

Open Science e Open Access nelle Scienze (Umane e non solo)

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Seminario 20 giugno 2019
Aula Affreschi, Università di Bologna, Bologna, Italia
<https://github.com/open-sci/seminar-2019-06>

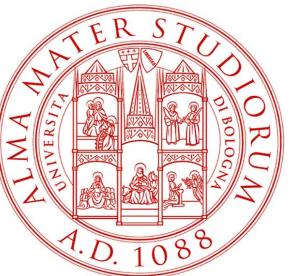


DIPARTIMENTO DI FILOLOGIA CLASSICA E ITALIANISTICA

Chi sono



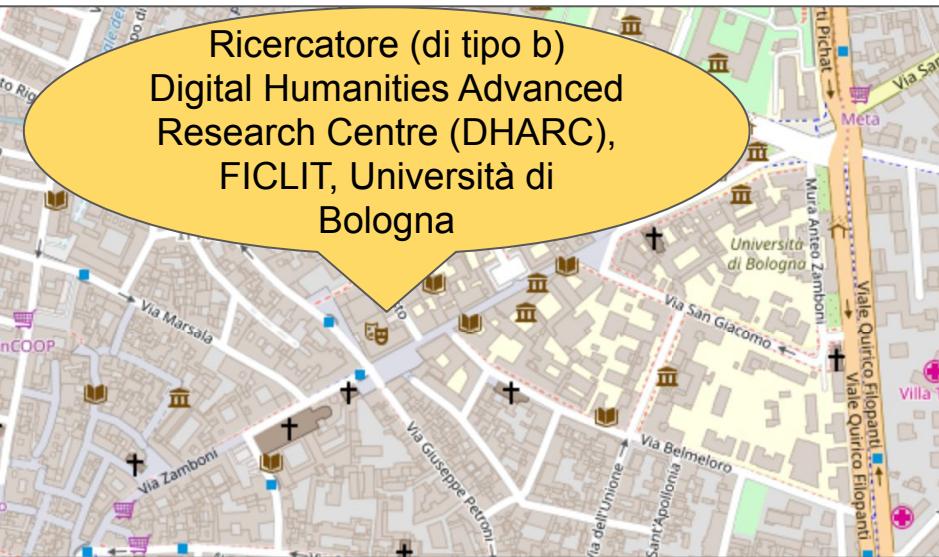
Triennale, Magistrale, Dottorato, Post dottorato in Informatica



Appendici di ricerca più significative (in ordine cronologico)



Tag cloud dagli
abstract dei miei
articoli pubblicati tra
il 2017 e il 2018



Ricercatore (di tipo b)
Digital Humanities Advanced
Research Centre (DHARC),
FICLIT, Università di
Bologna



definizioni

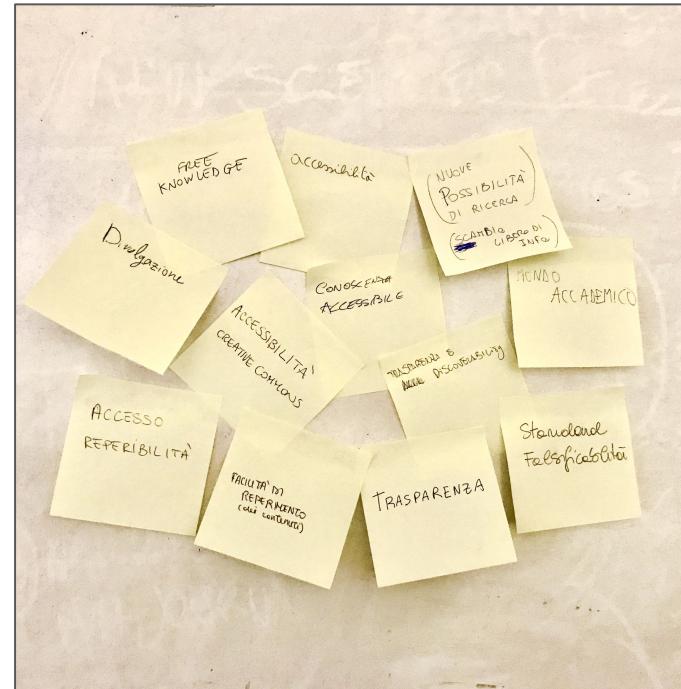
strumenti

pratica

Per iniziare

Descrivete con una, massimo due parole quel che vi evoca il concetto di
Open Science

