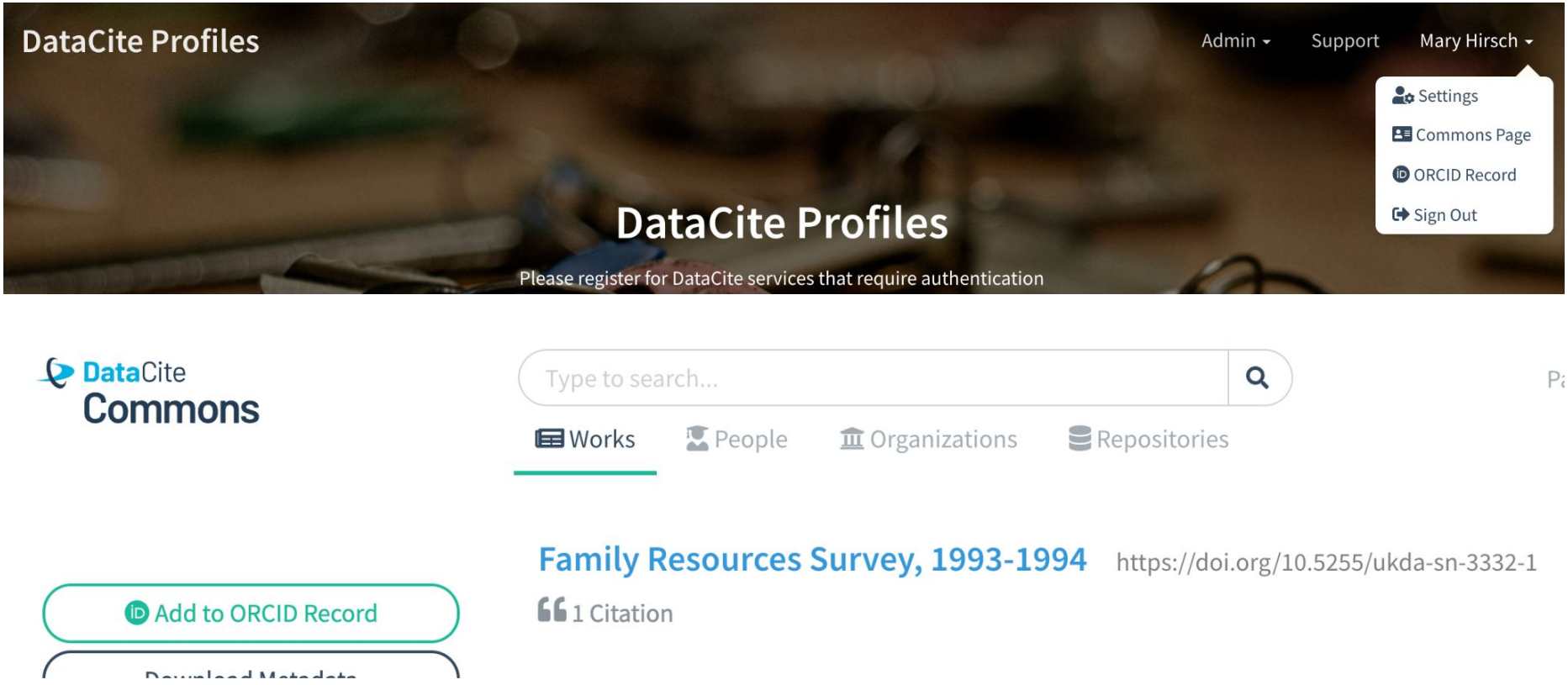
👍 Auto-update will trigger for findable DOIs registered or updated after the user enables the auto-update. To trigger the ORCID auto-update for existing DOIs, you will need to make an update to one of the following fields:

