# Building a global (and open!) research infrastructure, one DOI at a time

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ICRI 2022 20 October 2022



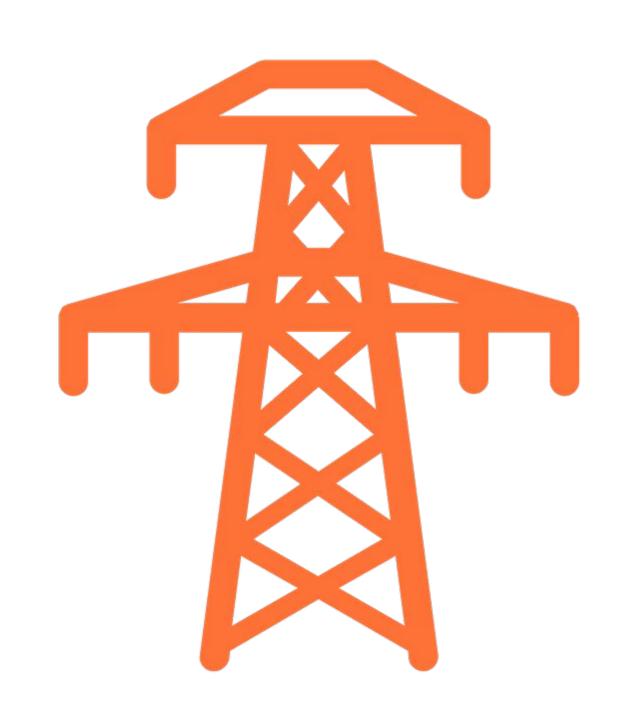
CONNECTING RESEARCH, IDENTIFYING KNOWLEDGE





## Our purpose

- Our vision at DataCite is Connecting Research, Identifying Knowledge.
- DataCite is a community led organization (found in 2009), and open to participation from members around the world. We work with research organizations (including research funders and facilities) from over 50 countries to provide the means to create, find, cite, connect, and (re)use research.
- We rely on each other for the success of open infrastructure



We are committed to the <u>Principles of</u> <u>Open Scholarly</u> <u>Infrastructure (POSI)</u>

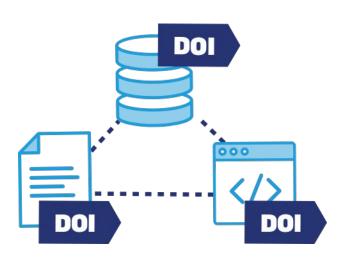
## Our value





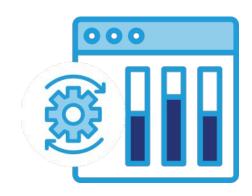
Registering DataCite DOIs and metadata to improve the discoverability and reuse of research outputs and resources

- DOI metadata registration and maintenance
- Content negotiation
- Link checking
- Public APIs for harvesting by third parties



Our services support best practice adoption for the community

- Simple interfaces and services, support do documentation and dedicated staff.
- Best practice documentation
- Community coordination, full of passionate people who share experiences and support best practice adoption.
- Continued evolution of our metadata schema.



We continue to invest in tools and services to track the influence of research that transcends borders and domains

- Dashboards and analytics.
- Harvesting services.
- Graph APIs and relational metadata.