Foto delle parole
indicate dai
partecipanti al
seminario



definizioni

Scienza

“Sistema di conoscenze ottenute con un'attività di ricerca organizzata e con procedimenti metodici e rigorosi, col fine di fornire una descrizione verosimile, oggettiva e predittiva della realtà e delle leggi regolanti l'occorrenza dei fenomeni”

Wikizionario – <https://it.wiktionary.org/wiki/scienza>

La definizione è indipendente dal particolare campo del sapere che si sta considerando: si applica alla Filologia, così come alla Storia, Filosofia, Matematica, Informatica, etc.

Open Science

Mi sapreste dare una definizione?

Open Science: definizioni (1/3)

“The **practice** of science in such a way that **others can collaborate and contribute**, where research data, lab notes and other research processes are **freely available**, under terms that enable **reuse, redistribution and reproduction** of the research and its underlying data and methods”

FOSTER Open Science – <https://www.fosteropenscience.eu/taxonomy/term/100>

I prodotti di uno studio (dati, metodi, appunti, etc.) devono essere liberamente:

- riutilizzabili – ad esempio per poterli usare in un altro studio o in una presentazione
- ridistribuibili – per poterli arricchire e mettere nuovamente a disposizione liberamente ad altri studiosi
- riproducibili – così da poter verificare il risultato esposto in uno studio

Open Science: definizioni (2/3)

“A new approach to the scientific process based on **cooperative work** and new ways of knowledge distribution using **digital technologies** and new **collaborative tools** [to] make science more **credible, reliable, efficient and responsive** to societal challenges”

Commissione Europea – <https://ec.europa.eu/research/openscience/index.cfm?pg=open-science-policy-platform-faqs#>

La scienza deve essere:

- credibile – controllare e certificare l'integrità scientifica
- affidabile – attività scientifica trasparente, al fine di verificarla
- efficiente – evitare la duplicazione di sforzi e risorse
- reattiva – aiutare a trovare le risposte di quesiti che affliggono la società odierna

Open Science: definizioni (3/3)

“The **movement** to make scientific research and data **accessible to all** [...] includes practices such as **publishing open scientific research**, **campaigning for open access** and generally making it easier to publish and communicate scientific knowledge [...] ways to make science more transparent and accessible **during the research process** [...] **open notebook science**, **citizen science**, and aspects of **open source software** and **crowdfunded research projects**”

UNESCO

– <http://www.unesco.org/new/en/communication-and-information/portals-and-platforms/goap/open-science-movement/>

Permettere anche a cittadini comuni di essere attivamente coinvolti nelle ricerche scientifiche al pari degli accademici

Scuole di pensiero sull'Open Science

Democrazia

accesso alla conoscenza non equamente distribuito → rendere la conoscenza liberamente a disposizione per tutti

Pragmatismo

creazione della conoscenza più efficiente se si condivide il lavoro → aprire il processo di creazione della conoscenza

Infrastruttura

una ricerca efficiente dipende dagli strumenti e applicazioni a disposizione → creare piattaforme aperte per gli scienziati

Pubblico accesso

la scienza deve essere pubblicamente accessibile → rendere la scienza accessibile ai cittadini comuni

Misurazione dell'impatto

l'impatto dei contributi scientifici deve essere misurato da indicatori alternativi → creazione di un sistema di metriche alternative per misurare l'impatto scientifico

Fecher, B., & Friesike, S. (2014). Open Science: One Term, Five Schools of Thought. In S. Bartling & S. Friesike (Eds.), *Opening Science* (pp. 17–47). https://doi.org/10.1007/978-3-319-00026-8_2

