SCHOLARLY COMMUNICATION IN WEB AGE

Dott. Augusto Pifferi

Lesson 1

- Scholarly Communication
- Innovation in scholarly communication
- Open Access
- Open Access Journals
- Open Science
- Author rights
- Predatory Publishers

SCHOLARLY COMMUNICATION IN WEB AGE

What is Scholarly Communication?

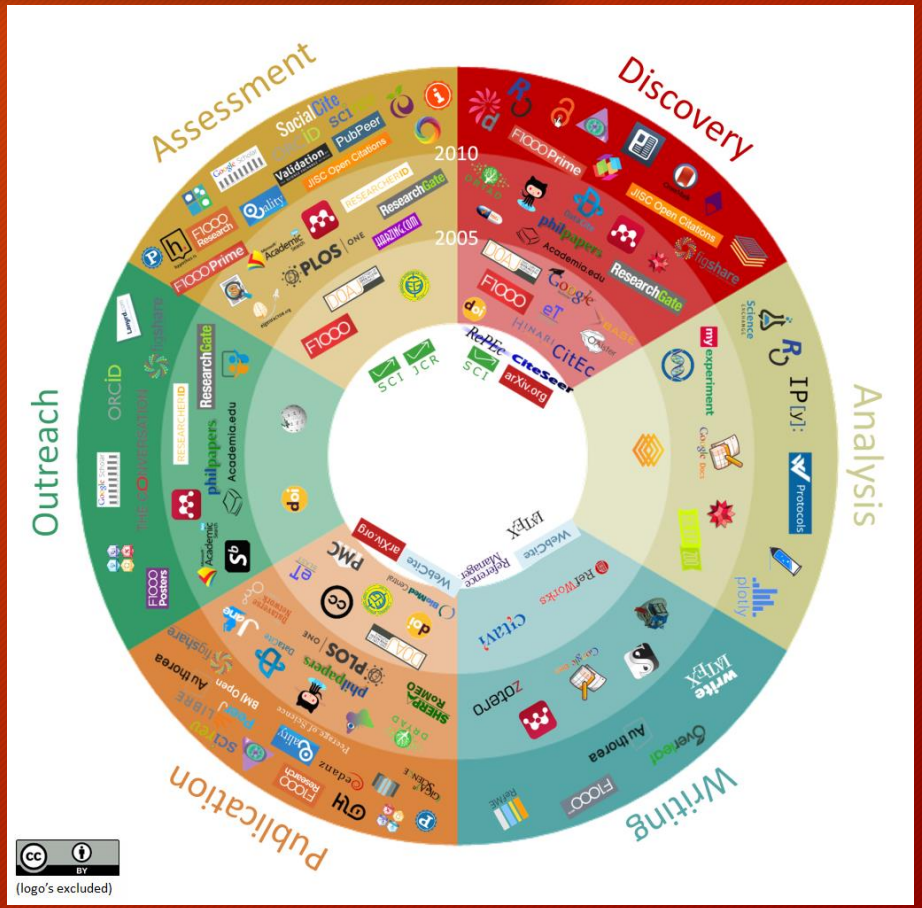
- Scholarly communication is the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use. The system includes both formal means of communication, such as publication in peer-reviewed journals, and informal channels, such as electronic mailing lists. This document addresses issues related primarily to the formal system of scholarly communication*.

- One of the fundamental characteristics of scholarly research is that it is created as a public good to facilitate inquiry and knowledge. A substantial portion of such research is publicly supported, either directly through federally-funded research projects or indirectly through state support of researchers at state higher-education institutions. In addition, the vast majority of scholars develop and disseminate their research with no expectation of direct financial reward.

* From the Association of College & Research Libraries (ACRL) a division of the American Library Association

Innovations in scholarly communication survey

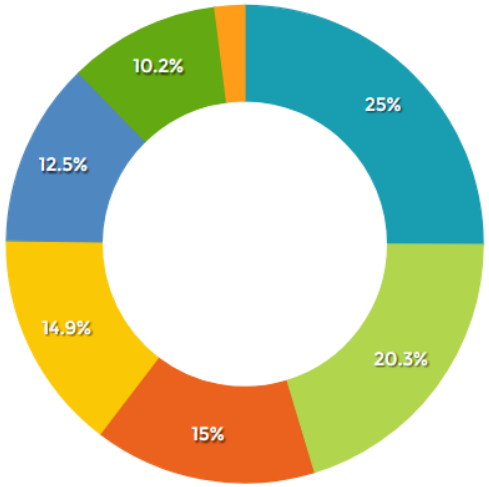
The University of Utrecht has carried out a survey* to chart the changing landscape of scholarly communication. The changes in this landscape are driven by technology, policies, and culture, but in the end only take place because researchers and other stakeholders decide to adapt their workflows or recommend changes to others. Thus, the developing landscape is for an important part expressed through changing tool usage. New tools are constantly being developed by researchers themselves, small start-ups or big players, that now offers over 600 of these tools. However, tool usage varies by field, country and position. This dashboard shows the 20,663 responses to the 2015-2016 survey Innovations in Scholarly Communication. The survey asked about tool usage for 17 research activities and stance about open access and open science.



(logo's excluded)

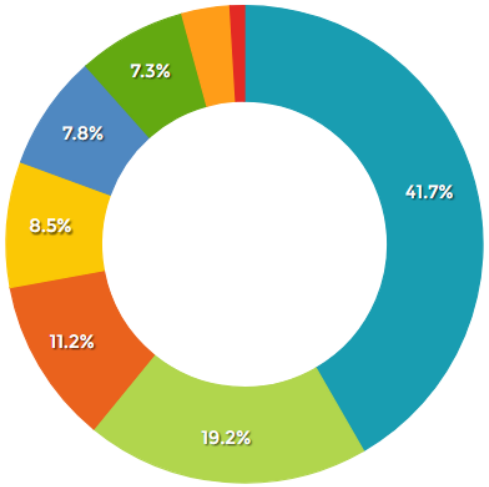
* https://101innovations.wordpress.com/survey-2015-2016/

Innovations in scholarly communication survey - results: Demographics



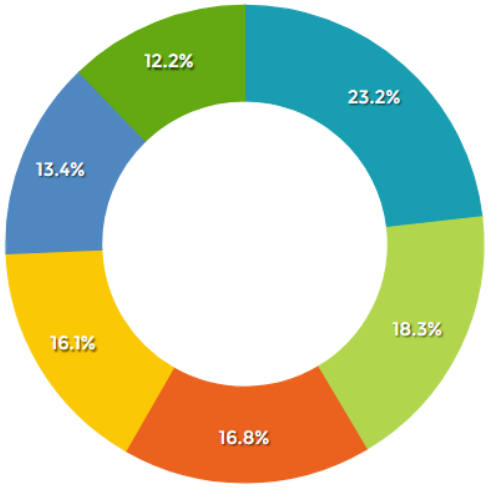
Discipline(s)

- Social Sciences & Economics
- Life Sciences
- Medicine
- Engineering & Technology
- Arts & Humanities
- Physical Sciences
- Law



Research role

- Professor / Associate professor / Assistant...
- PhD student
- Postdoc
- Bachelor/Master student
- Other
- Librarian
- Industry / Government
- Publisher



Year of first scholarly publication

- from 2011 to 2016
- from 2006 to 2010
- from 1991 to 2000
- I haven't published (yet)
- before 1991
- from 2001 to 2006

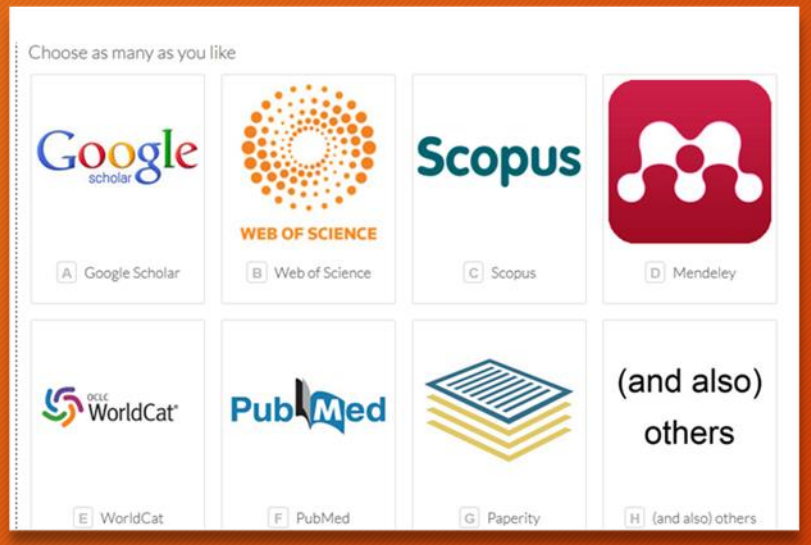
Innovations in scholarly communication - Discovery

- Search literature / data etc.
- Get access to literature etc.
- Get alerts / recommendations
- Read / view / annotate

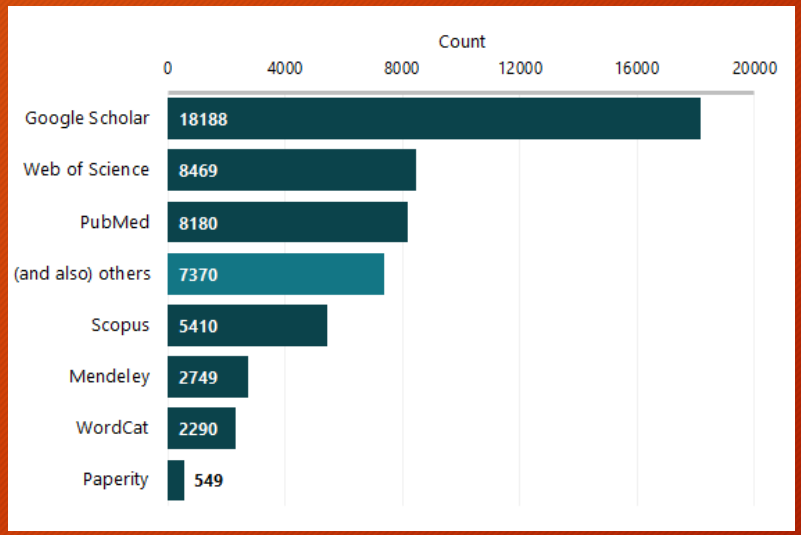
Innovations in scholarly communication - Discovery (1) - Search literature / data etc.

Question 1: What tools/sites do you use to search literature / data/etc.?

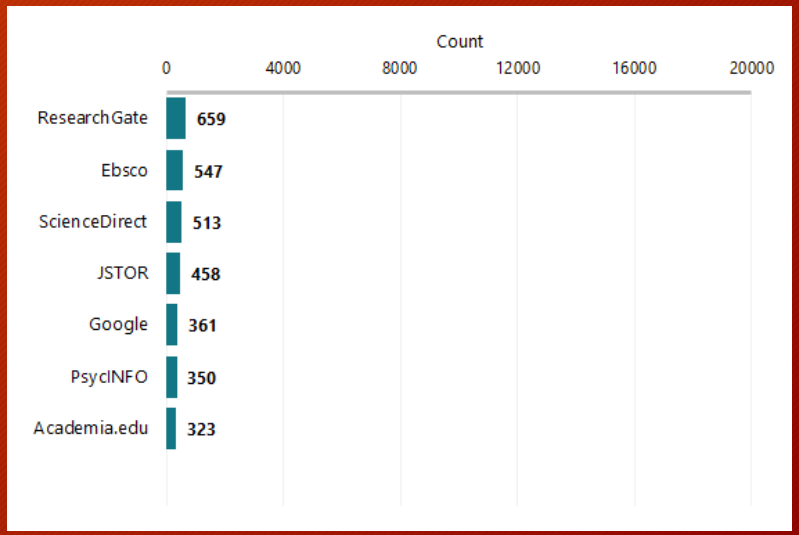
Tools/sites



Preset answers



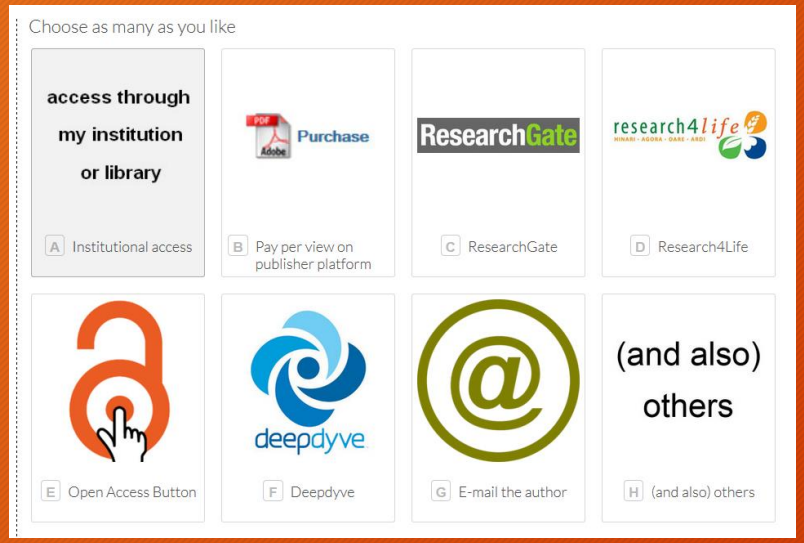
Others



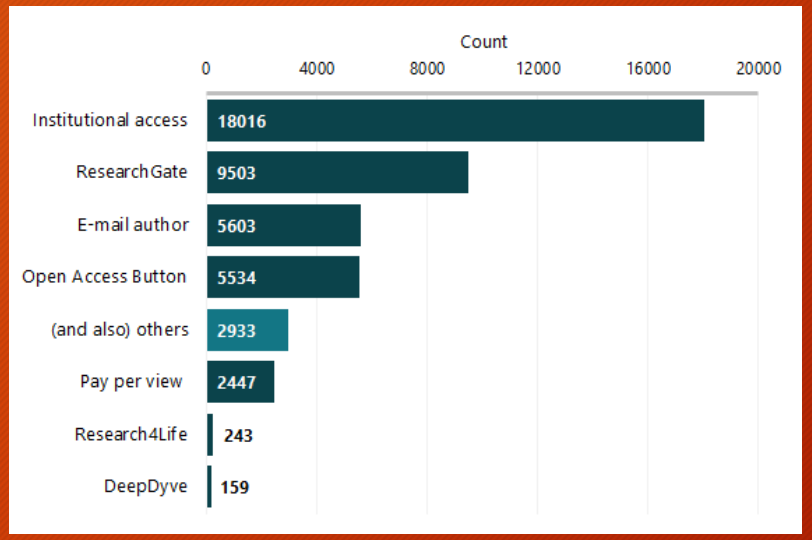
Innovations in scholarly communication - Discovery (2) - Get access to literature etc.