- Creator
- RelatedIdentifier
- FundingReference

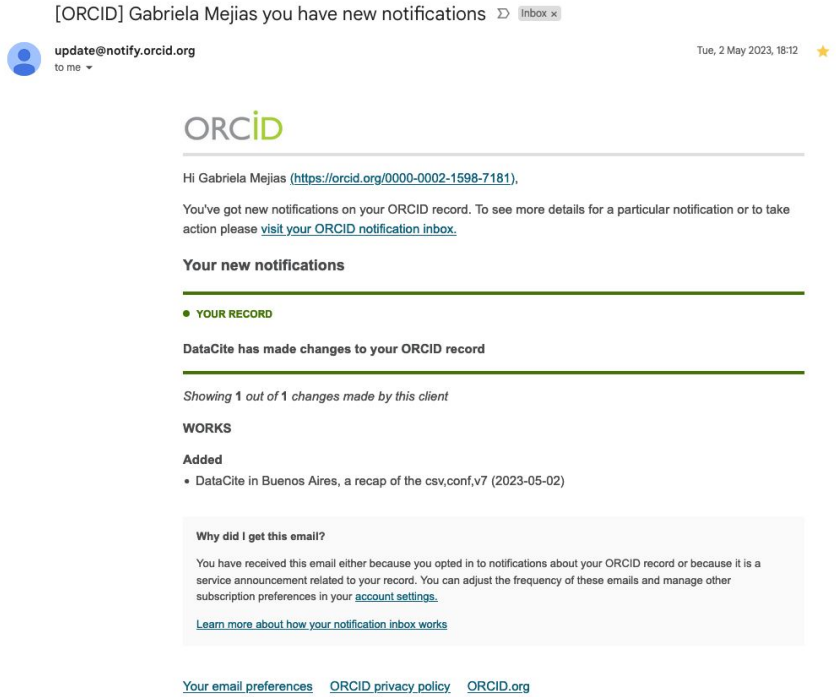
DataCite & ORCID Auto update



DataCite & ORCID Auto update



DataCite & ORCID Auto update



[ORCID] Gabriela Mejias you have new notifications Inbox ×

update@notify.orcid.org
to me

Tue, 2 May 2023, 18:12

ORCID

Hi Gabriela Mejias (https://orcid.org/0000-0002-1598-7181),

You've got new notifications on your ORCID record. To see more details for a particular notification or to take action please visit your ORCID notification inbox.

Your new notifications

YOUR RECORD

DataCite has made changes to your ORCID record

Showing 1 out of 1 changes made by this client

WORKS

Added

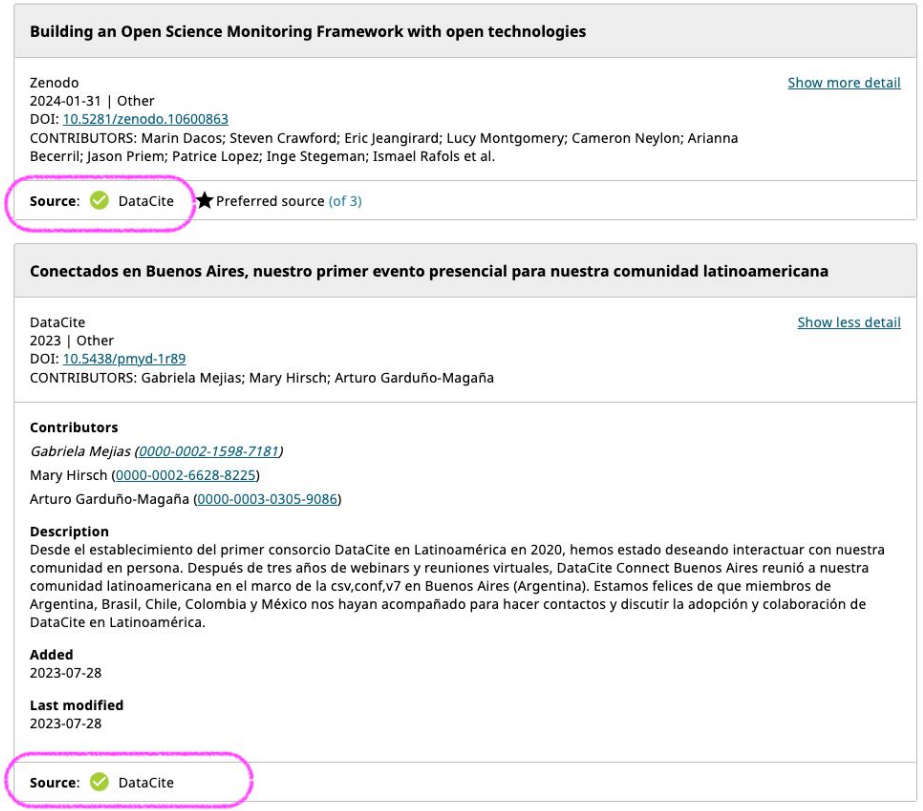
- DataCite in Buenos Aires, a recap of the csv,conf,v7 (2023-05-02)

Why did I get this email?

