



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

# Report on Open Science

2023-2024

February 2026

Open Science Committee

February 2026

University of Padua Report on Open Science 2023 - 2024

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**Open Science Committee**

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open-science-committee](https://biblio.unipd.it/en/digital-library/about-publishing/open-science-committee)

[unipd.it/open-science](https://unipd.it/open-science)

**Open Science support**

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# Open Science

Open Science is an important way to spread University of Padua's mission to research and deliver knowledge and science to society.

The goal is to make academic knowledge and research data accessible online and free of charge to all users: this facilitates the accelerated exchange of ideas and the advancement and application of new knowledge in an increasingly interconnected world.

Since 2015 the University of Padua has adopted Open Access institutional policies and since 2018 the institutional policies on Research Data Management are in force. Today, University of Padua ranks among the top 100 universities in the world for the number and impact of Open Access publications ([CWTS Leiden Ranking & Open Ranking edition 2025](#), based on 2020-23 data).

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## About this Report

The Open Science report follows a previous one focused on Open Access publishing during the period 2019-2022

(<https://zenodo.org/record/7984702>).

The purpose of the OS report is to represent the University of Padua's contribution, in the years 2023 and 2024, to the various Open Science pillars. This is done in continuity with several Open Science monitoring initiatives and, in particular, as part of the group of institutions participating in the OS Observatory Italy

(<https://openscience.it/catalogue>).

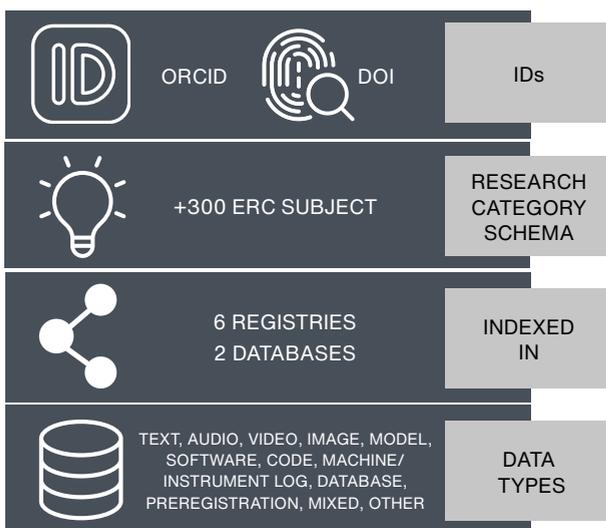
The University's engagement is aligned with national and international efforts to monitor and promote Open Science practices, and its participation to a variety of initiatives, like the above mentioned OS Observatory and CoARA, further demonstrates its commitment to transparency, collaboration, and the ongoing research assessment reform and evaluation of Open Science activities.

# Open Research Data

**Research Data Unipd** is an open-source data repository facilitating data sharing while allowing institutional users to access the archive through Single Sign-On credentials.

It aims to foster discovery, preservation, interoperability and reuse of datasets deposited. It is indexed in EOSC, OpenAIRE and Re3Data, among others.

[researchdata.cab.unipd.it](https://researchdata.cab.unipd.it)



## 2023-24 highlights

# +35%

increase in 2023-24 datasets deposited compared to the previous two years

# 140

2023-24 datasets available in RDU

# +19

ERC subjects used in 2023-24 RDU datasets compared to the previous two years

# Research Data Sharing

## Dataset Sharing

Based on several repositories data, in years 2023 and 2024 Researchers from University of Padua are listed as contributors of more than 1.100 datasets (no unique results), mostly published with an open license, largely a Creative Commons CC BY.