Vantaggi

Velocità: “experts identified themselves, and spontaneously contributed based on what was being posted online”

Trasparenza: “public can be assured that funding for science, arising from their taxes, is being used responsibly and [...] no suggestion of political interference”

Disponibilità: “available on the web [...] need not cease with the graduation of students, the termination of a grant or the demise of a principal investigator”

Qualità: “review process never ends [...] commenting function on results, and a mechanism for the community to police those comments”

Woelfle, M., Olliaro, P., & Todd, M. H. (2011). Open science is a research accelerator. *Nature Chemistry*, 3(10), 745–748.
<https://doi.org/10.1038/nchem.1149>

Svantaggi

Dal punto di vista del ricercatore e dei cittadini, beh, come dire...

...

...

...

...

... forse (ma forse, eh) dover investire un po' di tempo in più per fare le cose a modo – cosa che dovrebbe essere comunque la norma, non l'eccezione...

Chi sta promovendo l'Open Science?



European
Commission

<https://ec.europa.eu/research/openscience/>

European Open Science Cloud (EOSC)

This is a cloud for research data in Europe. Background, policy information, events and publications related to the EOSC

Open Science Policy Platform

Group that advises the Commission on how to develop open science policy. Meeting reports, member details and background

Open science monitor

Tracking trends for open access, collaborative and transparent research across countries and disciplines.



<http://www.orfg.org>



<http://scoss.org>



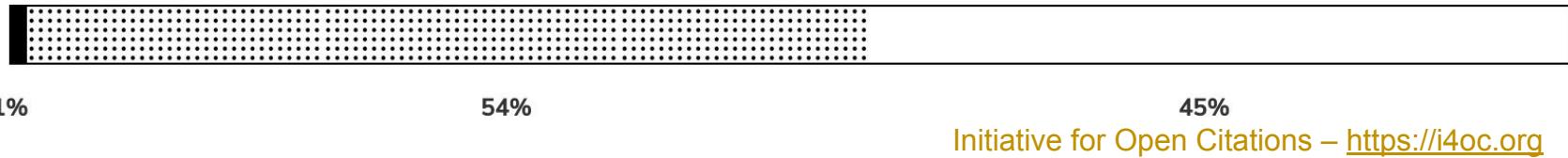
DOAJ DIRECTORY OF
OPEN ACCESS
JOURNALS

Questi sono solo alcuni esempi, ma la situazione è molto dinamica e in continua espansione

Iniziative: I4OC

Obiettivo: persuadere i principali editori accademici a rendere liberamente fruibili tutti i riferimenti depositati, così da tracciare l'evoluzione della scienza liberamente

(Dati aggiornati a febbraio 2019) la percentuale di pubblicazioni con riferimenti bibliografici aperti è cresciuta dall'1% al **54%** su **43.2 milioni di articoli** con riferimenti bibliografici depositati in Crossref – **>500M di citazioni** sono aperte



Per gli ultimi aggiornamenti dalla comunità: il **Workshop on Open Citations** (<https://workshop-oc.github.io>, hash tag **#WOOC2018**) e **WikiCite 2018** (https://meta.wikimedia.org/wiki/WikiCite_2018, hash tag **#WikiCite**)

Iniziative: DORA

Obiettivo: migliorare le modalità con cui i prodotti della ricerca scientifica vengono valutati

Rivolta ad agenzie di finanziamento, istituzioni, editori, organizzazioni che forniscono metriche, e ricercatori

Alcuni punti: metadati dei riferimenti bibliografici di articoli rilasciati senza copyright; considerare tutti i prodotti della ricerca oltre le pubblicazioni