Question 2: What tools/sites do you use to get access to literature etc.?

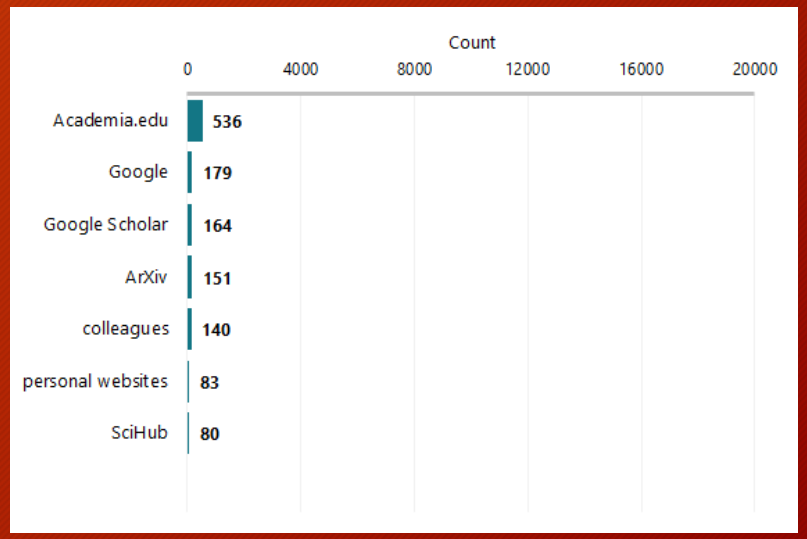
Tools/sites



Preset answers



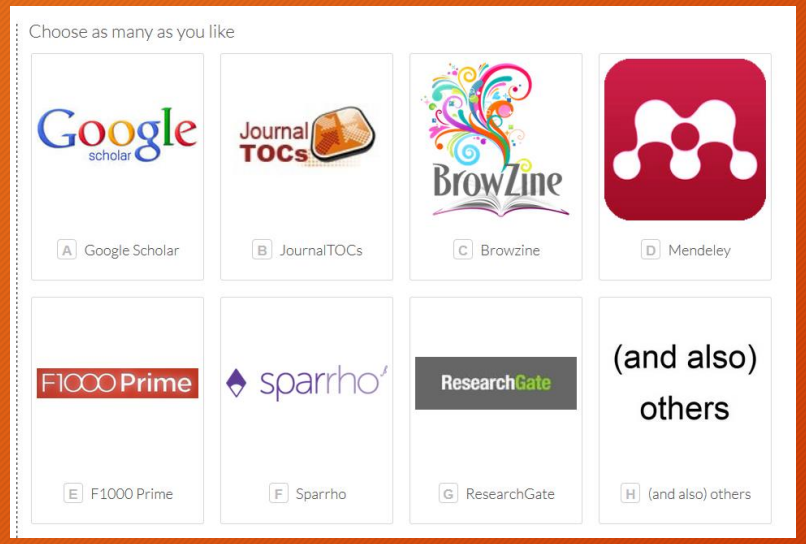
Others



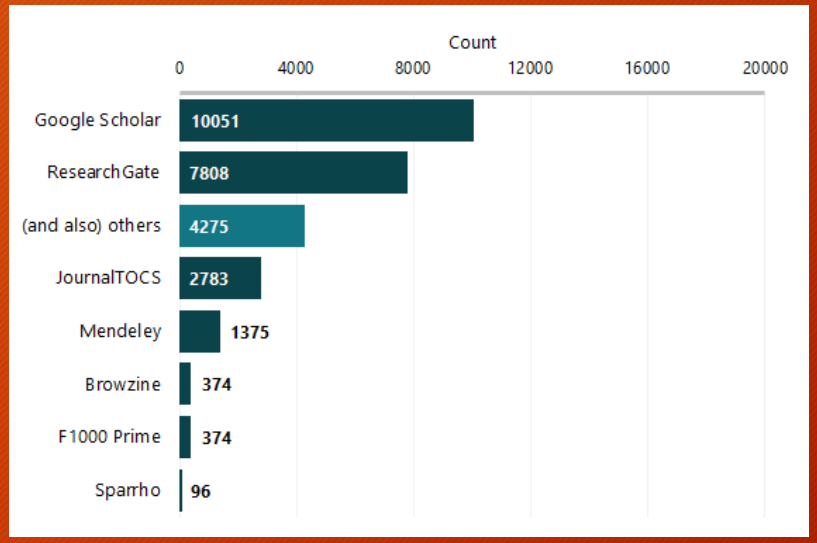
Innovations in scholarly communication - Discovery (3) - Get alerts / recommendations

Question 3: What tools/sites do you use to get alerts / recommendations?

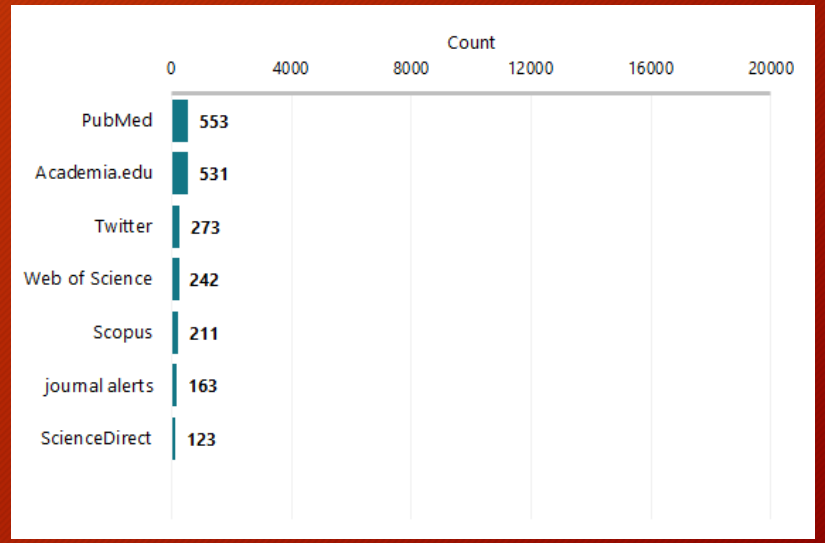
Tools/sites



Preset answers



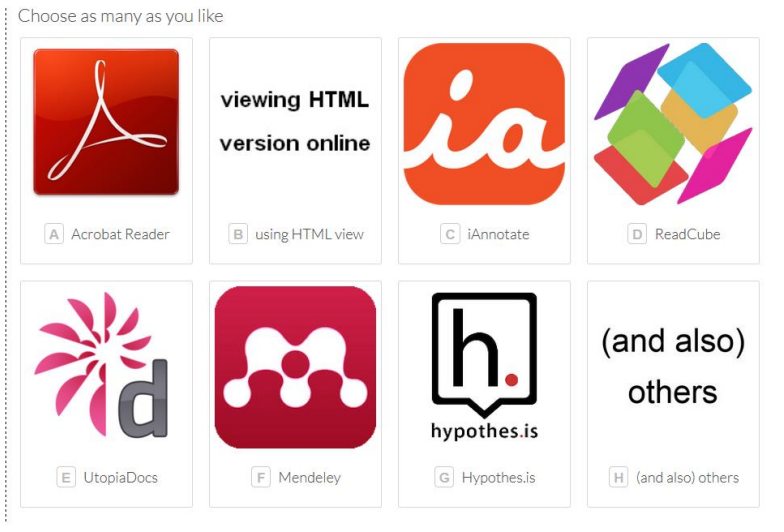
Others



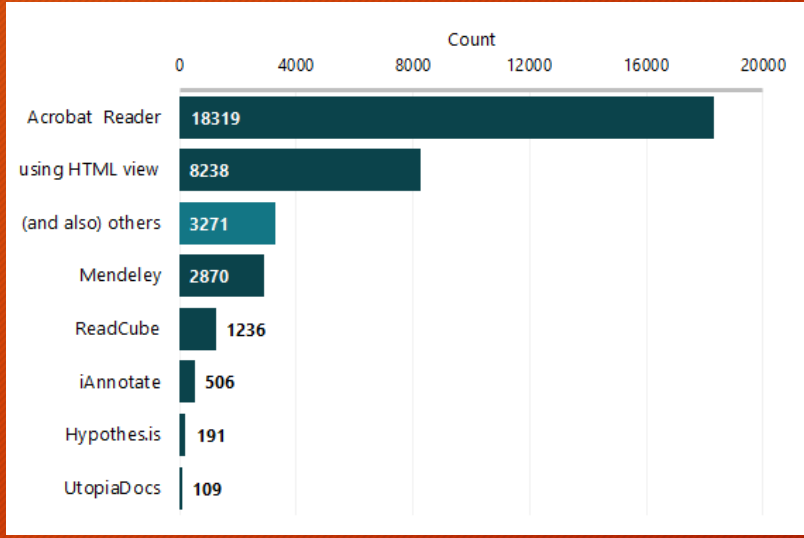
Innovations in scholarly communication - Discovery (4) - Read / view / annotate

Question 4: What tools/sites do you use to read/view/annotate?

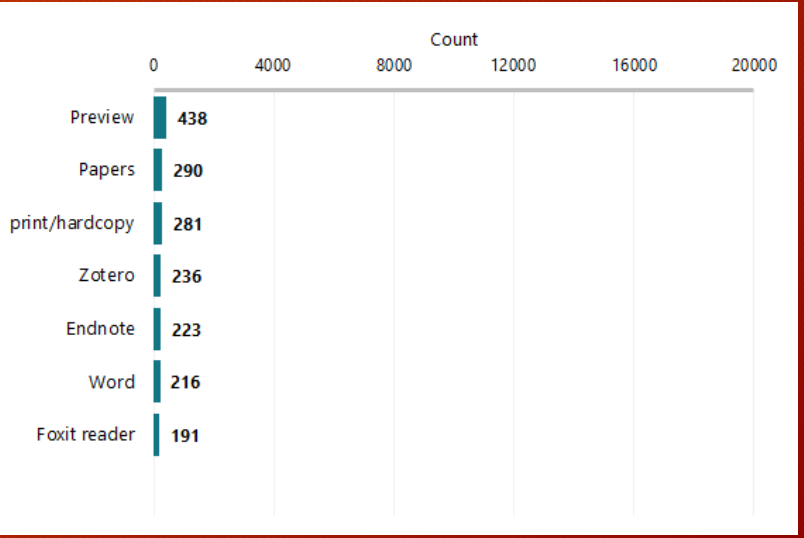
Tools/sites



Preset answers



Others



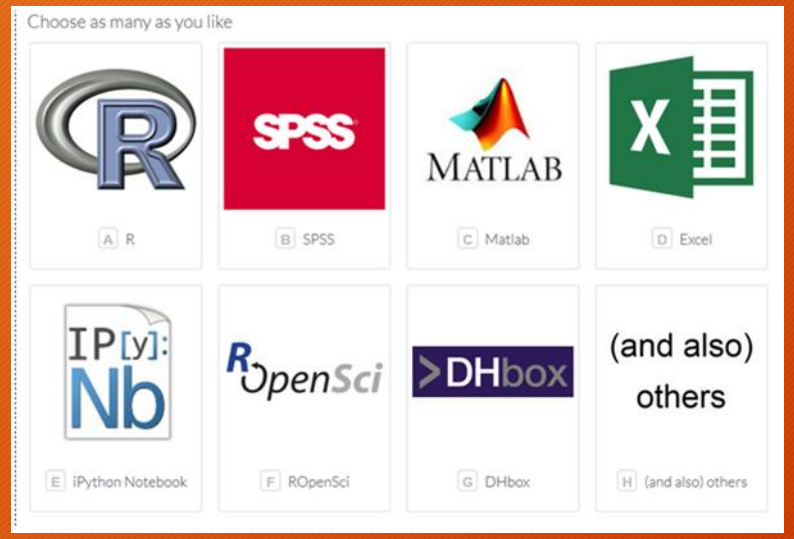
Innovations in scholarly communication - Analysis

- Analyze data / text
- Share notebooks / protocols / workflows

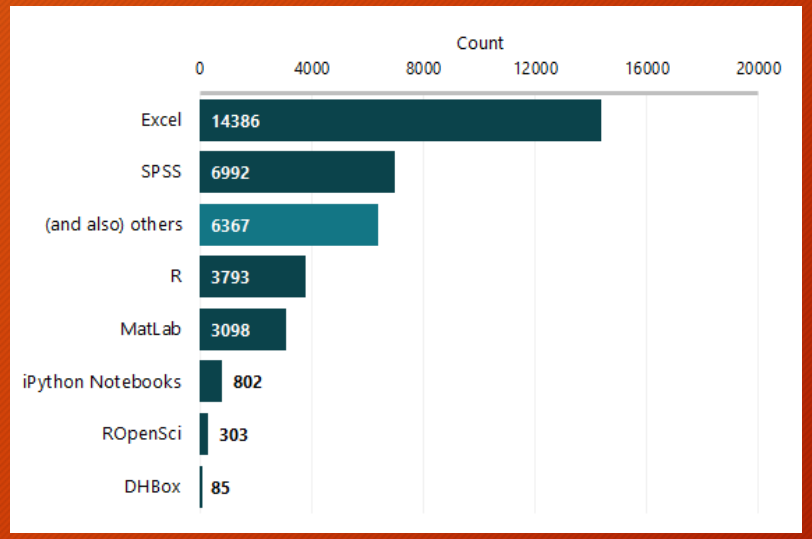
Innovations in scholarly communication - Analysis (1) - Analyze data / text

Question 1: What tools/sites do you use to analyze data/text etc.?