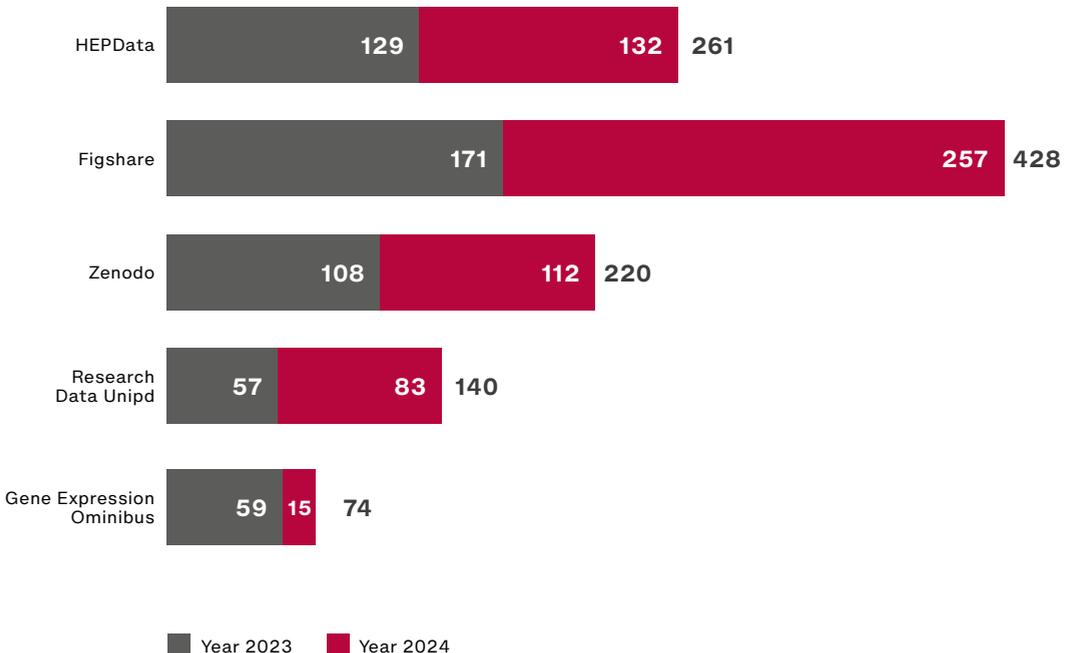
2023-24  
highlights

**524**

2023 open datasets from harvested data repositories

**599**

2024 open datasets from harvested data repositories



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# OER Open Educational Resources

Open Educational Resources (OER) are [defined by UNESCO](#) as learning, teaching, and research materials in any format or medium that reside in the public domain, or are under copyright and released under an open license, permitting no-cost access, reuse, repurposing, adaptation, and redistribution by others.

In 2023, the University launched an initiative to collect Open Educational Resources (OER) that are created within the institutional activities.

The monitoring of OERs is driven by the need to ensure data sharing and public availability, and is also carried out within the framework of initiatives such as the Open Science Observatory Italy.

2023-24 highlights

**University  
of Padua  
Open Educational  
Resources**

2022



**106**

2023



**160**

2024



**191**

Data from  
[10.25430/researchdata.cab.unipd.it.00001654](https://doi.org/10.25430/researchdata.cab.unipd.it.00001654)

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# Institutional Open Access Repository

**Padua Research Archive** is the institutional scholarly literature repository and CRIS (Current Research Information System) of the University of Padua.

It collects, preserves, and provides Open Access to the scientific and academic output of the university's researchers and staff.

It is an OAI-PMH registered data provider and it is indexed in OpenAIRE, COAR and OpenDOAR, among others. Open Access content is verified before being made publicly available. Through the Padua Research Archive, doctoral theses are also disseminated in full text: in the period 2023-24, 712 of them were published immediately as Open Access.

[www.research.unipd.it](http://www.research.unipd.it)

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## 2023-24 highlights

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# +169%

increase in Open Access full-texts in Padua Research Archive (PRA) during years 2023-24

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# +27.522

number of new Open Access full-text contents available in PRA during years 2023-24

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# +1.732.708

new downloads in PRA 2023-24

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# University of Padua 2023-2024 scholarly Publications and Open Access Overview

In analyzing the scholarly publications output of authors from the University of Padua for the years 2023–24, a consistent choice was made to use open, nonproprietary data sourced mostly from OpenAlex an OpenAIRE: the reported data are therefore freely accessible through the databases' native interface.

OpenAlex is a rapidly evolving tool, its quantitative data currently align with those found in proprietary scholarly databases such as Scopus (Elsevier) and Web of Science (Clarivate), which themselves are subject to updates due to corrections and the recency of the publication period under review.

OpenAlex may present certain representation gaps, primarily due to a relatively large share of missing affiliation data.

In addition, data from OpenAIRE, from Padua Research Archive (IRIS) and from OA publishing institutional agreements are provided for the analysis. The [OpenAIRE Research Graph](#) is the main and openly available source of reported data from the OpenAIRE MONITOR tool.

- Based on OpenAlex data, in [2023 and 2024, 19.370 academic works were published](#) with at least one author affiliated with the University of Padua.

These publications primarily consist of original articles, along with reviews, letters, books, and book chapters. The majority are content published in serials.