Dichiarazione di San Francisco sulla Valutazione della Ricerca

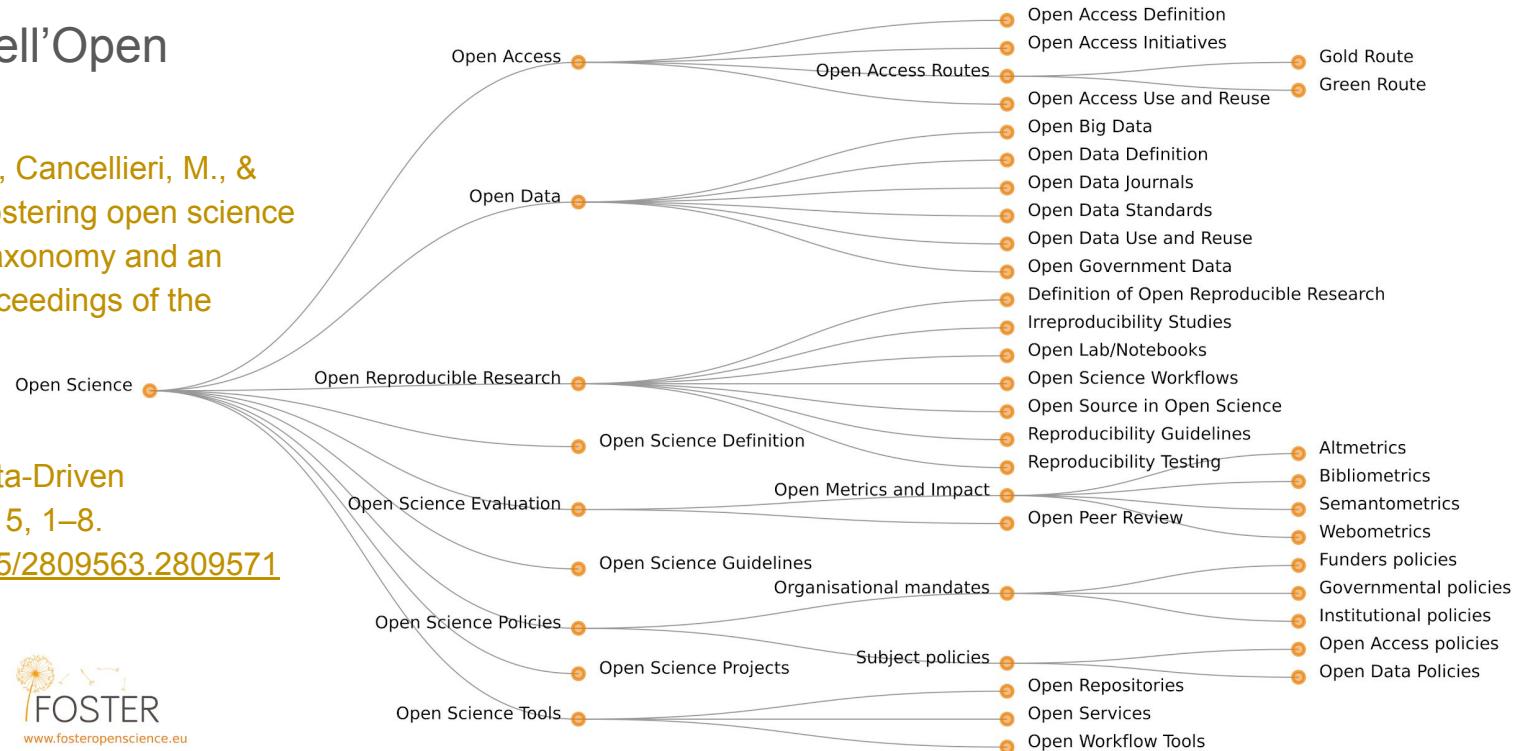
Durante il convegno annuale della Società Americana di Biologia Cellulare (ASCB) a San Francisco in California, il 16 dicembre 2012, un gruppo di curatori ed editori di riviste accademiche si è riunito per affrontare l'urgente questione di migliorare le modalità con cui i prodotti della ricerca scientifica vengono valutati dalle agenzie di finanziamento, dalle istituzioni accademiche e da altri attori. Il gruppo ha stilato una serie di raccomandazioni denominate Dichiarazione di San Francisco sulla Valutazione della Ricerca (*San Francisco Declaration on Research Assessment*). Invitiamo le parti interessate appartenenti a tutte le discipline scientifiche a segnalare il loro sostegno all'iniziativa sottoscrivendo a proprio nome questa Dichiarazione.