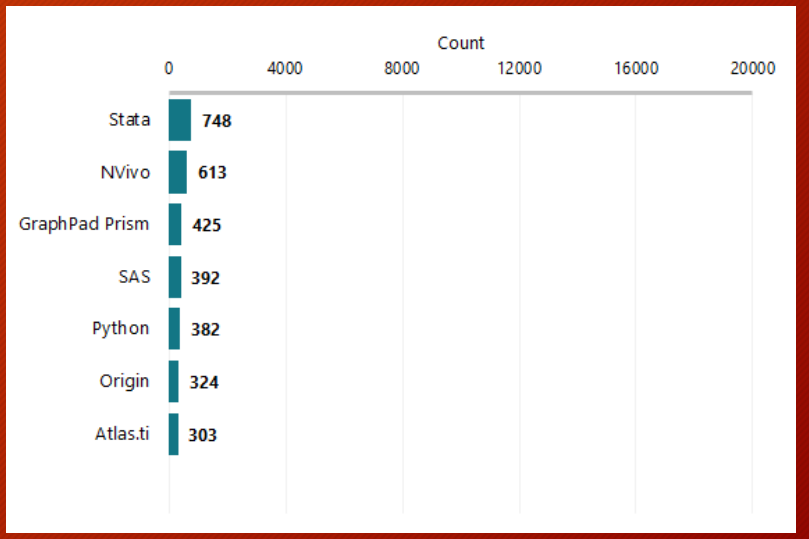
Tools/sites



Preset answers



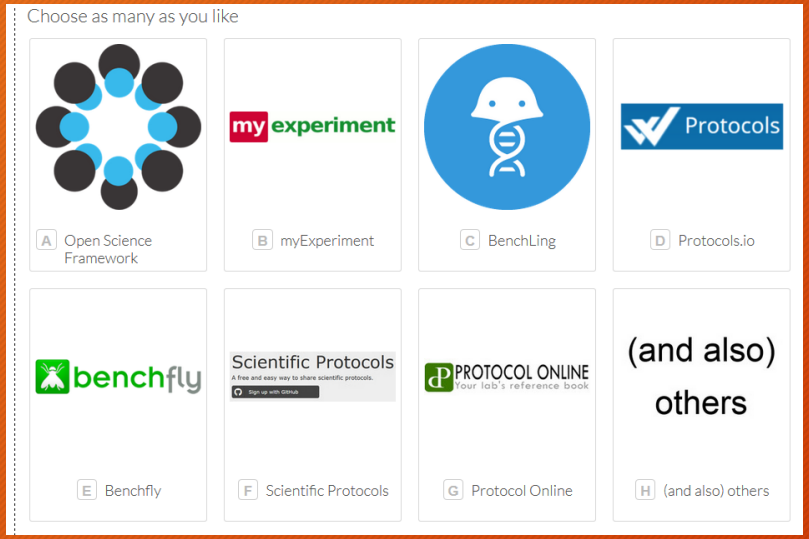
Others



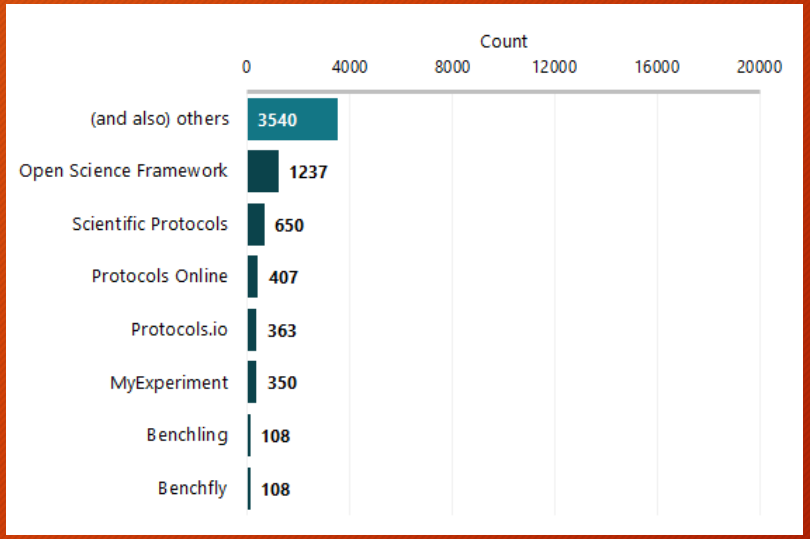
Innovations in scholarly communication - Analysis (2) - Share notebooks / protocols / workflows

Question 2: What tools/sites do you use to share notebooks/protocols/workflow?

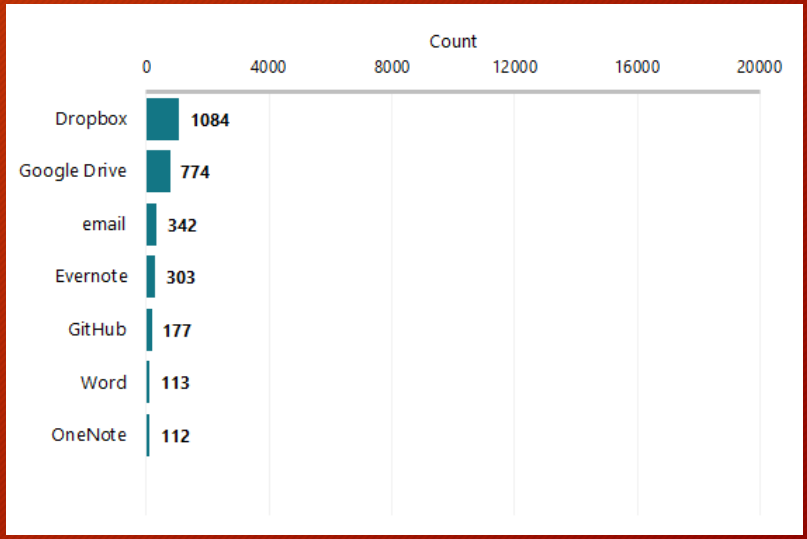
Tools/sites



Preset answers



Others



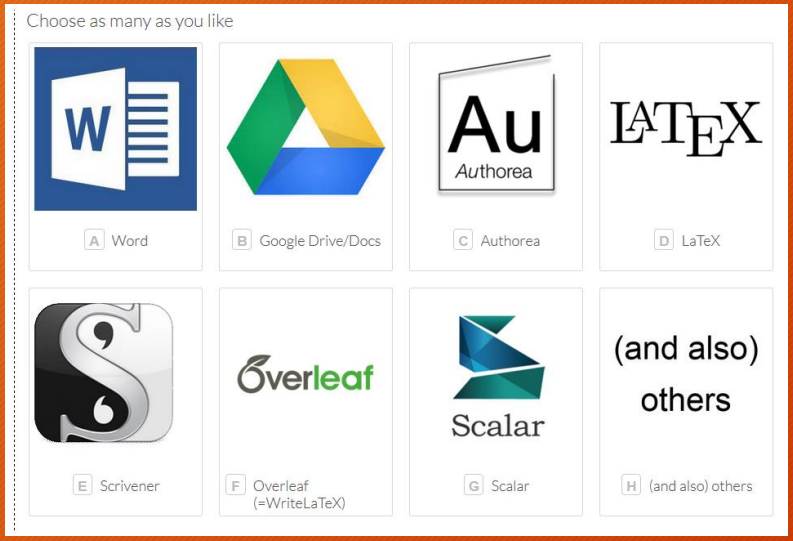
Innovations in scholarly communication - Writing

- Write / prepare manuscript
- Reference management

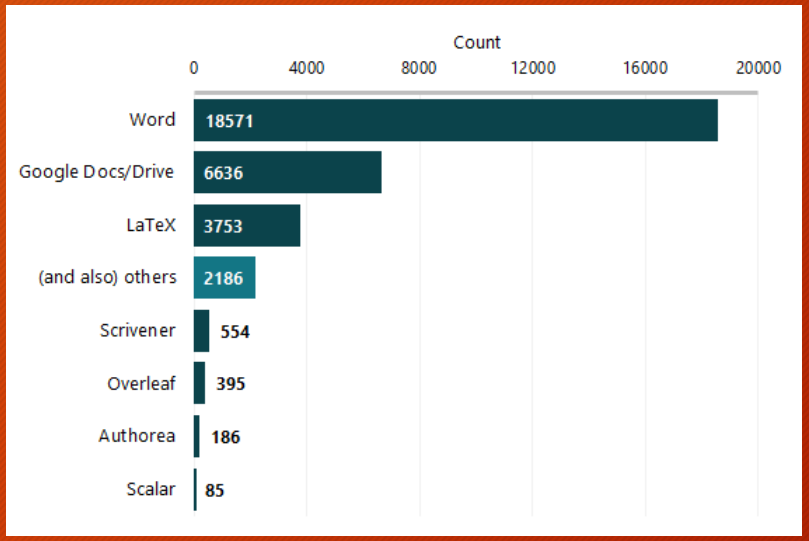
Innovations in scholarly communication - Writing (1) - Write / prepare manuscript

Question 1: What tools/sites do you use to write / prepare manuscript?

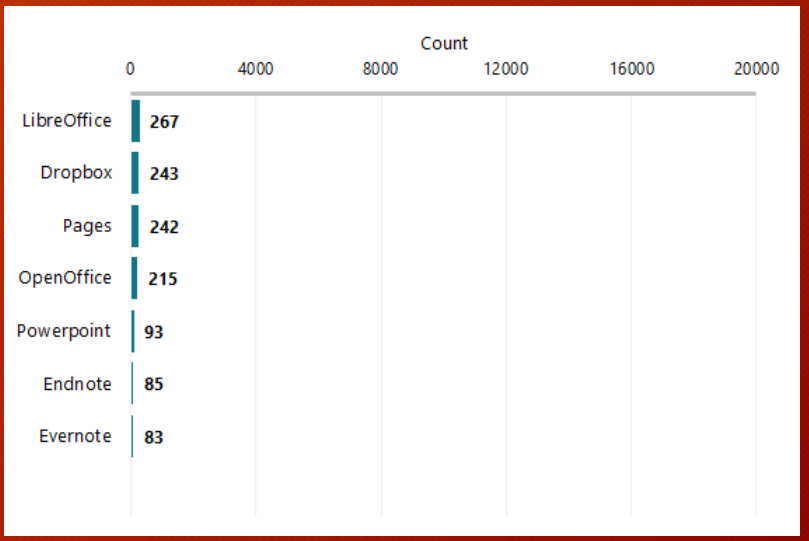
Tools/sites



Preset answers



Others

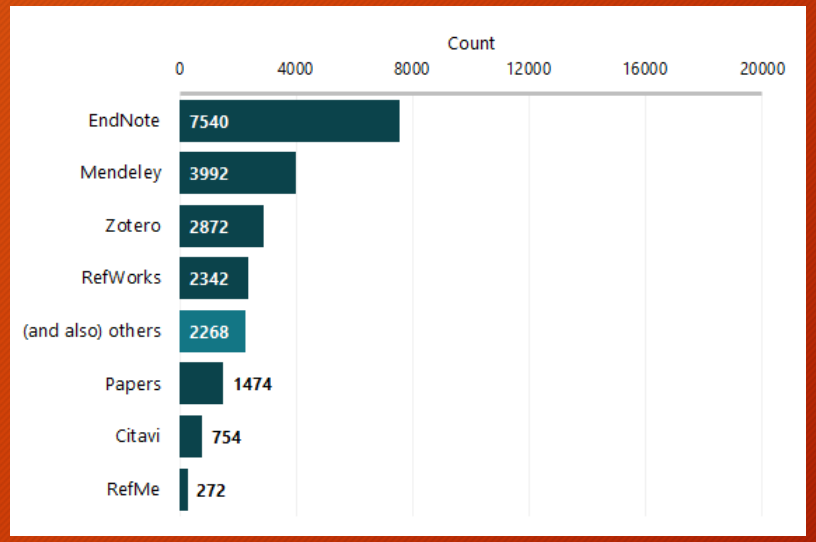


Innovations in scholarly communication - Writing (2) - Reference management

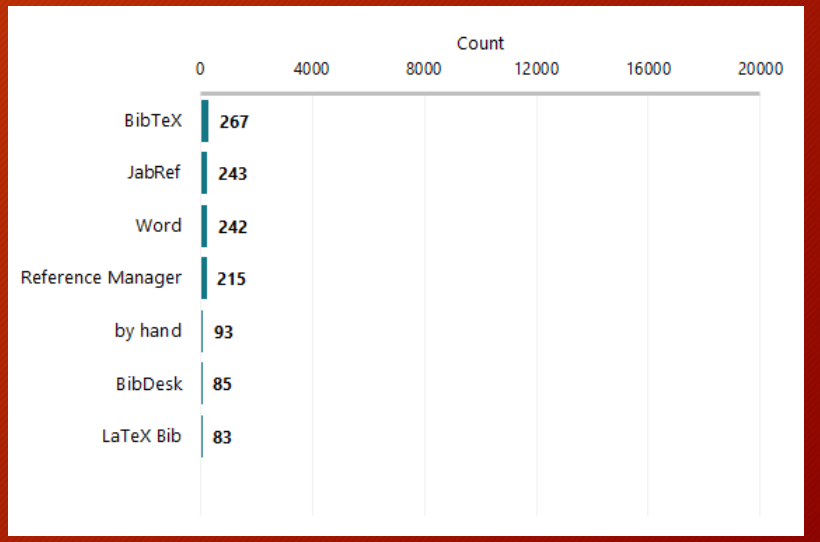
Question 2: What tools/sites do you use for reference management?