- In the [previous two-year period, total publications](#) of the same document types were of 19.280, the 2023–2024 increase amounts to 0,5%. Year 2024 data indexed are expected to grow also during 2026, due to typical delays in bibliographic databases and in repository self-archiving.

2021-22

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**19.280**

2021-22 total publications:  
9.703 (2021); 9.578 (2022)

2023-24 highlights

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**19.370**

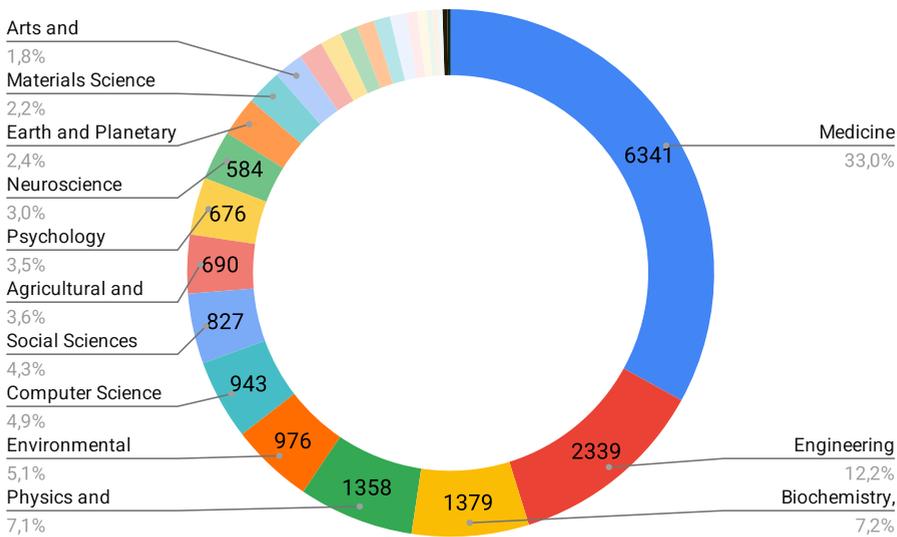
2023-24 total publications:  
9.827 (2023); 9.543 (2024)

University of Padua citation  
data from OpenAlex update  
11.02.2026

## Fields of Research Comparison of total and Open Access Publications

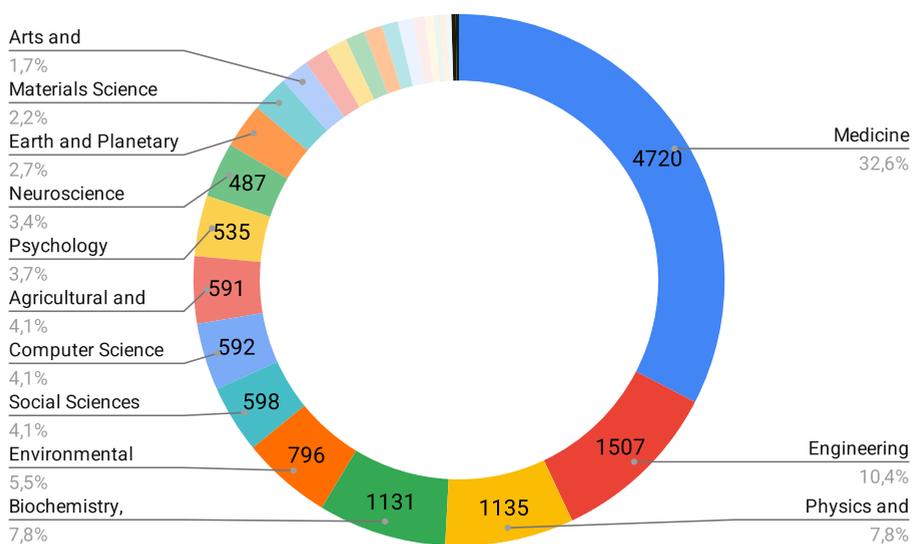
According to OpenAlex, **primary fields of papers** published during 2023-24 are **Medicine, Engineering, Biochemistry, Genetics and Molecular Biology, Physics and Astronomy**: all together they account for **59%** of the total publications 2023-2024.