Read the declaration - Italian, DORA – <https://sf哆拉.org/read/it/>

Di cosa si occupa l'Open Science: tassonomia

Tassonomia dell'Open Science

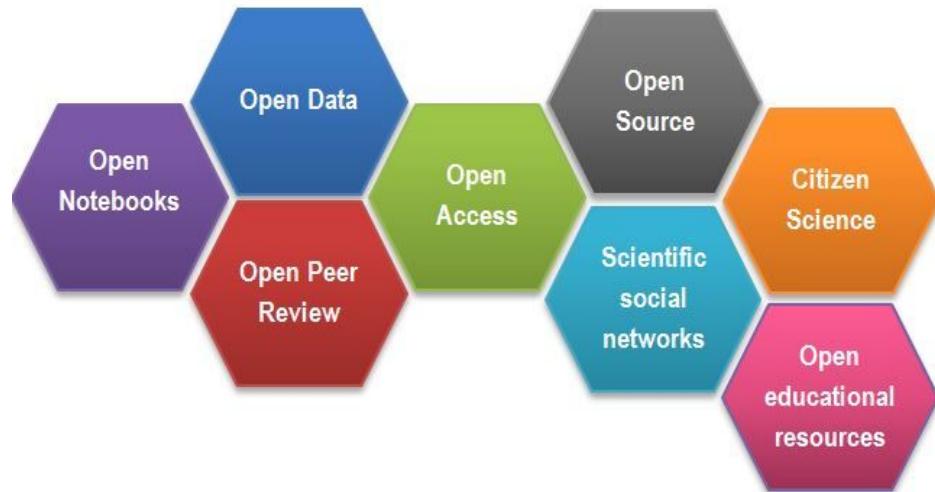
Pontika, N., Knoth, P., Cancellieri, M., & Pearce, S. (2015). Fostering open science to research using a taxonomy and an eLearning portal. Proceedings of the 15th International Conference on Knowledge Technologies and Data-Driven Business - i-KNOW '15, 1–8. <https://doi.org/10.1145/2809563.2809571>



Di cosa si occupa l'Open Science: macro-settori

Il termine Open Science spesso si riferisce a un insieme di movimenti e iniziative, nate anche in periodi diversi, che mirano a rimuovere le barriere alla distribuzione e divulgazione di un qualunque contenuto o dato scientifico e/o del processo utilizzato per produrlo

Tuttavia, il seminario di oggi si focalizzerà principalmente su due aspetti: **Open Access** e **Open Data**



What is Open Science? Introduction,
FOSTER Open Science –
[https://www.fosteropenscience.eu/content/
what-open-science-introduction](https://www.fosteropenscience.eu/content/what-open-science-introduction)

Contenuto

vs.

Dati



The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles

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⁴Canadian Journal Publishing Group, University, Vancouver, BC, Canada

⁵Public Knowledge Project, Canada

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¹University of Washington, Seattle, USA

²FloridaOA, USA

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ABSTRACT

Despite growing interest in Open Access (OA) to scholarly literature, there is an unmet need for large-scale, up-to-date, and reproducible studies assessing the prevalence and characteristics of OA research output. We used using DOIs, an open dataset that describes millions of OA articles from 10,000 journals, to analyze 100 million articles, each of which was assigned a CrossRef DOI, to investigate OA in three populations: (1) all journal articles assigned a CrossRef DOI; (2) recent journal articles indexed in Web of Science; and (3) articles viewed by users of Unpaywall, a service that tracks users of OA (100 million unique visitors in total) and that this proportion is growing, driven particularly by growth in Gold and Hybrid. The most recent year analyzed (2015) also has the highest percentage of OA (45%), because of this growth, and the fact that readers increasingly access newer articles, and that OA is more easily found in OA journals. OA is not the only mechanism they view as OA. Notably, the most common mechanism for OA is Not Gold, Green, or Hybrid OA, but rather an under-discussed category we dub Bronze: articles made free-to-read on platforms without an explicit Open license. We also examine the distribution of OA articles across disciplines and fields of study, and find that OA can advantage accounting for age and discipline. OA articles receive 18% more citations than average, an effect driven primarily by Green and Hybrid OA. We encourage further research using the free oaDOI service, as a way to inform OA policy and practice.