Tools/sites

Preset answers



Others



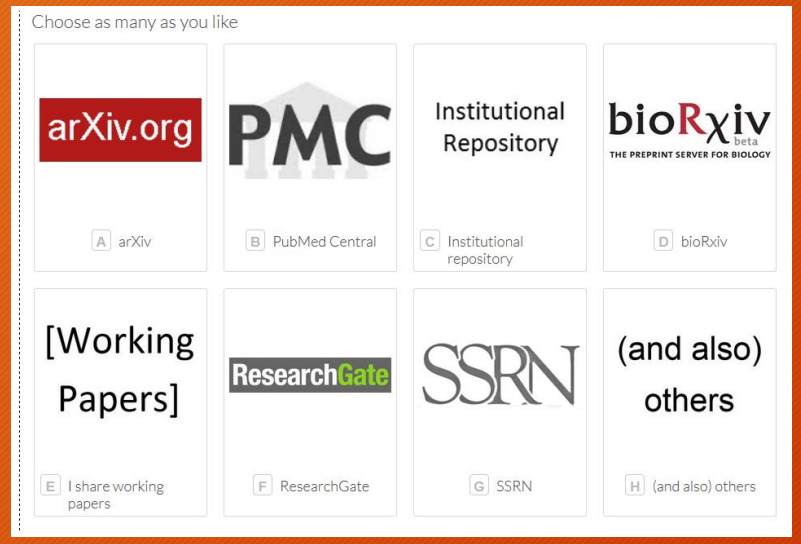
Innovations in scholarly communication - Publication

- Archive / share publications
- Archive / share data & code
- Select journal to submit to
- Publish

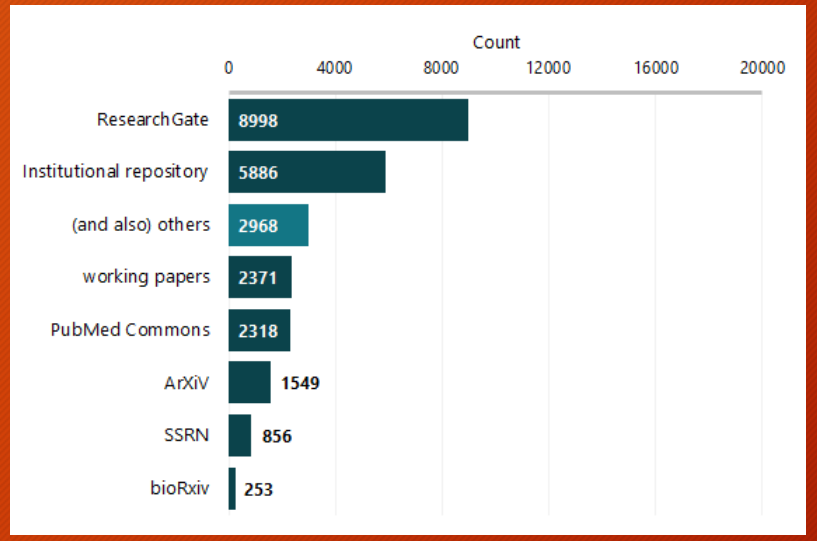
Innovations in scholarly communication - Publication (1) - Archive/share publications

Question 1: What tools/sites do you use to archive / share publications?

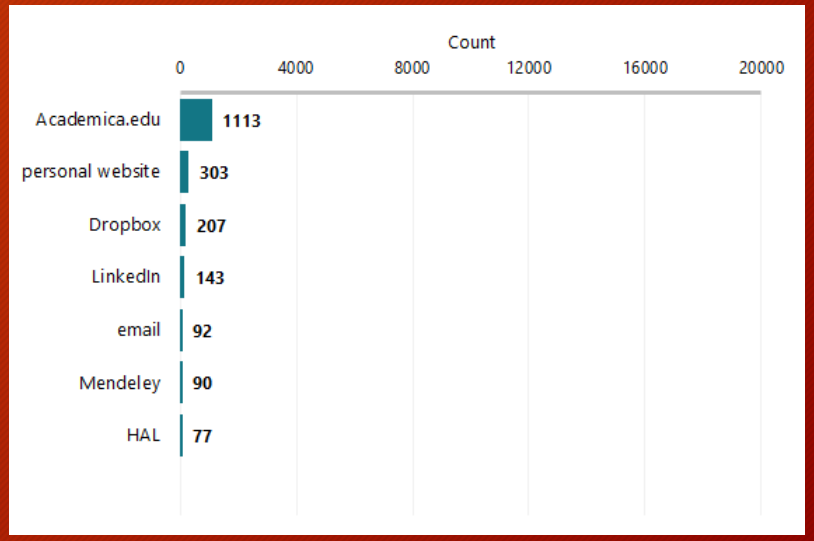
Tools/sites



Preset answers



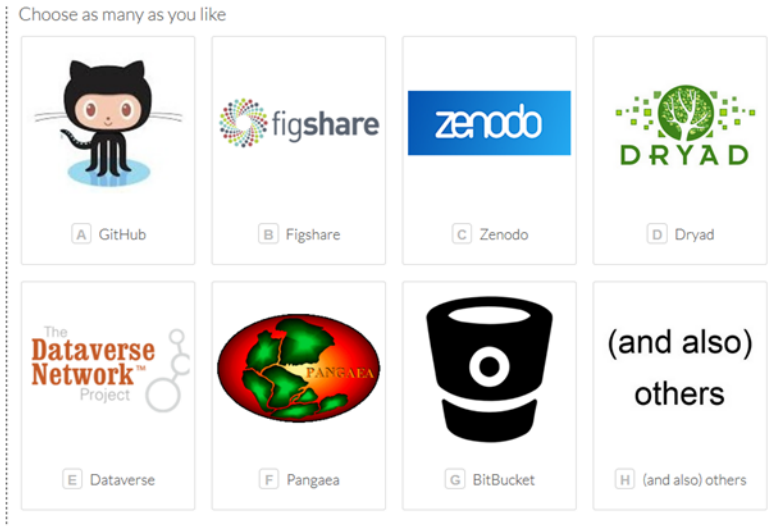
Others



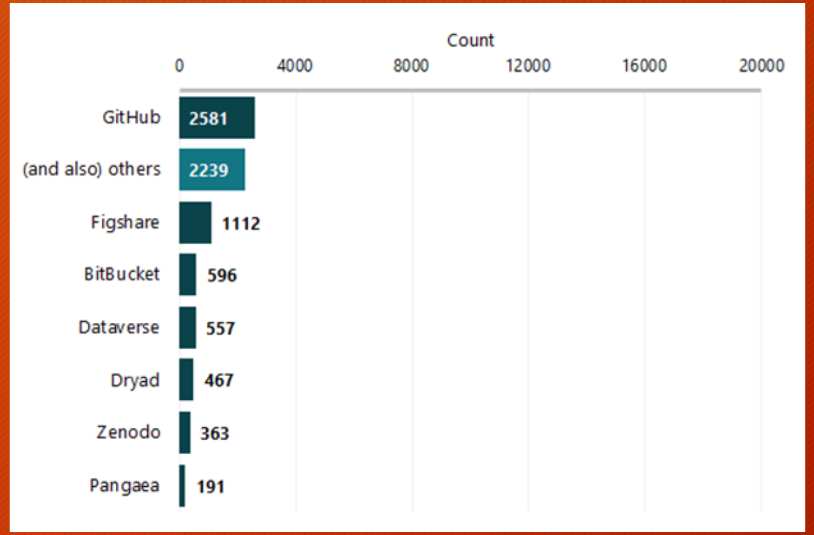
Innovations in scholarly communication – Publication (2) - Archive / share data & code

Question 2: What tools/sites do you use to archive / share data & code?

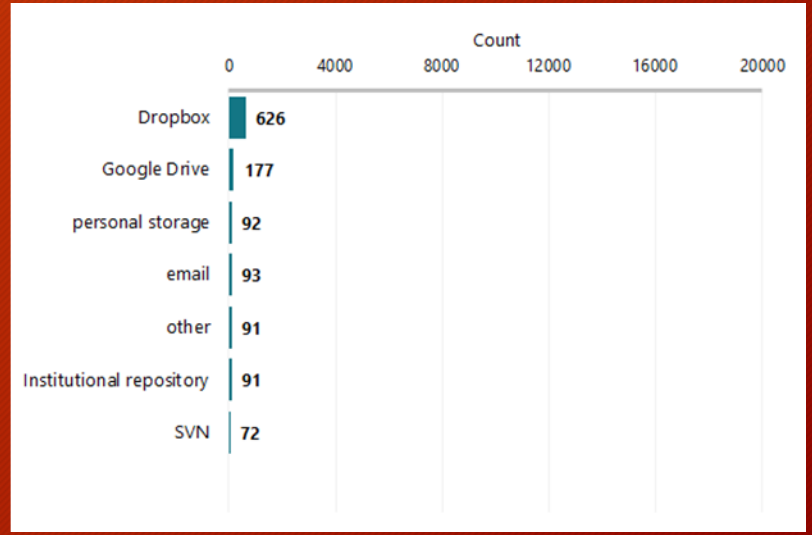
Tools/sites



Preset answers



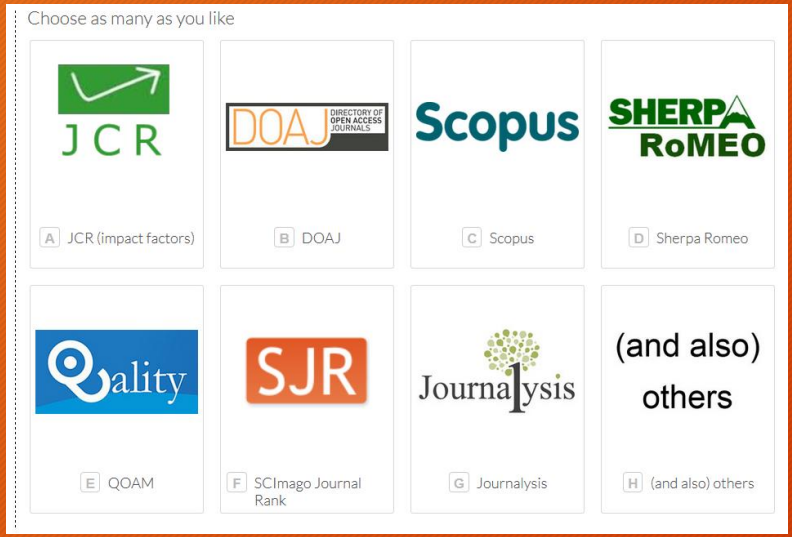
Others



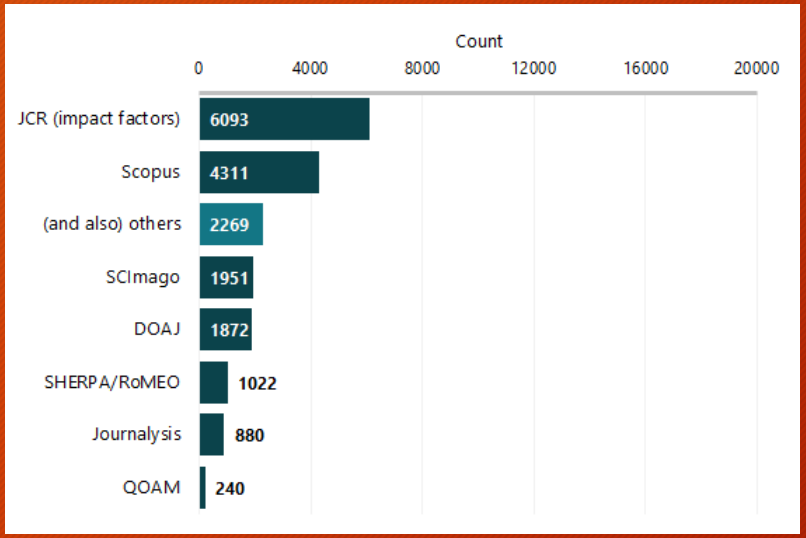
Innovations in scholarly communication – Publication (3) - Select journal to submit to

Question 3: What tools/sites do you use to decide which journal to submit your manuscript to?