You have received this email either because you opted in to notifications about your ORCID record or because it is a service announcement related to your record. You can adjust the frequency of these emails and manage other subscription preferences in your account settings.

Learn more about how your notification inbox works

Your email preferences ORCID privacy policy ORCID.org



Building an Open Science Monitoring Framework with open technologies

Zenodo
2024-01-31 | Other
DOI: 10.5281/zenodo.10600863
CONTRIBUTORS: Marin Dacos; Steven Crawford; Eric Jeangirard; Lucy Montgomery; Cameron Neylon; Arianna Becerril; Jason Priem; Patrice Lopez; Inge Stegeman; Ismael Rafols et al.

Show more detail

Source: DataCite ★ Preferred source (of 3)

Conectados en Buenos Aires, nuestro primer evento presencial para nuestra comunidad latinoamericana

DataCite
2023 | Other
DOI: 10.5438/pmyd-1r89
CONTRIBUTORS: Gabriela Mejias; Mary Hirsch; Arturo Garduño-Magaña

Show less detail

Contributors

Gabriela Mejias (0000-0002-1598-7181)
Mary Hirsch (0000-0002-6628-8225)
Arturo Garduño-Magaña (0000-0003-0305-9086)

Description
Desde el establecimiento del primer consorcio DataCite en Latinoamérica en 2020, hemos estado deseando interactuar con nuestra comunidad en persona. Después de tres años de webinars y reuniones virtuales, DataCite Connect Buenos Aires reunió a nuestra comunidad latinoamericana en el marco de la csv,conf,v7 en Buenos Aires (Argentina). Estamos felices de que miembros de Argentina, Brasil, Chile, Colombia y México nos hayan acompañado para hacer contactos y discutir la adopción y colaboración de DataCite en Latinoamérica.