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Academic editor:
Michael L. Hall
Additional Information and Declarations can be found on page 19
DOI: 10.7717/peerj.4375



Subjects: Legal Issues, Science Policy, Science
Keywords: Open access, Open science, Scientometrics, Publishing, Libraries, Scholarly communication, Bibliometrics, Science policy

OPEN ACCESS

How to cite this article Piwowar et al. (2018). The state of OA: A large-scale analysis of the prevalence and impact of Open Access articles. PeerJ, 6, e4375. DOI 10.7717/peerj.4375

Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... Haustein, S. (2018). The state of OA: A large-scale analysis of the prevalence and impact of Open Access articles. PeerJ, 6, e4375.
<https://doi.org/10.7717/peerj.4375>

PeerJ

INTRODUCTION

The movement to provide open access (OA) to all research literature is now over fifteen years old. In the last few years, several developments suggest that after years of slow growth, a shift is occurring in OA. First, funding agencies are increasingly mandating OA publishing for grants. In addition, the US National Institutes of Health, which mandated OA in 2008 (<http://publications.nih.gov/oa.html>), the Bill and Melinda Gates Foundation (<http://www.gatesfoundation.org/How-We-Work/General-Information/Open-Access-Policy>), the European Commission (http://ec.europa.eu/research/participants/programmes/2020/grants/manual/index_glossario_en.pdf), the US National Science Foundation (<https://www.nsf.gov/pubs/2013/nsf13-064/nsf13-064.pdf>), and the Wellcome Trust (<http://www.wellcome.ac.uk/research-funding/wellcome-trust-strengthens-its-open-access-policy>), among others, have made OA diffusion mandatory for grantees. Second, several tools have sprung up to help value atop the growing OA corpus. These include discovery platforms like ScienceOpen and iScience, and browser-based corpora like the Open Access Button, CrossMark, and Unpaywall. Third, OA self-archiving services like the OA button (<http://openaccessbutton.org>) have been adopted by many publishers and institutions, and now offer authors an increasingly popular but controversial solution to author self-archiving (http://bjork.com/2016a/bjork_2016/). Finally, increasing growth in the cost of OA self-archiving services, such as the “Big Data” OA publishers, has begun to force libraries and other institutions to initiate large-scale subscription cancellations; recent examples include Caltech, University of Maryland, University of Konstanz, Université de Montréal, and the national system of Peru (http://universite-de-montreal.ca/2017/schermers-e-mega_2017/, <http://universite-konstanz.de/2017/>). As the toll-access OA landscape becomes increasingly unaffordable, institutions are looking to OA as part of their “Plan B” to maintain OA research output (http://bjork.com/2016a/bjork_2016/).

Open access is thus provoking a new range of investment, controversy, and relevance across a wide group of stakeholders. We may be approaching a moment of great importance in the development of OA, and indeed of the scholarly communication system. However, despite the recent flurry of development and conversation around OA, there is a need for large-scale, high-quality data on the growth and composition of the OA literature and its impact. This is a need for a durable, reproducible, and overview of OA at large scale, (b) up-to-date, and (c) relevant to OA researchers. This paper attempts to provide such an overview, using a new open web service called oaDOI that links to legally-available OA scholarly articles.¹ Building on data provided by the oaDOI service, we answer the following two questions:

1. What fraction of the scholarly literature is OA, and how does this percentage vary according to publisher, discipline, and publication year?
2. Are OA papers more highly-cited than their toll-access counterparts?