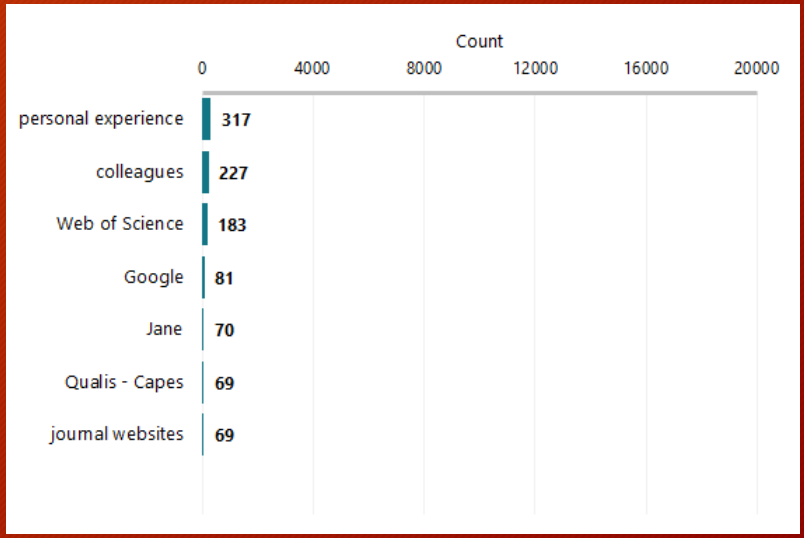
Tools/sites



Preset answers



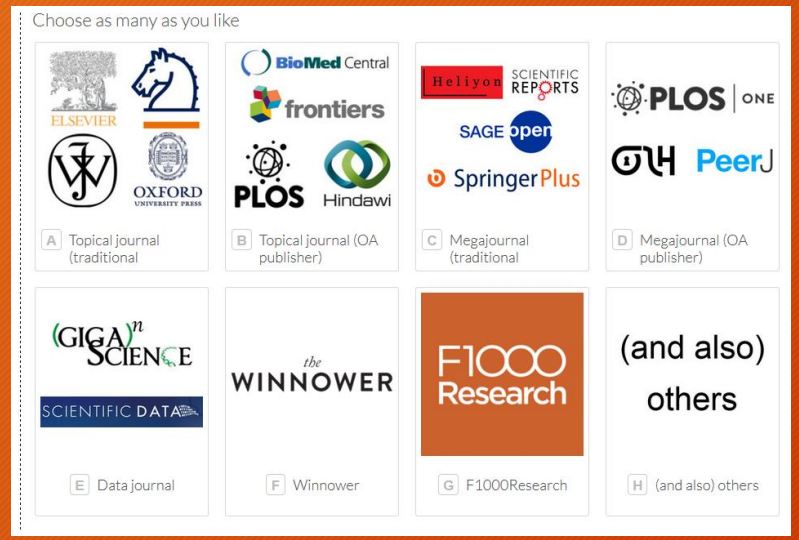
Others



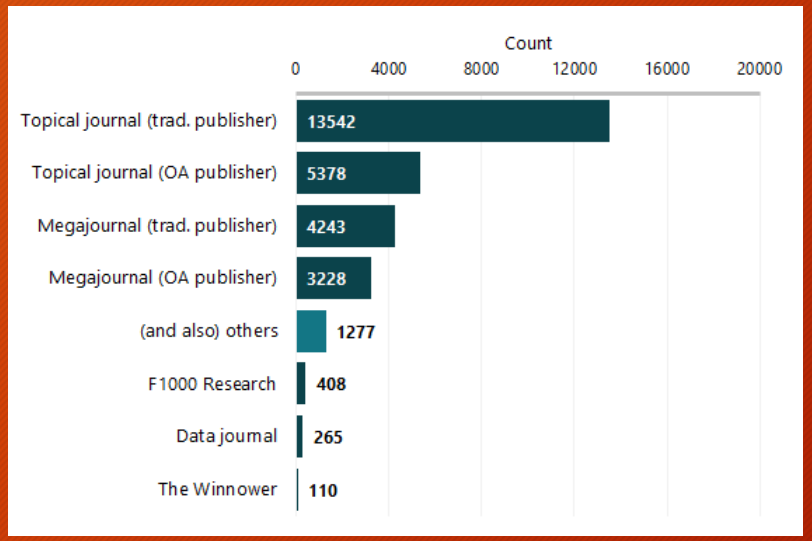
Innovations in scholarly communication – Publication (4) - Publish

Question 4: What tools/sites do you use to publish?

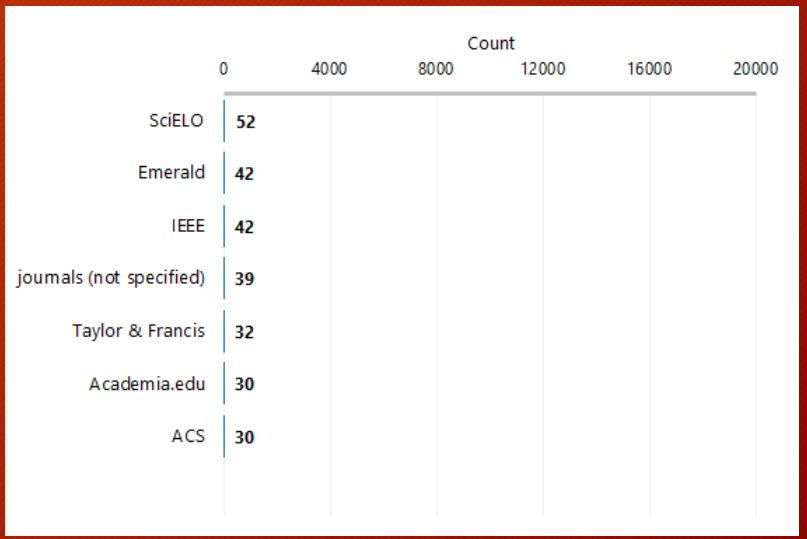
Tools/sites



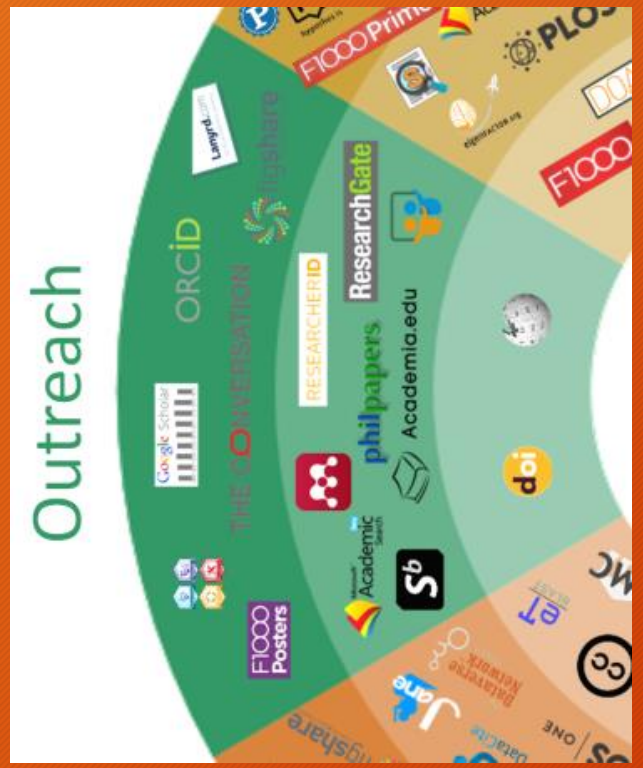
Preset answers



Others



Innovations in scholarly communication - Outreach

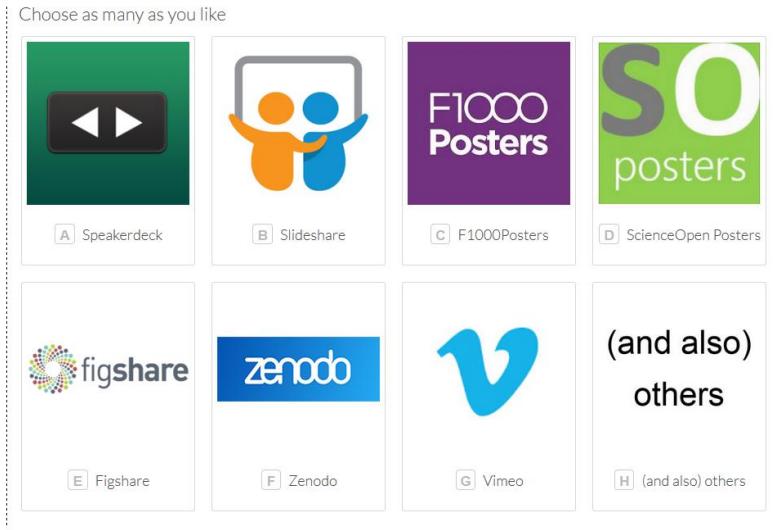


- Archive / share posters & presentations
- Tell about research outside academia
- Researcher profiles

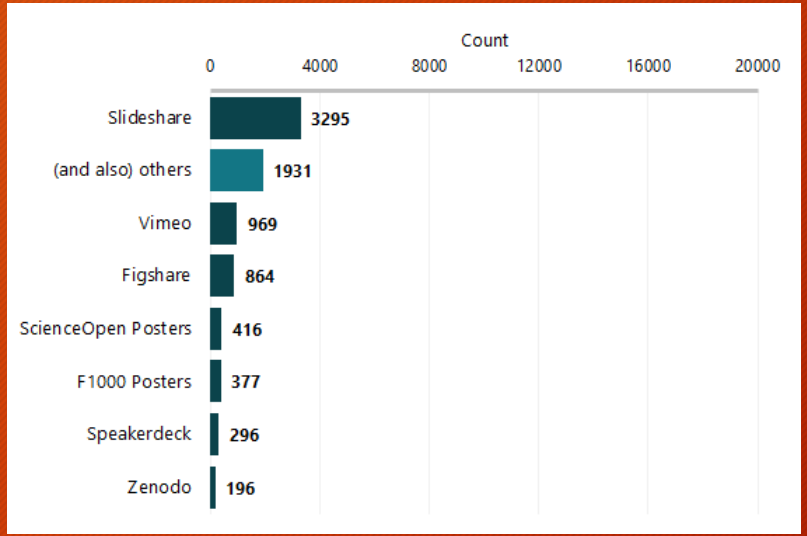
Innovations in scholarly communication - Outreach (1) - Archive / share posters & presentations

Question 1: What tools/sites do you use to archive/share posters & presentation?

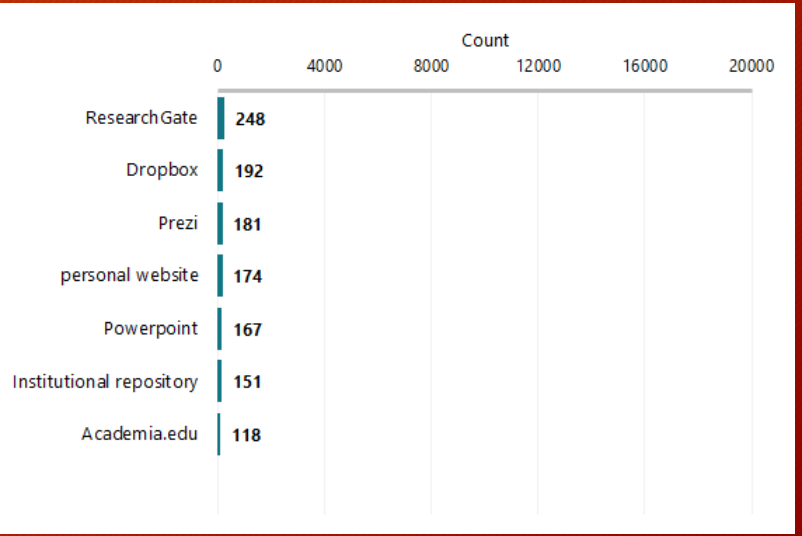
Tools/sites



Preset answers



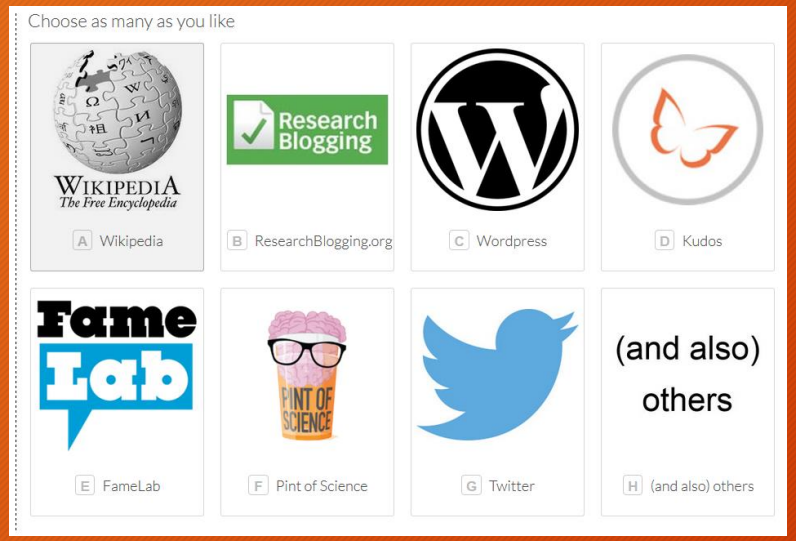
Others



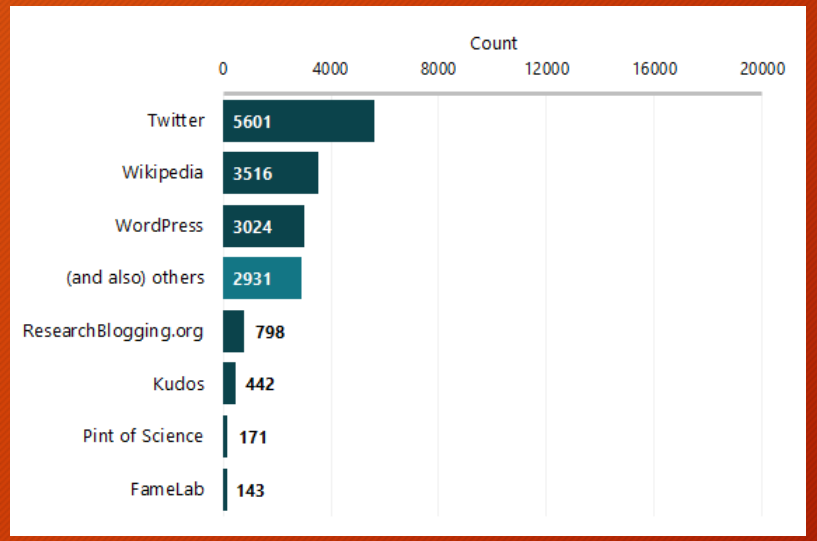
Innovations in scholarly communication - Outreach (2) - Tell about research outside academia

Question 2: What tools/sites do you use to tell about your research outside academia?