# Our community\*













2700+
Repositories

280+
Members
51
Consortia

**50+**Countries

36.5m+
DOIs

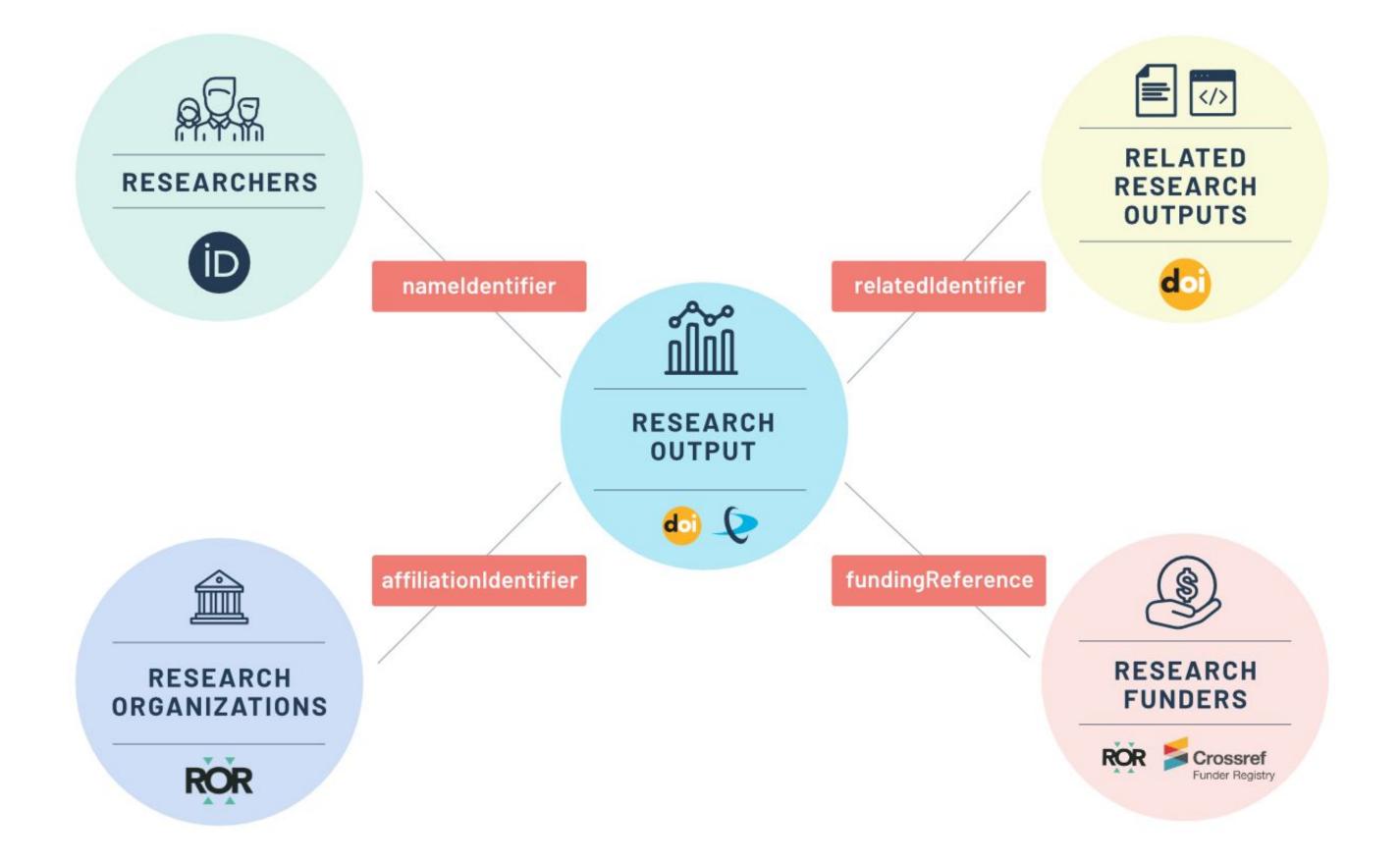
1.200+
Organizations

<sup>\*</sup>Statistics as of September 2022

## DataCite connection metadata



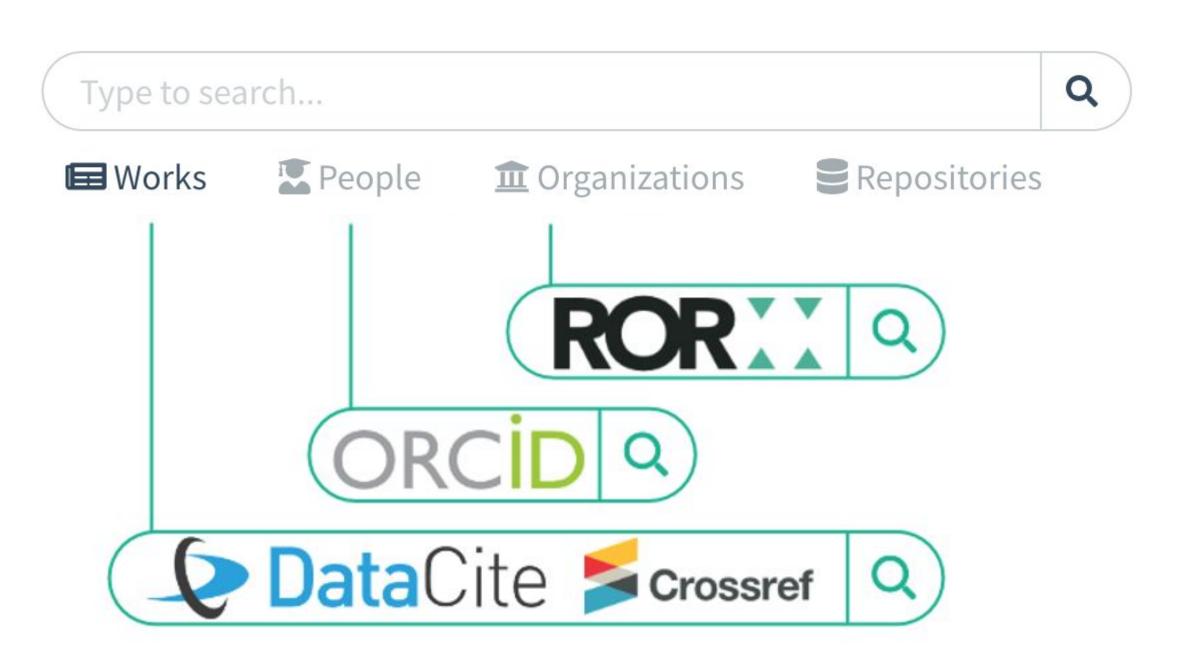
Connect DataCite DOIs to every part of research ecosystem