Unipd total publications 2023-2024 by field of research



**A higher share of OA publications** (Green, Diamond, Gold or Hybrid OA) can be observed in fields **Physics and Astronomy, Biochemistry, Genetics and Molecular Biology, Environmental Science, Agricultural & Biological Sciences and Psychology.**

Unipd OA publications 2023-2024 by field of research

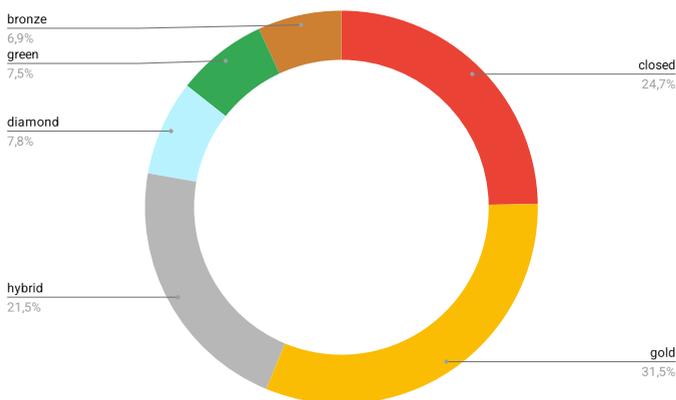


# Open Access Status

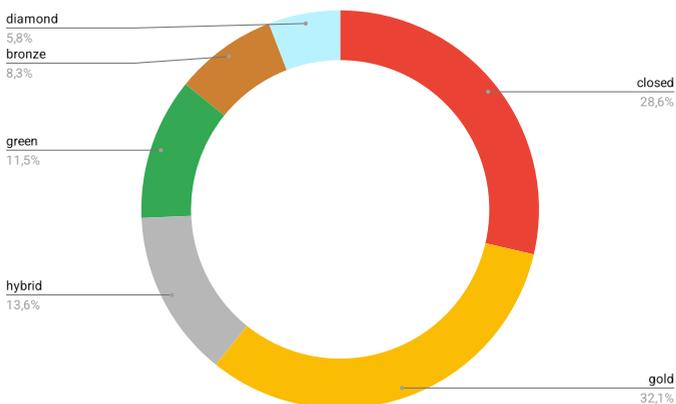
Based on OpenAlex data, **14.580 Open Access publications are retrieved from years 2023-24 with at least one author affiliated with the University of Padua.**

**75% of total publications are available in an OA version**, as of today. It was the 71,4 % in 2021-22.

Open Access status 2023-2024



Open Access status 2021-2022



During the analysis period, Gold and Hybrid Open Access publications represented 53% of the total University of Padua OA papers. Gold and Hybrid OA are models that involve the payment of Article Processing Charges (APCs), either directly or through an OA publication agreement.

When compared to the previous two-year period, **Hybrid OA is the only model showing a marked increase**. On the other hand, **Diamond Open Access**, where no APCs are paid by author or institutions, has shown an **increase of approximately 200 articles over the 2021-22 period**.

There is no doubt that the **growth in Hybrid OA is largely driven by Read & Publish agreements**, which have led to a significant rise in the number of published articles from University of Padua corresponding authors since 2023, following the launch of the CRUI national publishing agreement with Elsevier.

Green Open Access (self-archiving) allows authors to make their paywalled, peer-reviewed articles, chapters or books freely available by depositing a version permitted by publishers - preprint, accepted or published - into an institutional or subject-based repository. Green OA is also expected to grow over the next years, which may reduce the number of closed-access publications and, consequently, decrease the share of Hybrid OA.

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## 2023-24 Trend Analysis: Publishers

Based on OpenAlex data, **10.650 of 18.070 total publications 2023-24**, with at least one author from University of Padua, are Gold, Hybrid or Diamond **Open Access** contents (“native OA” is 59% of total output).

Of these, 6.525 are published by Elsevier, MDPI, Springer Nature and Wiley, publishers that, in line with the global trend, rank among the top four in terms of total publications, as well as OA content only.

In contrast, scholarly publishers such as Taylor & Francis, Sage and BMJ, ranked 8th, 11th and 14th respectively as overall output, are not among the top 15 publishers of OA content with at least one author affiliated with the University of Padua. Unipd top 15 publishers of 2023-24 OA content are mostly publishers with an active institutional publishing agreement or discount.