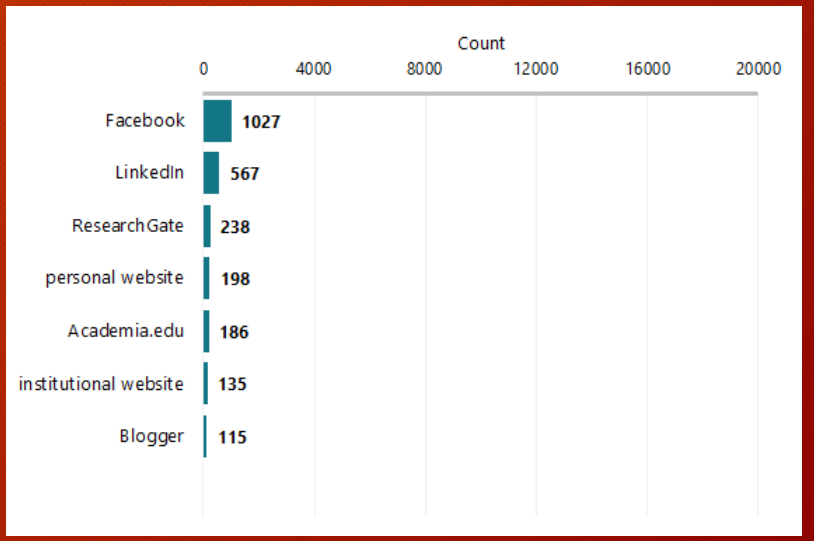
Tools/sites



Preset answers



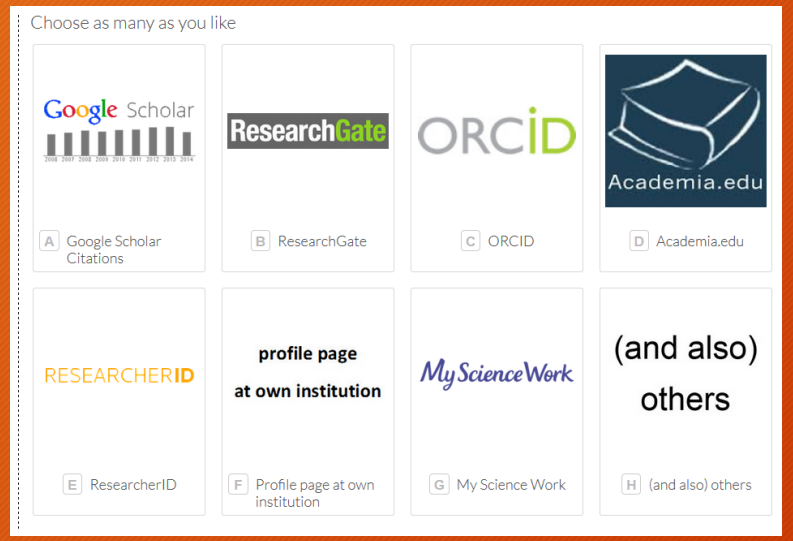
Others



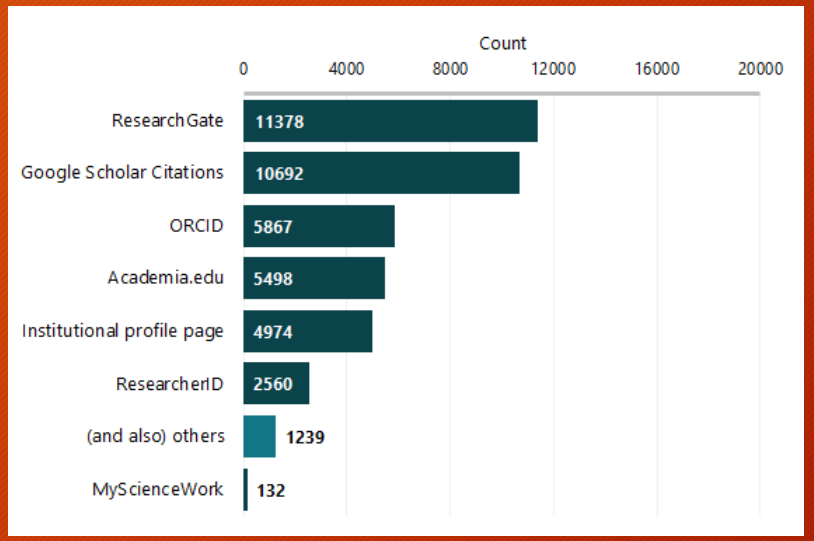
Innovations in scholarly communication – Outreach (3) - Researcher profiles

Question 3: What researcher profile do you use?

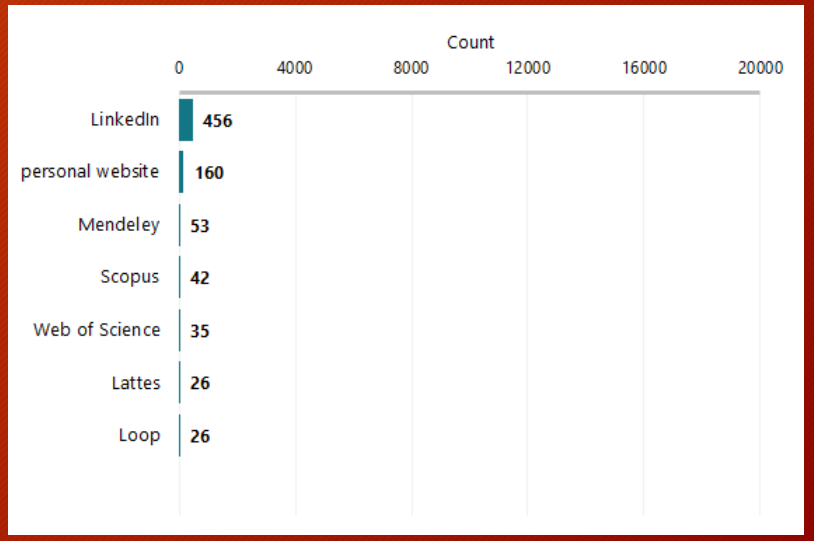
- Profiles



- Preset answers



Others



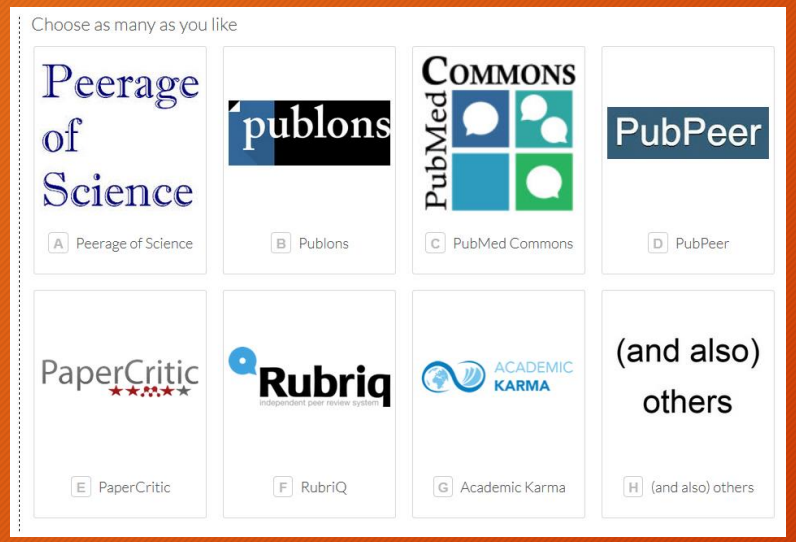
Innovations in scholarly communication - Assessment

- Peer review beyond that organized by journals
- Measure impact

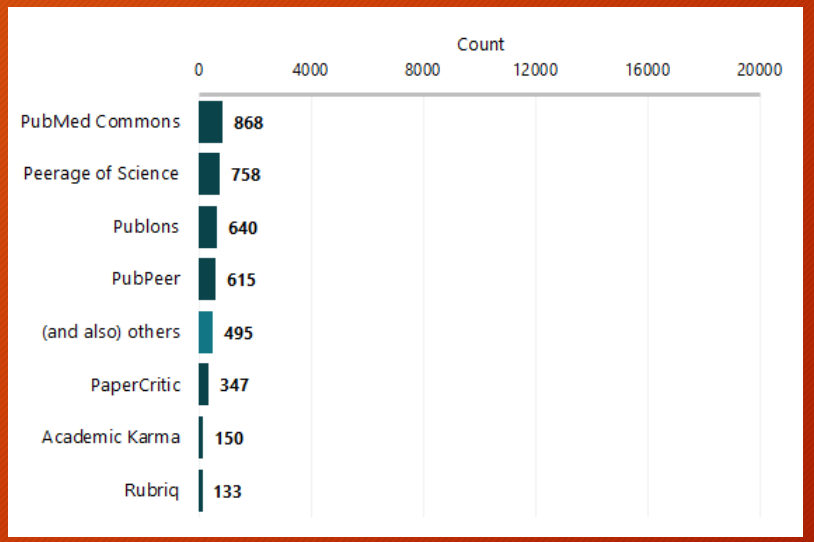
Innovations in scholarly communication - Assessment (1) - Peer review beyond that organized by journals

Question 1: What tools/sites do you use for peer review beyond that organized by journals?

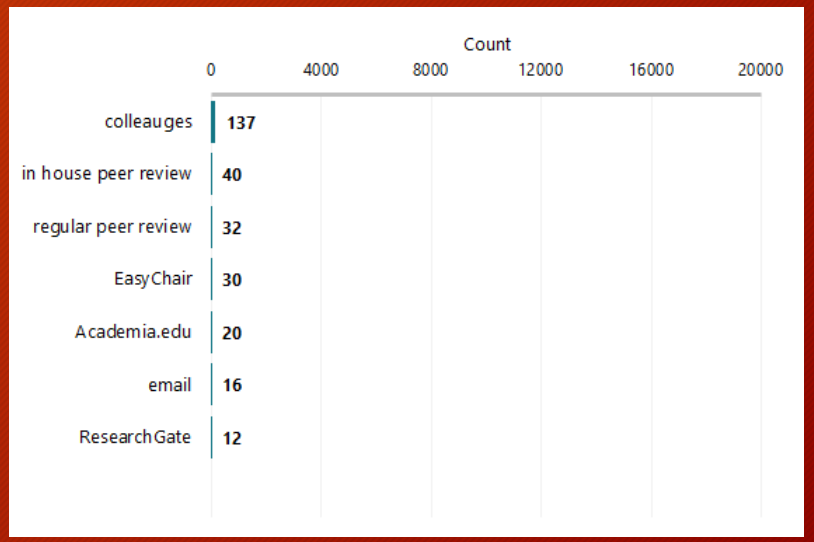
Tools/sites



Preset answers



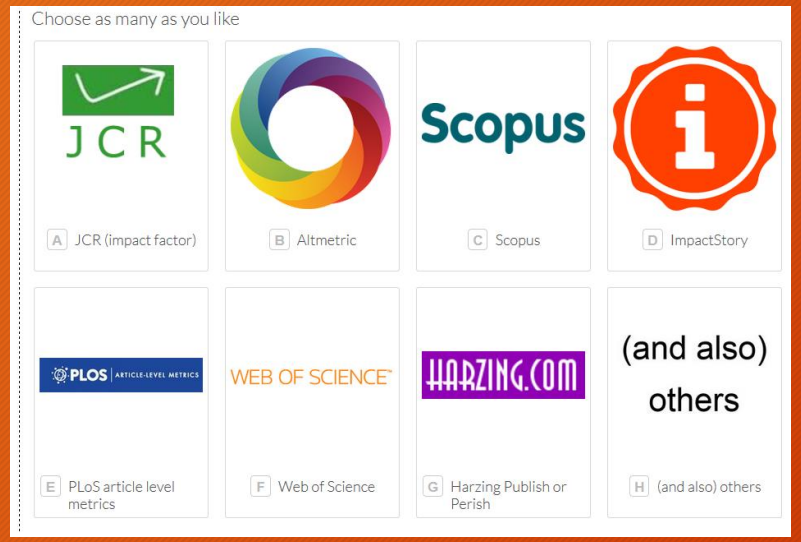
Others



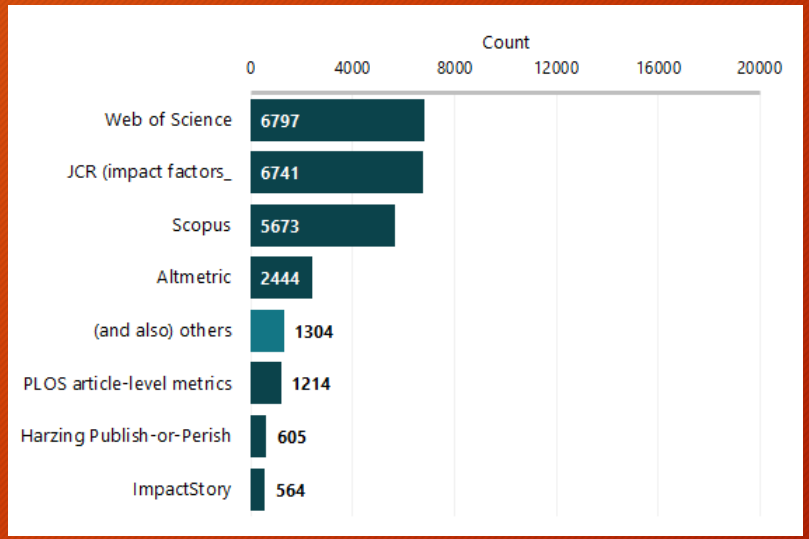
Innovations in scholarly communication - Assessment (2) - Measure impact

Question 2: What tools/sites do you use to mesure impact?