Added
2023-07-28

Last modified
2023-07-28

Source: DataCite

Tools for your research

DataCite

DMPTool
Build your Data Management Plan

CENTER FOR OPEN SCIENCE

protocols.io

figshare

DRYAD

zenodo

arXiv

OJS Open Journal Systems

OMP Open Monograph Press

OPS Open Preprint Systems

DSPACE

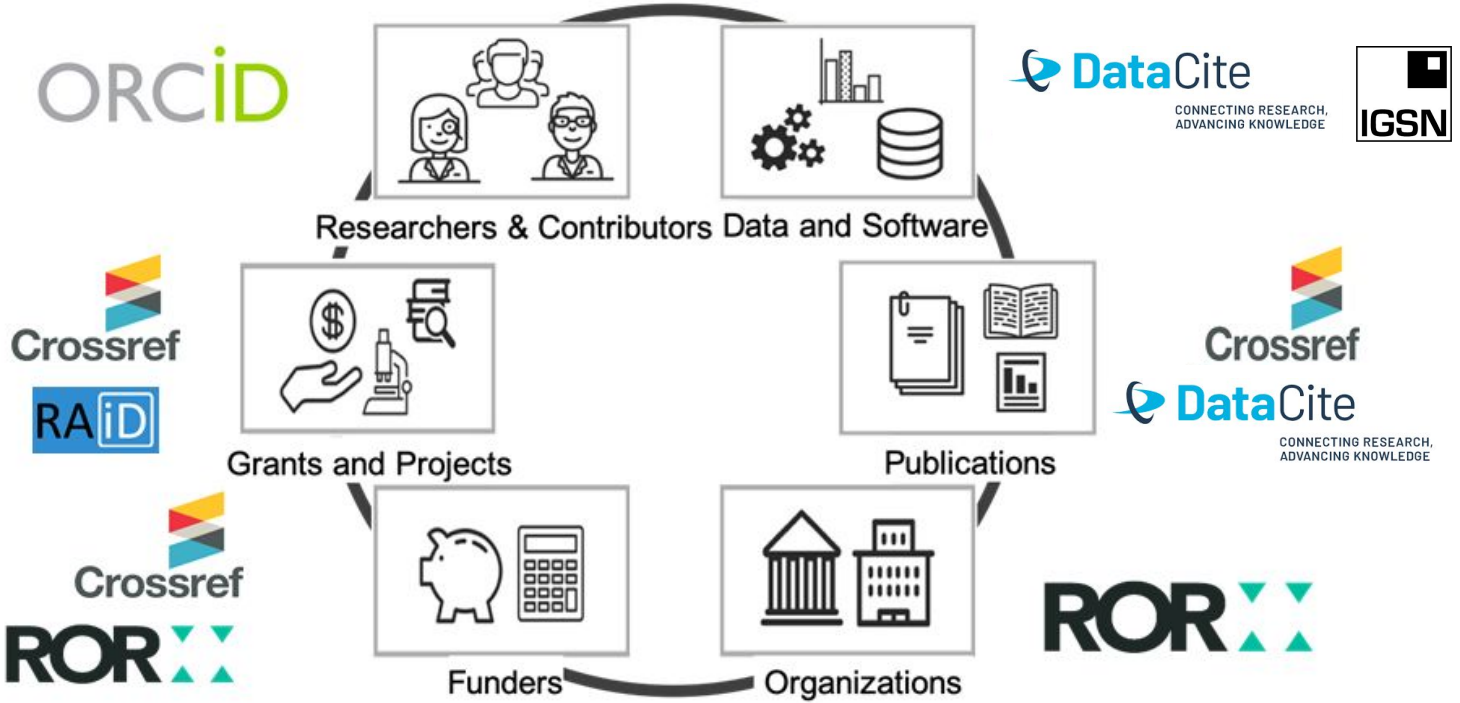
INVENIO RDM

The Dataverse Project

When tools and platforms that integrate open scholarly infrastructure, and support PIDs and metadata workflow, they simultaneously contribute to, and benefit from an open metadata commons, promoting a virtuous cycle for a more transparent, accountable and **FAIR** research ecosystem.

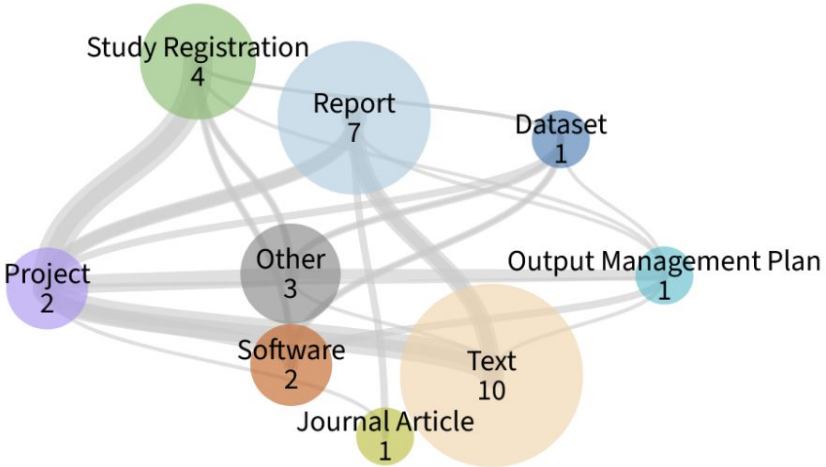
Interconnected Scholarly Ecosystem

PIDs and their metadata!



DataCite

Project Related Works



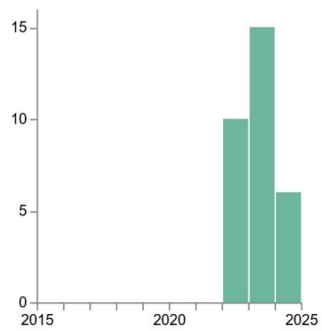
The network graph visualizes the relationships between different work types in the project. It shows the number of instances of each work type, and hovering over a connection reveals the number of links between any two types.