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### 72.620

current citations of  
2023-24 native OA  
publications only

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### 108.600

current citations of  
2023-24 total  
publications

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### 62%

percentage of total native  
OA publications from  
Elsevier, MDPI, Springer  
Nature and Wiley

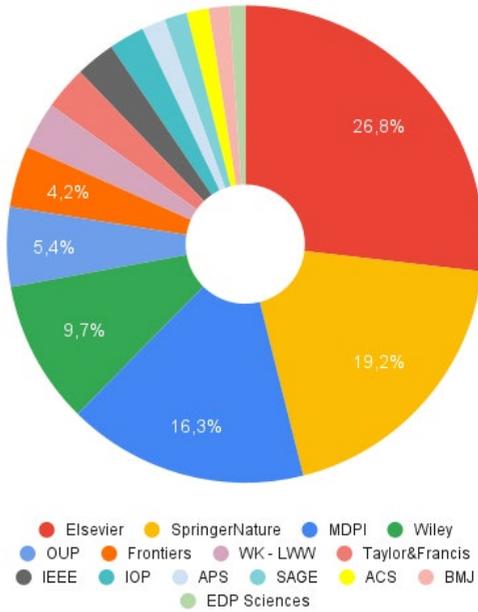
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### 47.840

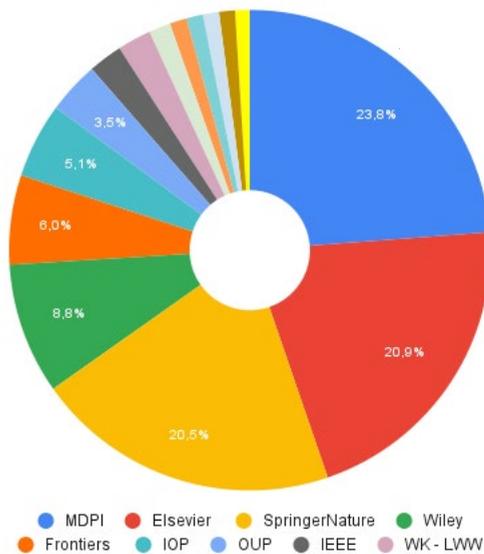
current citations  
of 2023-24 OA native  
publications from Elsevier,  
MDPI, Springer Nature and  
Wiley vs. 72.620 total

University of Padua citation  
data from OpenAlex update  
01.12.2025

Unipd publications 2023-2024 by publisher (top15)



Unipd native OA publications 2023-2024 by publisher (top15)



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# 2023-24 University of Padua Open Access Spotlight

## Green Open Access only

Open Access papers available only via self-archiving in digital repositories

- Preprints are the preferred type of non-native Open Access published by authors at the University of Padua.
- Green OA-only content mainly comes from the fields of Medicine, Physics and Astronomy, Biochemistry, Genetics and Molecular Biology, Engineering, and Computer Science.

2023-24

**1.537**

share of preprints in  
Green OA only 2023-24

**89%**

University of Padua data  
from OpenAlex update  
11.02.2026

## Diamond Open Access

Fully OA journal or books, without charging any fees to authors or institutions

- The Journal of High Energy Physics is the fully OA journal without APCs (entirely sponsored by SCOAP3) with the largest number of articles from University of Padua in 2023-24.
- **The Diamond OA journals with the largest number of articles published by authors from the University of Padua are mostly scholar-led and community-driven Italian journals**, published either by international commercial or non-profit publishers and university presses.

2023-24

**1.558**

current citations of  
2023-24 Diamond OA  
contents

**8.026**

University of Padua data  
from OpenAlex update  
11.02.2026

## Gold Open Access

Fully OA journal, chapter or books, with an “author pays” Article Processing Charge model

- Books, articles, and book chapters that are fully Open Access (Gold OA) account for **31,5% of the total scholarly production** from 2023-24, their share of the citations received corresponds to **33% of the total citations** of the University of Padua 2020-24 scholarly output.

N. of items  
2021-22

**6.189**

N. of items  
2023-24

**6.103**

University of Padua data  
from OpenAlex update  
11.02.2026

## Hybrid Open Access

Hybrid Open Access refers to content published in subscription-based journals and paywalled books, where authors can make individual works freely accessible by paying Article Processing Charges (APCs) or Book Processing Charges (BPCs)

- Hybrid OA, driven by the transformative agreements subscribed by the University of Padua and worldwide research institutions, is the type of OA that has grown the most compared to the previous biennium. In 2021-22, it accounted for 13,6% of the total publications (both closed and open), and by 2023-24, it reached 21,5% of the University of Padua scholarly output.

N. of items  
2021-22

**2.615**

N. of items  
2023-24

**4.169**

University of Padua data  
from OpenAlex update  
11.02.2026

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# Open Access Institutional Agreements

Starting from 2020, the University of Padua has signed numerous agreements to publish in Open Access, many under the national framework negotiated by CRUI CARE, while others have been established solely by the university itself.