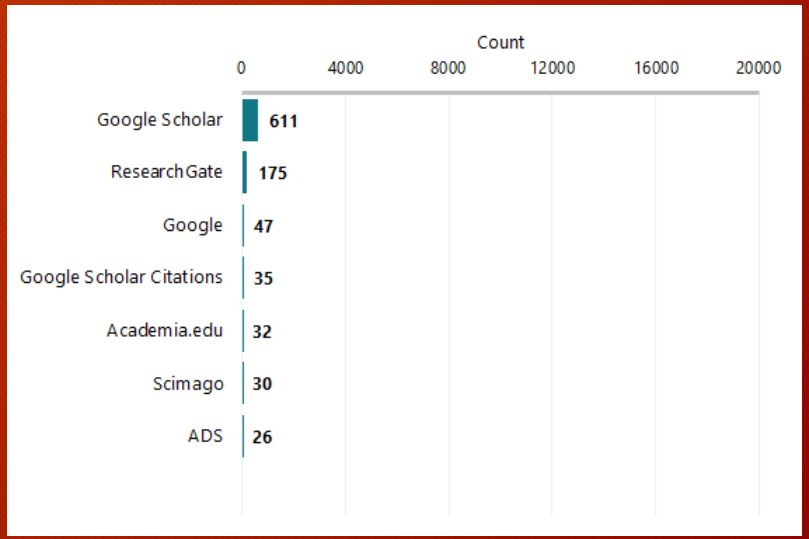
Tools/sites



Preset answers



Others



Open Access

The term Open Access was born in the international context of scientific research that is developing in Europe. It is a method of scientific publication that encourages scientists, researchers and scholars to disclose their research works, making them freely accessible both by depositing their work in an open archive through a process known as self-archiving (self-archiving), and by publishing their work in open access periodicals, i.e. those periodicals that offer free and unrestricted use of the articles after the regular quality validation process (peer reviewed). It is now undisputed that in order to have an "impact factor", a wide dissemination is necessary; in other words, the published works must be read, cited and reworked by other researchers.

One of the two objectives of Open Access concerns the creation of open archives (Open Archives) within universities and research institutions, useful for the collection, storage and dissemination of the material produced by the research.

The e-prints archives are servers that allow authors to make their works freely available to the international scientific community, distributing them on a global scale (which is unattainable for a traditional paper work).

- Open Access (OA) is a way of publishing the material produced by research, such as scientific articles published in academic journals or conference papers, but also book chapters, monographs, or experimental data; which allows free and unrestricted access. Given the contrast between the open access publication model and the classic one, in which academic publishing houses typically have exclusive rights to the material and sell subscriptions and licenses, the expression also indicates the movement that supports and promotes the open access strategy . In an even wider sense, the term expresses the free online availability of digital content in general and concerns the set of knowledge and creativity that can be freely used, as it is not covered by restrictions related to intellectual property.
- One of the first important international declarations on OA is the Budapest Open Access Initiative in 2001. It is in fact recognized as the first historical meeting of the foundation of Open Access.
- A second major international initiative, in 2003, is the Berlin Declaration on open access to scientific literature. It is built and based on the definition of the Budapest conference. This statement founded the Open Access movement. The Italian universities joined to the Berlin Declaration in November 2004, on the occasion of the conference "Italian universities for Open Access: towards open access to research literature" in Messina: in fact for Italy we speak of the Declaration of Messina.

The procedure defined as "self-archiving", involves sending the article by the author to a peer-reviewed journal (traditional or open access model), together with the filing in the archive. Through self-archiving or self-filing, the authors feed the archives and the librarians check the correctness of the data, while the quality of the data or contents is guaranteed by the review of the articles by the magazines.

Open access as a whole develops on three fronts:

1. A technological front with the Open Archives Initiative.
2. A political front with a series of initiatives aimed at raising public awareness of Open Access (Budapest Open Access Initiative, SPARC, Public Library of Science) issues.
3. A more properly editorial front with the birth of "open" magazines. publish his work

Open Access Journals

Open access journals are full-text publications accessible for free online. The publishers of these magazines, in fact, use alternative economic models to the subscription: funding from institutions or the "author pays" system with which they are the same authors (or rather the institutions that finance research) that pay to allow free access to their articles. Furthermore, these magazines do not require authors to assign copyright. For example, the magazines of the Public Library of Science (PLoS) and of BioMed Central. Lots of commercial publishers such as Springer, Blackwell and Oxford University Press have recently been experimenting with this new funding model.

Open Access combats the paradox of intellectual property in the circuit of scientific communication which hinders the processes of growth and development of science, while at the same time trying to stem the bleeding of economic expenditure for scientific literature. Currently, about two million articles are published each year, held "prisoners" in paid scientific journals. Scientific growth is a slow and tortuous path that can benefit from the contribution of each of us. To this end, open access constitutes an invitation to publish any significant scientific contribution.

PKP (Public Knowledge Project) Open Journal System

- The public knowledge project is a non-profit research initiative focused on the importance of making publicly funded research results freely available through open access policies and on developing strategies to make it possible, including software solutions. It is a partnership between the Faculty of Education of the University of British Columbia, the Canadian Center for Studies in Publishing at Simon Fraser University, the University of Pittsburgh, the Ontario Council of University Libraries, the California Digital Library and the Stanford University School of Education. It seeks to improve the academic and public quality of academic research by developing innovative online environments.
- The PKP software suite includes four separate, but related, applications to demonstrate the feasibility of open access: the Open Journal systems, the Open Conference systems, the PKP Open Archives Harvester and the Open Monograph Press. PKP briefly experimented with a fifth application, Lemon8-XML, but has since decided to incorporate XML functionality into existing applications. All products are open source and freely available to anyone interested in using them. They share similar technical requirements (PHP, MySQL, Apache or Microsoft IIS 6 and a Linux, BSD, Solaris, Mac OS X or Windows operating system) and require only a minimum of technical experience to be operational. In addition, the software is well supported by a free online support forum and an increasing number of publications and documentation is available on the project website.

Public Knowledge Project

pkp.sfu.ca

App Collegamenti Nagios OWGM --- The unOfficial Ki... login WebMail - CNR Are... Mutua MBA - Affid... NGFW Authenticati... Apache Guacamole

PKP
PUBLIC KNOWLEDGE PROJECT

Software Research Community Services Support

PKP is a multi-university initiative developing (free) open source software and conducting research to improve the quality and reach of scholarly publishing

LATEST NEWS

OJS in the Online Classroom: Engaging Students with Course Journals

As post-secondary instructors adapt to providing online instruction for the foreseeable future, many are looking for new ways to engage with students in an online environment. Course journal projects, using Open Journal Systems (OJS), can offer one such opportunity.

Read More →

More News

- Is Your Journal Accessible? Working With Community to Make OJS Open for All
- World Book and Copyright Day
- The Road to Preprints (Part 3): Metadata Matters

More News →

OUR SOFTWARE

Open Journal Systems

OJS is the world's most widely used journal management and publishing system.

Open Monograph Press

OMP establishes an online workspace for editing and publishing books.

Open Conference Systems

OCS offers a complete Web presence for scholarly conferences.

Open Harvester Systems

OHS is an indexing system for OJS, OCS and other online resources.

Scrivi qui per eseguire la ricerca

23:19
15/06/2020

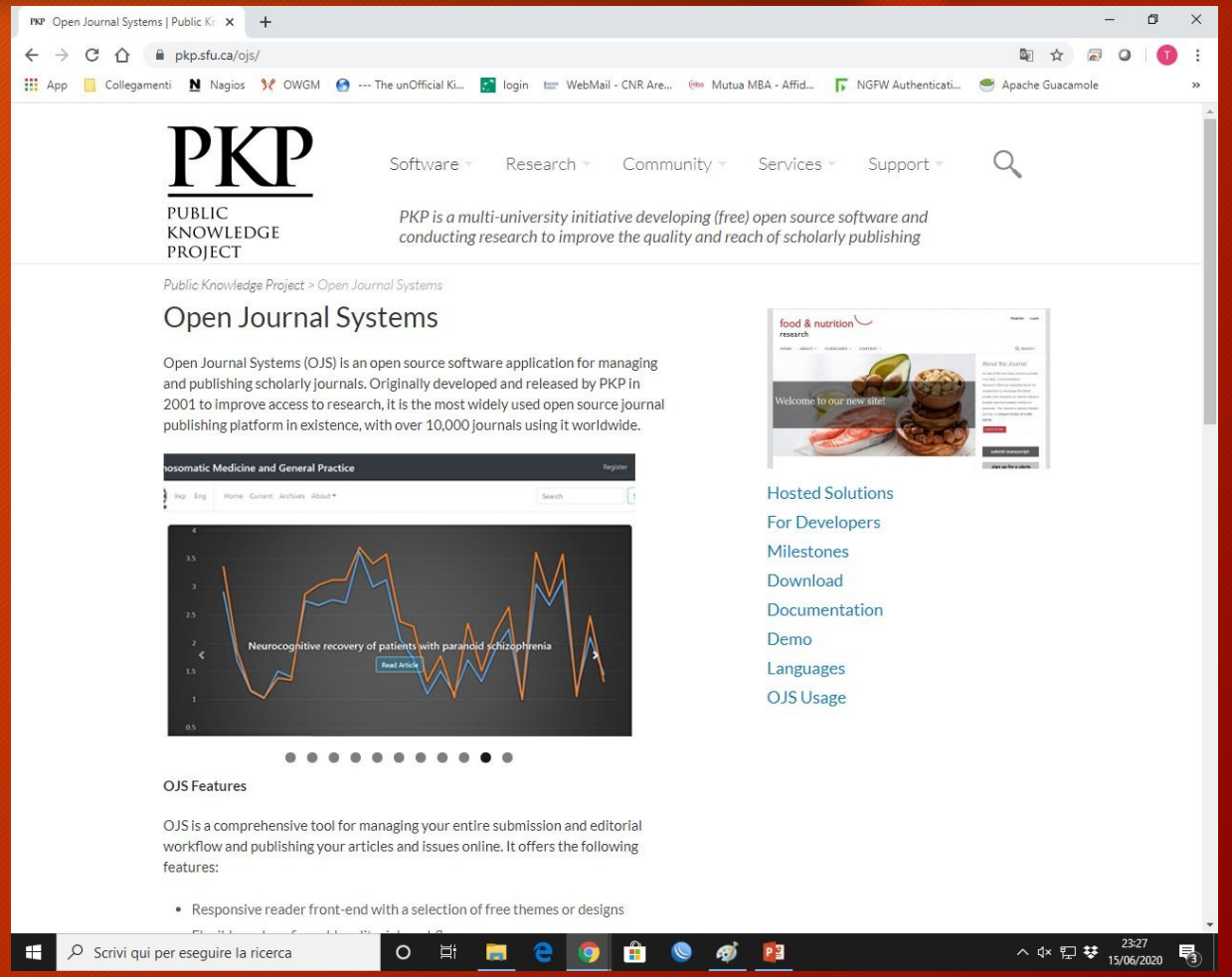
Open Journal System (OJS)

The Open Journal Systems (OJS) was designed to facilitate the development of open access, peer-reviewed publications, providing the technical infrastructure not only for the online submission of journal articles, but also an entire editorial management workflow, including:

- article submission,
- multiple peer-review and indexing shifts.

OJS relies on individuals in different roles, such as the editor of the newspaper, the editor, the reviewer, the author, the reader, etc.

It has a module that supports subscription periodicals.



The software has a "plug-in" architecture, similar to other community based projects such as WordPress, which allows you to easily integrate new features without the need to modify the entire basic software code. Some of the plugins provided to OJS include tools to facilitate indexing in Google Scholar and PubMed Central, a feed plug-in that provides RSS / Atom syndication feeds, a COUNTER plug-in, which allows statistics and usage reports and more yet. OJS is also compliant with LOCKSS (Standford University project for the development of connection systems between libraries), helping to guarantee permanent archiving for continuous access to the content of the publication.

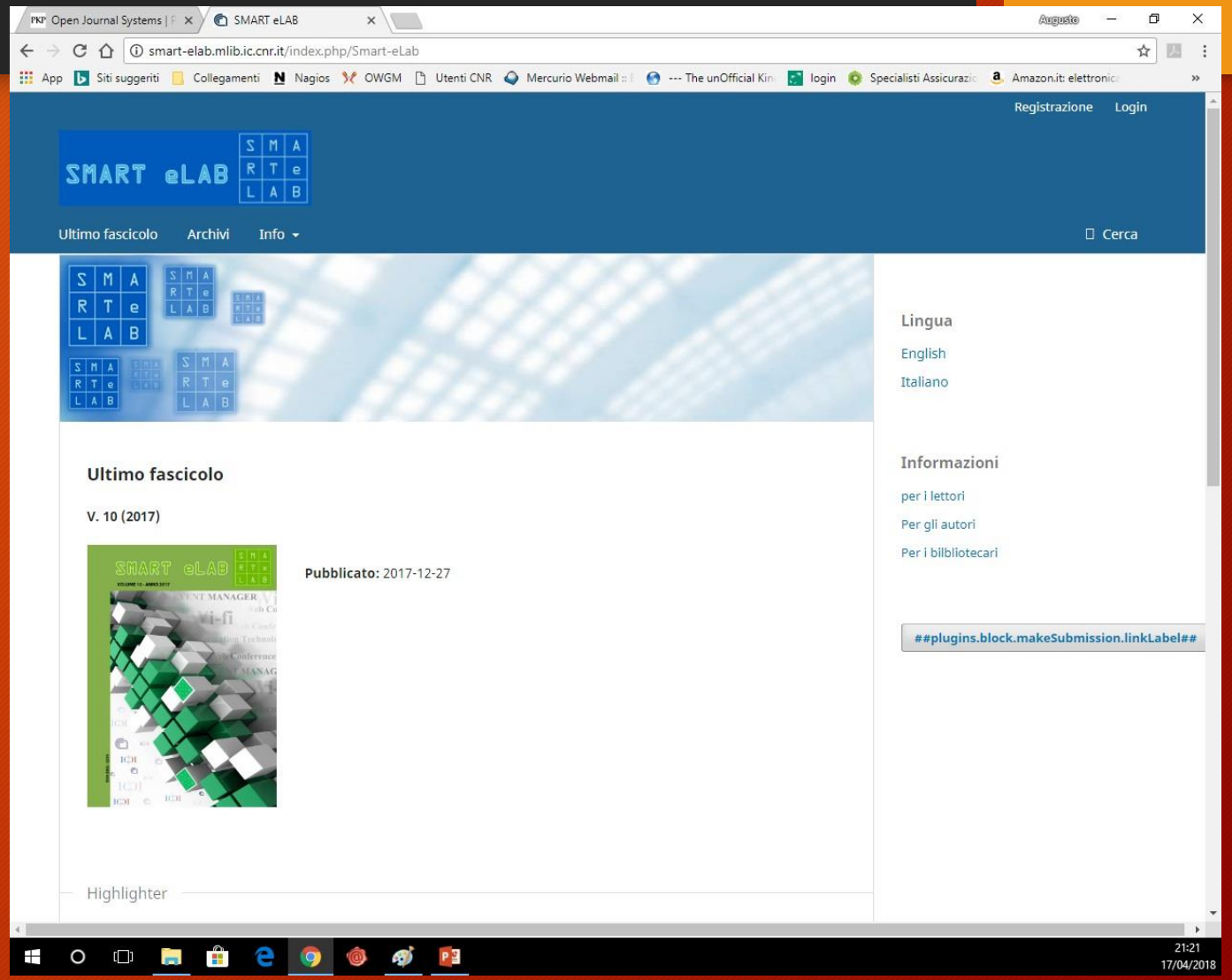
OJS is a comprehensive tool for managing your entire submission and editorial workflow and publishing your articles and issues online.