https://commons.datacite.org/doi.org/10.60581/zaev-6p15?connection-type=parts

Related Works

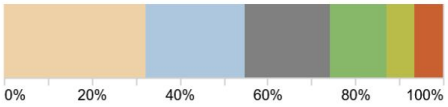
aCite

Publication Year



Work Types

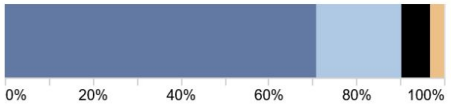
Text 32%



Other
Study Registration
Journal Article
Text
Report
Software

Licenses

CC-BY-4.0 71%



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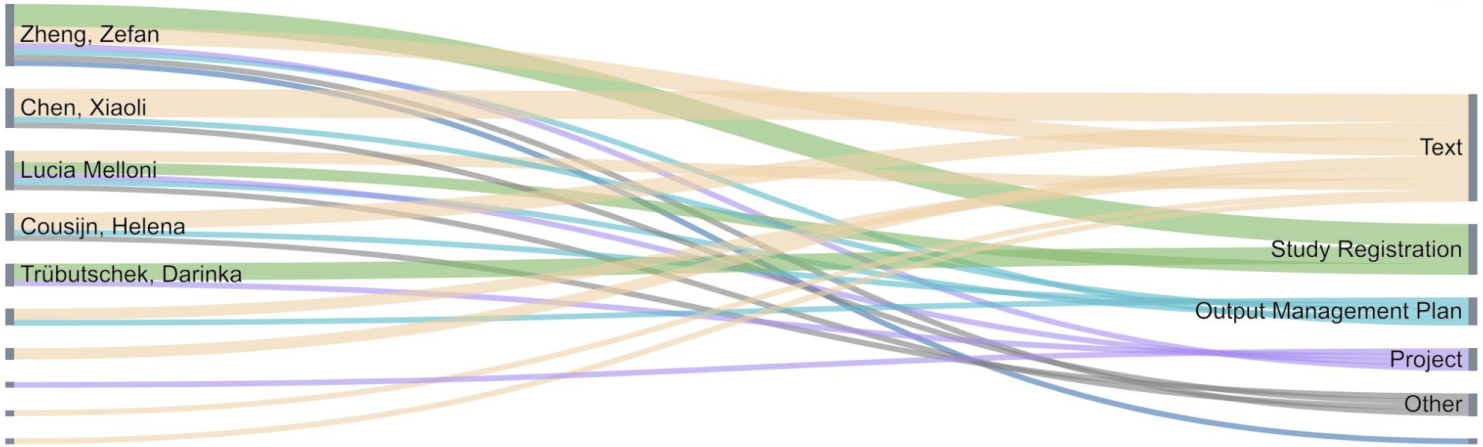
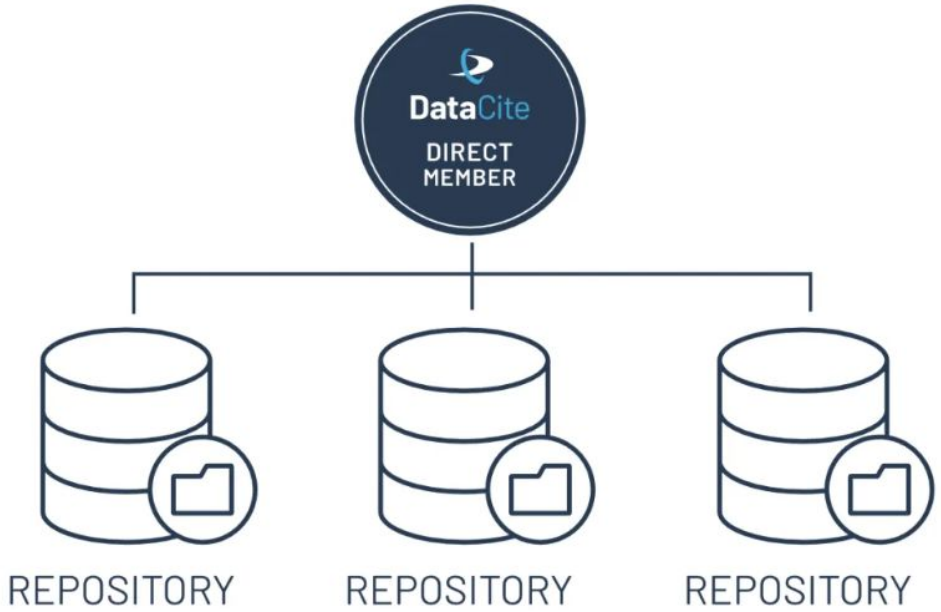
Contributions to allRelated