Since 2023, these initiatives at the single-institution level, funded by the University Open Science Committee, have included experimenting with models different from the so-called transformative agreements.

These alternative formulas include Pure OA agreements (prepaid or flat fees models), S2O (Subscribe to Open), OA pledging, agreements to obtain discounts on APCs, and models integrating multiple components into a single contract.

Agreements have been made with both non-profit and commercial publishers.

The twofold objective has been to respond to researchers' needs and to ensure responsible cost management, with particular attention to double dipping, while promoting more sustainable, transparent, and non-profit-oriented publishing models

<b>READ &amp; PUBLISH CRUI CARE 2023 AND/OR 2024</b>	<b>PURE OA - READ&amp;PUB - DISCOUNTED APC UNIPD 2023 AND/OR 2024</b>	<b>S20 - OA PLEDGING 2024</b>
ACM - ASSOCIATION FOR COMPUTING MACHINERY	ASME	ANNUAL REVIEWS (CRUI CARE)
ACS - AMERICAN CHEMICAL SOCIETY	BIOMED CENTRAL	BERGHAHN
AIP - AM INST PHYSICS	FRONTIERS	BREPOLS
BMJ	KARGER	DUKE UNIVERSITY PRESS
CUP - CAMBRIDGE UNIVERSITY PRESS	PLOS	DUNKER & HUMBLLOT
DE GRUYTER	TAYLOR & FRANCIS	EDP SCIENCES
ELSEVIER		EUROPEAN MATHEMATICAL SOCIETY PRESS
EMERALD		MATHEMATICAL SCIENCE PUBLISHERS
IEEE		MOHR SIEBECK
IOP		OPEN BOOK PUBLISHERS
LIPPINCOTT		
RSC - ROYAL SOCIETY OF CHEMISTRY		
SPRINGER		
WILEY		

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# The Road to Diamond Open Access

Since the end of 2023, Padova University Press (PUP) has launched a program to become a fully Diamond Open Access University Press.

Without giving up the option of producing printed versions, every monograph, edited volume, or journal article published by PUP is digitally available in Open Access, under a Creative Commons license.

Padova University Press publishes scholarly community-owned, peer-reviewed journals, series and e-books, that allow authors to publish in Open Access without paying APCs. The enhancement project is grounded in the adoption of Open Access standards, including the OAI-PMH protocol, the progressive assignment of persistent identifiers (such as DOIs via DataCite), the development of standardized self-archiving and preservation policies, and the indexing of journals and monographs in DOAJ and DOAB, respectively. It also involves the implementation of common licensing terms across all PUP publications.

## Padova University Press

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# 430

PUP Open Access  
Journal Articles published  
in 2023-24

---

# 45.000

PUP Open Access  
Journal Article Full-Text  
Downloads in 2023-24

---

# 87

PUP Open Access  
Books published in  
2023-24

---

# 20.500

PUP Open Access  
Books Full-Text Downloads  
in 2023-24

Data from  
Padova University Press  
website update 01.12.2025

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# Open Science Committee Actions 2023-2024

## Open Infrastructures

Since 2024 the University of Padua supports free world-scale services used globally for Open Access content dissemination.

DOAJ (Directory of Open Access Journals) is an authoritative, online database that indexes and provides access to high-quality, peer-reviewed, fully OA journals. It operates as a global registry designed to enhance the discoverability, accessibility, and visibility of scholarly content.

Both DOAB and OAPEN contribute significantly to the global movement toward OA, focusing on books (globally in the case of DOAB and European-centric scholarly book publishing in the case of OAPEN). Both platforms use rigorous standards, advanced metadata practices, and international collaborations to promote the discoverability, accessibility, and sustainability of OA books and chapters.

[DOAJ](#) ↗

[DOAB](#) ↗

[OAPEN](#) ↗

## Open Access

Since 2023, the [Open Science Committee](#) has launched a series of initiatives in the domain of Open Access, critically engaging with diverse OA publishing models. These efforts are directed towards fostering long-term financial sustainability, strengthening the centralization and transparency of service providers, and systematically addressing priorities identified through evidence-based, data-driven analyse.

OA AGREEMENTS  
OA COST ANALYSIS  
OA SUSTAINABLE  
MODELS

## Open Data, Citizen Science, Research Integrity

In 2024, the Open Science Committee co-funded the Third Mission call, which for the first time incorporated a dedicated project line explicitly aligned with three pillars of Open Science - Open Data, Citizen Science, and Research Integrity - thus marking a significant step towards the structural integration of these dimensions into institutional practices.