## Find and Connect Research

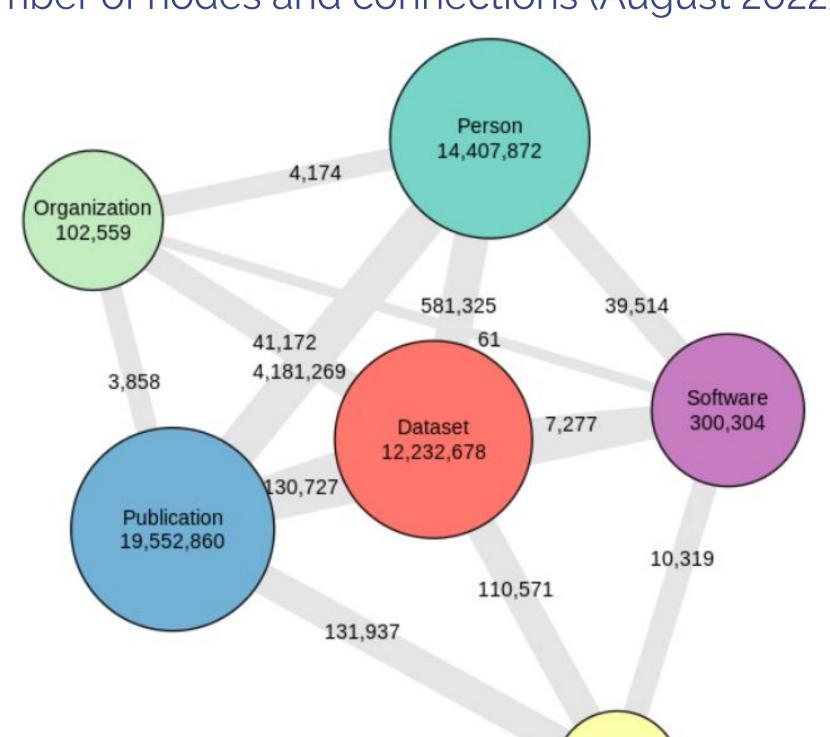


Find Research with DataCite Commons



#### **PID Graph**

Number of nodes and connections (August 2022)



Funder

# The power of PIDs



Type to search			Q	Pages ▼	Support	→ Sign In
<b>■</b> Works	People	<b>1</b> Organizations	Repositories			

#### https://doi.org/10.5061/dryad.234

#### Data from: Towards a worldwide wood economics spectrum

Amy E. Zanne, G. Lopez-Gonzalez, David A. Coomes, Jugo Ilic, Steven Jansen, Simon L. Lewis, Regis B. Miller, Nathan G. Swenson, Michael C. Wiemann & Jerome Chave

Version 5 of Dataset published 2009 in DRYAD

Wood performs several essential functions in plants, including mechanically supporting aboveground tissue, storing water and other resources, and transporting sap. Woody tissues are likely to face physiological, structural and defensive trade-offs. How a plant optimizes among these competing functions can have major ecological implications, which have been under-appreciated by ecologists compared to the focus they have given to leaf function. To draw together our current understanding of wood function, we identify and collate data on the major wood functional traits, including the largest wood density database to date (8412 taxa), mechanical strength measures and anatomical features, as well as clade-specific features such as secondary chemistry. We then show how wood traits are related to one another, highlighting functional trade-offs, and to ecological and demographic plant features (growth form, growth rate, latitude, ecological setting). We suggest that, similar to the manifold that tree species leaf traits cluster around the 'leaf economics spectrum', a similar 'wood economics spectrum' may be defined. We then discuss the biogeography, evolution and biogeochemistry of the spectrum, and conclude by pointing out the major gaps in our current knowledge of wood functional traits.