DataCite Membership

Direct Member

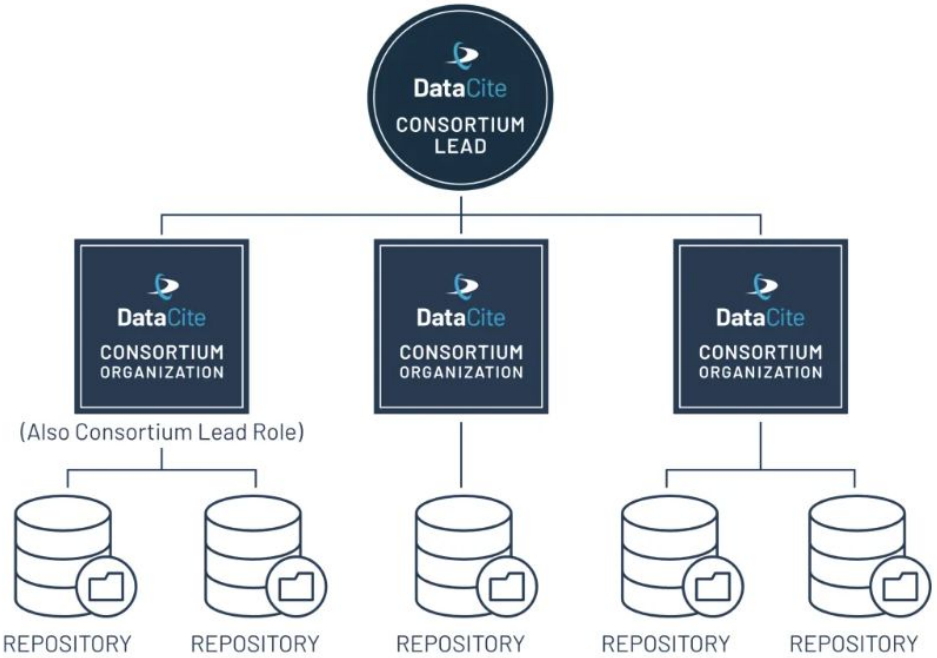
This type of member supports DataCite's mission and is an organization that works with one or more repositories within their organization. The repositories are under the same administrative structure as the organization.



Full details: https://datacite.org/fee-model/#Direct-Member

Consortium

A consortium is a group of like-minded organizations that have come together to collectively participate in DataCite's community and governance activities and use DataCite's DOI services. Consortia are generally located in a single country or subject-based. Organizations within a consortium can work with one or more repositories.



Full details: https://datacite.org/fee-model/#Consortium-fee-application

Improving equity and inclusion In PID infrastructure

Global Access Fund (GAF)

In September 2023, DataCite launched the Global Access Fund (GAF) to enable communities currently underrepresented in the global open science infrastructure landscape to benefit from DataCite services.

In 2023 round, we received more than +185 applications and awarded 12 organisations from Lebanon, Mexico, Uganda, India, Argentina, Côte d'Ivoire, Zimbabwe, Indonesia, Georgia, Tunisia, Nigeria, Brazil.

Applications are open for all non-profit organizations in Africa, Middle East, Asia, and Latin America.

2024 Global Access Fund (GAF)

Register:
https://datacite.zoom.us/webinar/register/1317212922645/WN_FMaSriTPQ9qFjA0Vtqf_jw#/registration

PIDs in Research Workflows

DataCite

Implementing PIDs in research workflows can enhance the visibility and accessibility of research outputs within the **Open Research** framework. This practice promotes more **transparency, collaboration and trust** in the research ecosystem.

DataCite Annual Community Meeting 2024

Wednesday, 25 September

DataCite

[See DataCite.org for Schedule & Registration]

DataCite

CONNECTING RESEARCH,
ADVANCING KNOWLEDGE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