OJS Features

It offers the following features:

- Responsive reader front-end with a selection of free themes or designs
- Flexible and configurable editorial workflow
- Online submission and management of all content
- Subscription module with delayed open access options
- Integrated with scholarly publishing services such as Crossref, ORCiD, and DOAJ
- Recommended by Google Scholar for ease of indexing and discoverability
- Locally installed and controlled
- Community-led and supported
- Multilingual and translated into over 30 languages
- Extensive user guides and training videos

- An example of Open Access journal is Smart eLab published by the CNR Crystallography Institute on the OJS platform.
- The Smart eLab Journal is part of a larger project by the Crystallography Institute called Calliope for an Open platform capable of hosting numerous independent magazines.



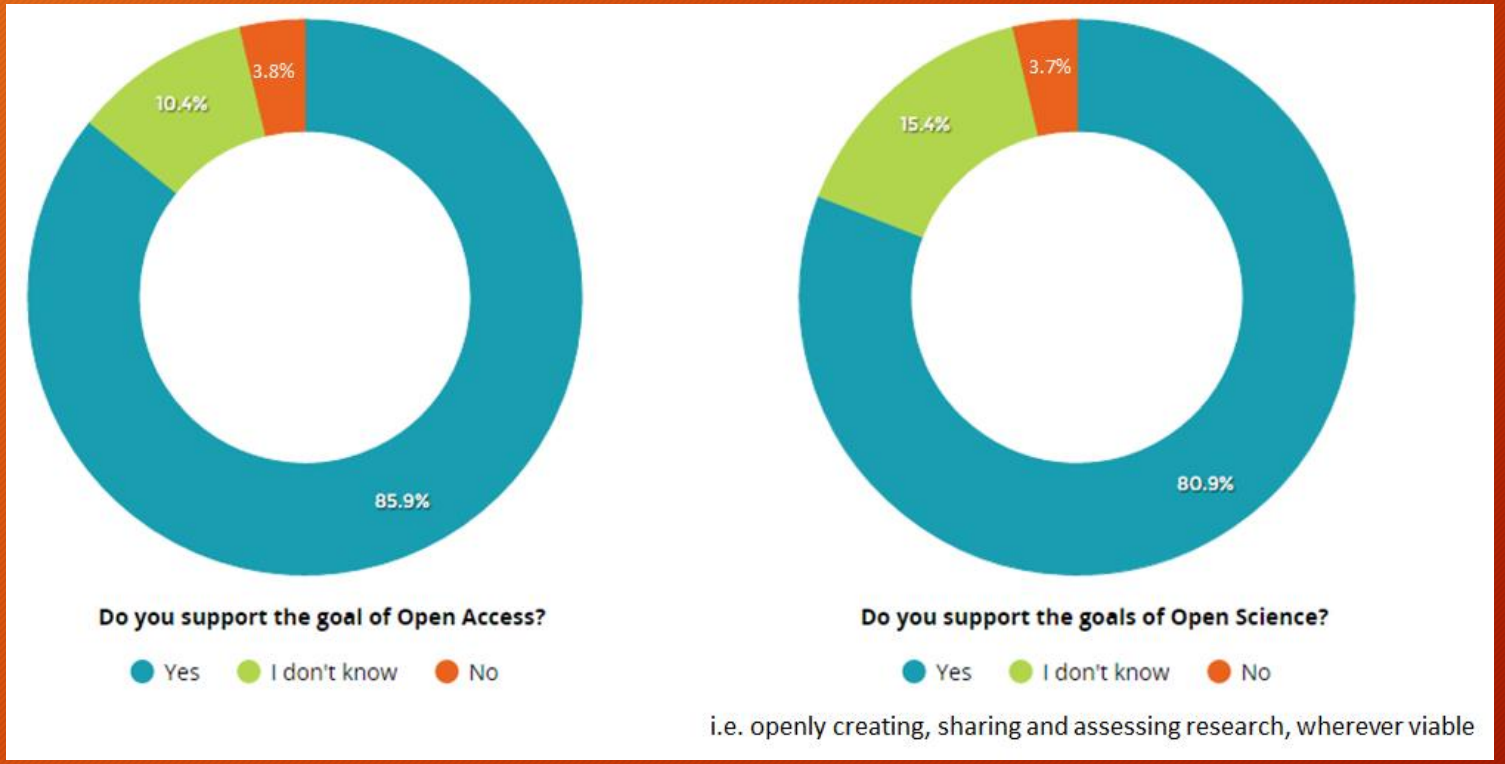
Open Science

The proposal of Open Science is to foster new approaches to research and scholarly communication. It represents a composite concept, due to the various topics covered and, most of all, for the cultural change implied. It may be summarized using four keywords: networks, data, cooperation, and transparency.

The European Commission has made a precise choice to sustain Open Science, realizing the European Open Science Cloud, a shared infrastructure to support various innovative services for the scientific community and the citizenship. The theoretical principles are stated in the EOSC Declaration, while the EOSC Roadmap offers more operative indications. Horizon2020 represents the financial support of the EC to achieve the goals of Open Science.

Open Access and Open Data are the two main applications. Open Access tackles the shortcomings of the current publishing system, while Open Data opens to the dissemination of the "raw materials" of research. The other contents supported by Open Science entails the opening up of learning materials, the sharing of research methodologies such as open notebooks, a radical change in research assessment and peer-review, the opening up of science to citizens.

Open Access / Open Science



OpenAIRE is the major infrastructure for the monitoring and the assessment of the OA policies financed by the EU from 2009. OpenAIRE links the results of the research projects (papers, data, software, etc.). Nowadays supplies 16 funders in Europe and worldwide, supports Open Science in all its aspects through the network of National Open Access Desks (NOADs). To know more about ...

RDA - Research Data Alliance is an international organization whose members gathers during scheduled meetings with the purpose of facilitating data sharing and reuse. RDA members are organized in spontaneous and voluntary interest groups gathering twice a year during the Plenary meetings. The RDA European chapter is constituting a network of national nodes with the project RDA Europe 4.0, with the purpose of bringing the needs of national communities in RDA and viceversa. The project finances the participation in RDA through different types of grants. To know more about ...

IOSSG - Italian Open Science Support Group is a working group gathering different academic representatives, born from the cooperation between professionals with different competencies in the areas: research support, digital libraries, Open Science, law, ICT. Participants come from Open AIRE, University of Milan, University of Venice - Ca' Foscari, Politecnico Milano, University of Turin, Bologna University, University of Trento, University of Parma, University of Padua, University of Wien, University of Trieste. The subscription to IOSSG is on voluntary basis and does not imply any involvement at institutional level. To know more about ...

AISA - Associazione Italiana per la Scienza Aperta (*Italian Association for Open Science*) is a no-profit organization whose purpose is to disseminate the values and principles of open access to knowledge through the promotion of activities like: papers on Open Science principles; organization of educational activities, networking, participation in research projects, submission of proposals for legislative initiatives to sustain Open Science, etc. To know more about ...

COAR is an international association composed of 140 members and partners worldwide representing libraries, universities, research institutes, national funding agencies, etc. COAR gathers communities and networks of repositories to build innovative services and infrastructures, align practices and policies and give voice at global level to the communities working with repositories. To know more about ...

D4Science is a hardware and software infrastructure based on the gcube toolkit that integrates and manages data from over 50 different suppliers into a single system. The platform offers a wide range of services to its users. To know more about...

SPARC International, Inc.

The Scholarly Publishing and Academic Resources Coalition (SPARC) is an organization that collaborates with other actors of scientific communication (authors, publishers, libraries ...) to promote open sharing of research results ...To know more about...

Author rights

With the advent of the digital technology the production and the exploitation of the information have radically changed. This new situation has generated a number of questions concerning rules and regulations for the safeguard of the author rights and the distribution of contents.
The European Parliament has recently approved the law reform on copyright. The provisional edition of the text is available here.
The association **AISA** has formulated a proposal for the alignment of the Italian law to the regulations of more advanced EU countries adding the article 42-bis to the law on author rights with the aim of recognizing the right for republication to the authors of financed research papers.

Author rights

- **What is it**

Copyright is a legal institution. The Italian reference text is Law no. 633/1941 with subsequent amendments and additions following the implementation of some important European directives. Each author holds, from the moment of the creation of the work, the intellectual property on the works he has produced.

- **What it protects**

Creative works of a creative nature are protected, belonging to literature, music, figurative arts, architecture, theater, cinema. Copyright does NOT protect: ideas that are ends in themselves and NOT innovative and NOT original works.

- **How it is acquired**

Copyright is acquired by simply creating the work itself ... as long as it falls within the typologies contemplated by law.

- **What it includes**

Copyright includes: moral rights, economic exploitation rights (or Copyright), related rights.

- **The rights**

Moral rights are unavailable, inalienable, imprescriptible, inalienable and concern: the right to authorship of the work, or to be recognized as an author; the right to the integrity of the work, or the right to oppose unauthorized changes; the right to withdraw the work from commerce for serious moral reasons and ..... any act or damage to the work that could be detrimental to the author's reputation. The rights of economic exploitation (or Copyright): are comparable to the property right that the author can enjoy and dispose of, are transferable and last for the entire life of the author and for the following 70 years from his death. After the expiration date the work becomes public domain. The related rights protect other subjects connected to the author since their activity allows the fruition and diffusion of the work: for example the rights of phonographic production, film production, radio and television broadcasting; the rights expire 50 or 70 years after their publication or communication to the public.

- **Who is the author**

In the case of an individual work, the copyright owner is originally the author as creator of the work; in the case of collaborative works, the copyright holders are originally the coauthors; in the case of software created by an employee, the owner of the moral rights remains the author (the worker), while the owner of the economic exploitation rights is, unless otherwise agreed, the employer.

- **The exceptions**

The law prohibits any use of the work without the authorization of the owner, with the exception of some exceptions that provide for the free use of the work with some limitations, such as libraries, museums, archives, schools ... etc., since they do not cause any damage to the author neither moral nor property (articles 68-71 of the law).

- **The assignment of economic exploitation rights**

Each author is the owner of all copyrights until he assigns them to a publisher through a written agreement (contract). The assignment may concern all rights or only some of them: right of reproduction (making copies), right of translation, right of re-elaboration or insertion in other works, right of distribution (in other forms or ways), etc ... , in addition to the publication right.

Horizon 2020

In the EU financing program, Open Access is stated as a general principle.

Open Access is **mandatory** for all research products, with the exception of patents or when special clauses for confidentiality obligation and data protection apply.

Starting from 2017, open access to research data is **mandatory** for all projects harvesting and/or producing data. O*pt-in* is the default option. However, beneficiaries have the opportunity to *opt-out*, not sharing their data (or part of it) for security reasons, incompatibility with GDPR, in cases when the sharing of data may threaten the success of the project, or when no data would be produced.

During the evaluation of the project proposal, *opt-out* would not compromise the award of the grant.

In the Annotated Model of Grant Agreement beneficiaries can find all practices and tools to guarantee open access to research products. Any breach to the obligations stated in the Grant Agreement may result in financial consequences as the reduction of the fund.

Academic Libraries & Open Science: How to meet the challenges?

- Open Science represents a new approach to the scientific process based on cooperative work and new ways of knowledge distribution using digital technologies and new collaborative tools[1]. Open Science involves a change of practices in the way scientific results are shared throughout the research cycle and fundamentally relies on a culture change in academic

[1] https://ec.europa.eu/search/?queryText=open+science&query_source=europa_default&filterSource=europa_default&swlang=en&more_options_language=en&more_options_f_formats=&more_options_date=

Predatory Publishers

- “Predatory open-access publishers are those that unprofessionally exploit the gold open-access model for their own profit. That is to say, they operate as scholarly vanity presses and publish articles in exchange for the author fee. They are characterized by various levels of deception and lack of transparency in their operations.” - Jeffrey Beall, On Predatory Publishers, Chronicle of Higher Education.

- With the explosion of online publishing and the increasing use of the author pay business model, predatory publishers are becoming more common. When you are evaluating a journal to determine if you article is a good fit for the publication, don’t forget to spend some time evaluating the publisher. Similarly, if you are invited to submit to a journal or to become an editorial board member, be sure to critically evaluate the publisher’s legitimacy.

How to Avoid Predatory Publishers

- First see if the journal is listed in DOAJ. This isn't a guarantee that the OA journal is not predatory but it is a good indicator. You can also check to see if the publisher is a member of COPE or OASPA.

- Analyze the journal to look for any predatory publisher indicators such as:

- Receiving an unsolicited email, little or no contact info given,
- Grammar errors in the text, false or misleading metrics given,
- Scope of journal is extremely broad or inappropriate,
- Promised turnaround time for peer review is very short,
- Information about fees or Author Processing Charges is not clearly laid out

Questions & Answer