DOI registered June 8, 2010 via DataCite.

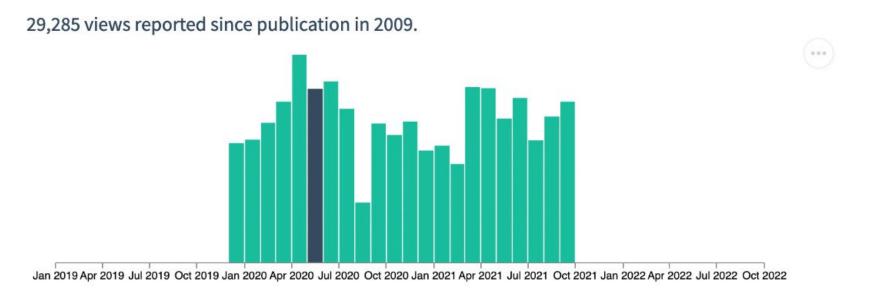


**66** 79 Citations ● 29K Views **16**K Downloads



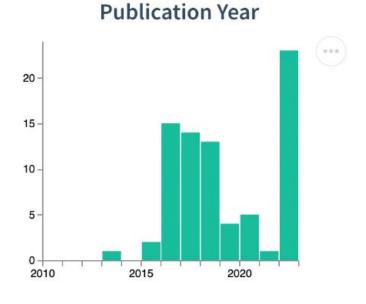


15,832 Downloads

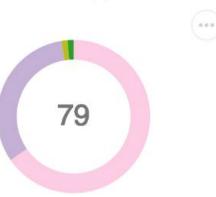


#### 1 Reference 79

#### 79 Citations



#### **Work Type**



#### License



# National & Regional Adoption





The Australian #research sector could save \$24 million and 38,000 person days in wasted effort every year by adopting Persistent Identifiers #PIDs, according to a new report by @MoreBrains\_Coop
Read more > ardc.edu.au/article/strate...



https://doi.org/10.5281/zenodo.7100578 https://doi.org/10.5281/zenodo.4772627 https://www.rd-alliance.org/groups/national-pid-strategies-wg



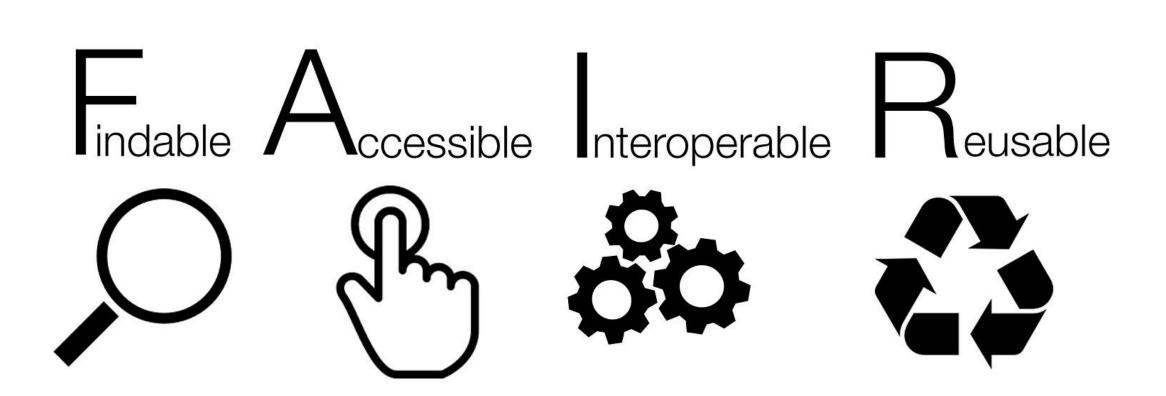


https://fair-impact.eu/

## Join us!



- 1. Register DOIs and PIDs for your data and outputs
- 2. Include relational metadata
- 3. Share these connections with the community







CONNECTING RESEARCH, IDENTIFYING KNOWLEDGE

### Get in touch!



Email us: <a href="mailto:info@datacite.org">info@datacite.org</a>



Follow us: <a href="mailto:adatacite">adatacite</a>



Talk to us: pidforum.org



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