CO-FOUNDING  
OF OPEN  
SCIENCE &  
THIRD MISSION  
PROJECTS

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# Openness Assessment

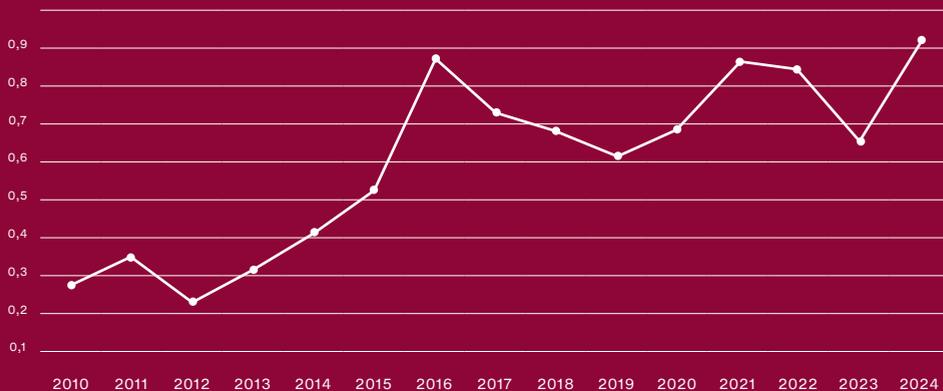
## Openness Score

A measure representing the proportion of an organization's research that is available in Open Access from OpenAIRE

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# 0.689

average Openness score  
2023-24 University of Padua



This metric is calculated by taking the average share of an organization's research output that is in Open Access. This score is determined based on the best available access rights for any given output in the OpenAIRE Graph after undergoing the [Graph Production Workflow](#) including merging, enrichment and cleaning steps. For example, if a publication is published under closed access but can also be openly found in a repository, it will be categorized as Open Access for the purposes of this score.

## Fairness Score

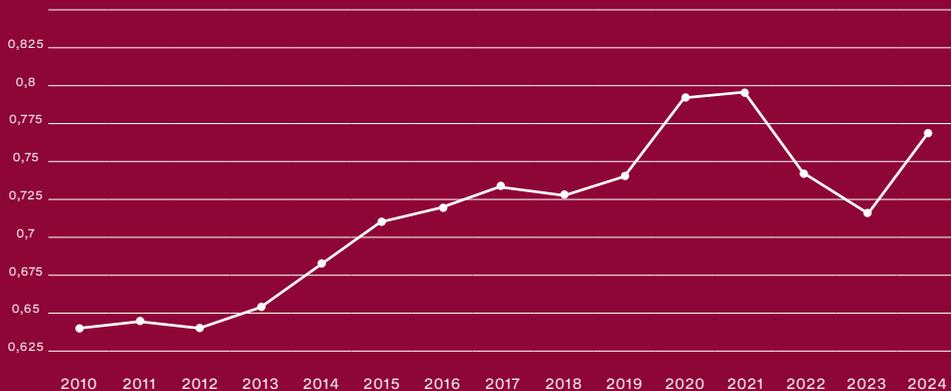
A metric demonstrating the presence of critical metadata elements in an organization's research output, including the Title, Publisher, Abstract, Year of Publication, Author(s), and a Persistent Identifier (PID).

It signifies the presence of metadata not its quality, with the exception of PIDs which have specific inclusion criteria

---

# 0.989

average FAIRness score  
2023-24 University of Padua



This metric is calculated by taking the average share of an organization's research output with essential metadata criteria, specifically the presence of a Title, Publisher, Abstract, Year of Publication, Author(s), and a Persistent Identifier (PID).

While the score indicates the presence of these metadata elements, it does not assess their quality, with the exception of PIDs that have unique inclusion criteria in the OpenAIRE Graph, as detailed in [OpenAIRE's PID and Identifiers documentation](#).

The score represents the state of the organization's research output metadata records in the OpenAIRE Graph after undergoing the [Graph Production Workflow](#), encompassing merging, enrichment, and cleaning procedures.

Data for OpenAIRE's Institutional Openness assessments comes from the OpenAIRE Graph, a comprehensive, open, and global linked research graph that aggregates metadata on research outputs like publications, data, and software. The OpenAIRE Monitor uses this extensive dataset to generate indicators and provide dashboards for institutions and funders to monitor and understand the impact and openness of research activities.