The next section provides a brief review of the background literature for this paper, followed by a description of the datasets and methods used, as well as details on the

Usati in

| oa_color | Random 100,000 | Percent | Average relative citations |
|------------|----------------|---------|----------------------------|
| closed | 63,93% | 63,9% | 0,90 |
| all open | 36,06% | 36,1% | 1,18 |
| bronze | 12,93% | 12,9% | 1,22 |
| hybrid | 4,31% | 4,3% | 1,31 |
| gold | 7,35% | 7,4% | 0,83 |
| green only | 11,46% | 11,5% | 1,33 |
| all papers | 100,00% | 100,0% | 1,00 |

| oa_color | Access per year | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2009-2015 |
|------------|-----------------|--------|---------|---------|---------|---------|---------|---------|-----------|
| closed | 7,94% | 8,32% | 8,82% | 9,37% | 9,95% | 9,08% | 10,42% | 12,53% | 12,53% |
| all open | 3,09% | 3,89% | 4,75% | 5,34% | 5,82% | 5,44% | 6,34% | 9,66% | 9,66% |
| bronze | 1,75% | 1,79% | 1,88% | 2,09% | 1,91% | 1,68% | 1,81% | 2,23% | 2,23% |
| hybrid | 4,17% | 4,83% | 5,41% | 5,39% | 6,60% | 7,59% | 9,15% | 4,31% | 4,31% |
| gold | 3,84% | 5,27% | 7,05% | 10,31% | 1,455% | 1,370% | 1,882% | 7,35% | 7,35% |
| green only | 1,42% | 1,57% | 1,621% | 1,679% | 1,794% | 1,627% | 1,736% | 11,463% | 11,463% |
| all papers | 11,93% | 12,70% | 13,578% | 14,716% | 15,784% | 14,522% | 16,766% | 100,00% | 100,00% |

| oa_color | Impact of access per year | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2009-2015 |
|------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|-----------|
| closed | 66,6% | 65,5% | 65,0% | 63,7% | 63,1% | 62,5% | 62,2% | 63,9% | 63,9% |
| all open | 33,4% | 34,5% | 35,0% | 36,3% | 36,9% | 37,5% | 37,8% | 36,1% | 36,1% |
| bronze | 14,7% | 14,1% | 13,9% | 14,2% | 12,1% | 11,6% | 10,8% | 12,9% | 12,9% |
| hybrid | 3,5% | 3,8% | 4,0% | 3,7% | 4,2% | 5,2% | 5,5% | 4,3% | 4,3% |
| gold | 3,2% | 4,1% | 5,2% | 7,0% | 9,2% | 9,4% | 11,2% | 7,4% | 7,4% |
| green only | 12,0% | 12,4% | 11,9% | 11,4% | 11,4% | 11,2% | 10,4% | 11,5% | 11,5% |
| all papers | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |

Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... Haustein, S. (2017). Data from: The State of OA: A large-scale analysis of the prevalence and impact of Open Access articles. Zenodo. <http://doi.org/10.5281/zenodo.837902>

Cosa significa “open” applicato a contenuti e dati?

“Open means anyone can **freely access, use, modify, and share for any purpose** (subject, at most, to requirements that preserve provenance and openness)”

The Open Definition – <https://opendefinition.org> (ma si veda anche <https://freedomdefined.org> e <https://opensource.org/docs/osd>)

Requisiti non obbligatori menzionati nella Open Definition

- Attribuzione: l'identificazione dell'autore del contributo che si vuole utilizzare
- Openness: garantire che l'utilizzo del contributo per la creazione di un nuovo lavoro obblighi quest'ultimo ad essere anch'esso aperto

Questa definizione **non vieta** di riutilizzare materiale aperto per scopi commerciali

Licenze per l'Open Science

La **licenza** associata ad un opera spiega come l'opera stessa è resa disponibile e come può essere usata

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OPEN ACCESS

Dalla versione PDF di
Piwowar, H., et al. (2018). The state
of OA: A large-scale analysis of the
prevalence and impact of Open
Access articles. PeerJ, 6, e4375.
<https://doi.org/10.7717/peerj.4375>