Metrics methodology is available here: [monitor.openaire.eu/support/terminology-and-construction.html#Id-Constructed](https://monitor.openaire.eu/support/terminology-and-construction.html#Id-Constructed)

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# Open Science Training

As part of its commitment to fostering a culture of Open Science, the University of Padua provides a comprehensive portfolio of educational and training initiatives designed to build capacity across the academic community. These include user-oriented courses, professional development programs, and information literacy activities, complemented by seminars, online webinars, consultancy services, and tailored training for technical-administrative staff, researchers, and students at the undergraduate, master's, and doctoral levels. By delivering these initiatives through face-to-face, online (synchronous and asynchronous), and blended formats, the University seeks to promote the systematic integration of Open Science principles into research, teaching, and institutional practices.

Training hours may not be counted as unique event. Data collected from internal databases for monitoring purposes.

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## 2023

### 81

hours for PhD students

### 65

hours for Research staff

### 59

hours for students

### 54

hours for administrative, technical and library staff

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## 2024

### 83

hours for PhD students

### 61

hours for Research staff

### 52

hours for students

### 35

hours for administrative, technical and library staff

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# Arqus Open Science Ambassadors

Since 2023, the University of Padua has joined the Arqus Open Science Ambassador Network, appointing three representatives: Margarita Gleba, Massimo Grassi, and Alexander Monzon.

The Ambassadors act as catalysts for the diffusion of Open Science values within the University and as connectors to the wider European research community.

Their mission is to promote a cultural shift towards openness, transparency, and collaboration, aligning institutional practices with European and global initiatives. At the University of Padua, the Ambassadors support the Open Science Committee by engaging in awarenessraising, training, and outreach activities. They contribute to the design and dissemination of good practices in areas such as Open Access publishing, FAIR data management, Citizen Science, and research integrity. Through seminars, workshops, and international exchanges, they foster dialogue across disciplines and career stages, encouraging researchers and students alike to adopt Open Science principles in their daily practices.

As part of the Arqus Alliance, the Ambassadors also represent Padua in a European network of peers. This role provides opportunities to share experiences and innovative approaches, and to collaboratively address challenges such as sustainable publishing models, research assessment reform, and the visibility of institutional outputs.

By bridging local initiatives with international strategies, the Ambassadors strengthen the University's contribution to the global Open Science movement. Their activities highlight the University of Padua's longstanding commitment to making scientific knowledge a common good, openly accessible and reusable by all.



**University of  
Padua Arqus OS  
Ambassadors:**

**Margarita Gleba  
Massimo Grassi  
Alexander Monzon**

See also:  
<https://arqus-alliance.eu/research/arqus-ri/open-science/open-scienceambassador-network>

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# Outlook

## Open Science at the University of Padua

At the University of Padua, our commitment to Open Science is rooted in our historic mission of knowledge freely shared-embodied in our motto “Universa Universis Patavina Libertas”. Building on this foundation, we envision the next phase of Open Science as a transformative force for research, teaching and engagement across our institution.

## Looking Ahead

In the coming years, the University of Padua envisions an ecosystem where:

- every significant research output is openly accessible, with data and methods shared;
- infrastructure supports seamless open workflows and long-term preservation;
- evaluation and reward systems reflect scientific quality, openness, collaboration and societal benefit;
- students, researchers and citizens engage in open, inclusive research processes;
- the increasing costs of pay-to-read and pay-to-publish models are analyzed and addressed through credible alternative models and solutions, built and supported by the University research communities involved in the process;
- advancing the principles of the Coalition for Advancing Research Assessment (CoARA) by redesigning evaluation frameworks to recognize the quality of research processes, Open Science practices, interdisciplinary collaboration, and contributions to society.

The University of Padua remains at the forefront of the Open Science movement, embodying its values in research, education, innovation and societal impact. By embracing this future, the University of Padua will reinforce its role as a global leader in open, trustworthy, and impactful scholarship, honouring its heritage while shaping the research culture of tomorrow.

### Monica Salvadori

Vice Rector of Historical and Cultural Heritage

### Fabio Zwirner

Vice Rector for Research

### Andrea Zanella

Vice Rector of Information Technologies and ICT Communication

### Giorgio Maria Di Nunzio

Open Science & Open Data Advisor

### Matteo Millan

CoARA Advisor

### Open Science Committee

<https://biblio.unipd.it/en/digital-library/about-publishing/open-science-committee>



[unipd.it](https://www.unipd.it)