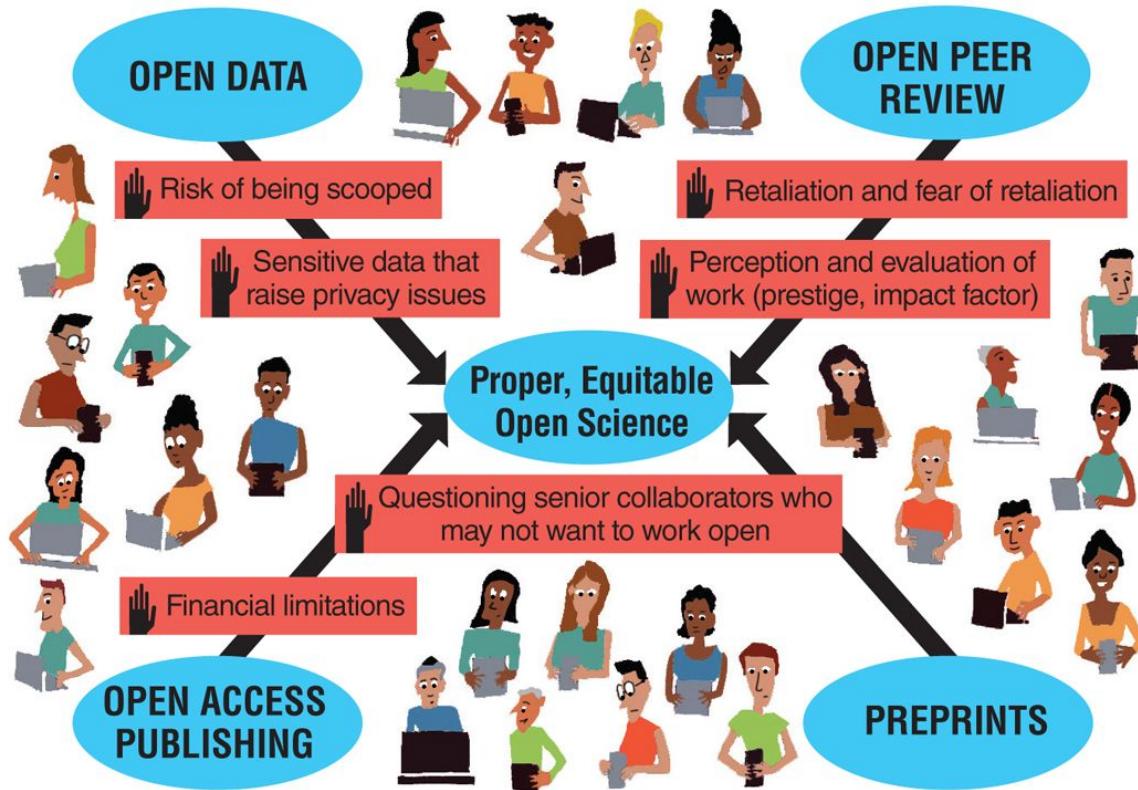
| Licenza | Tipologia di materiale | Obbliga attribuzione | Obbliga openness |
|---|------------------------|----------------------|------------------|
| Creative Commons Attribution (CC-BY) | contenuto | sì | no |
| Creative Commons Attribution - Share-Alike (CC-BY-SA) | contenuto | sì | sì |
| Creative Commons CCZero (CC0) | contenuto o dati | no | no |
| Open Data Commons Public Domain Dedication and Licence (PDDL) | dati | no | no |
| Open Data Commons Attribution License (ODC-BY) | dati | sì | no |
| Open Data Commons Open Database License (ODbL) | dati | sì | sì |

Conformant Licenses, The Open Definition – <https://opendefinition.org/licenses/>

Rischi dell'Open Science

“Scientist’s career stage, employment stability, financial circumstances, country of origin or residence, and cultural context [...] may all create barriers to specific aspects of open science”

Bahlai, C., Bartlett, L., Burgio, K., Fournier, A., Keiser, C., Poisot, T., & Whitney, K. (2019). Open Science Isn’t Always Open to All Scientists. *American Scientist*, 107(2), 78.
<https://doi.org/10.1511/2019.107.2.78>



È davvero così?

A proposito di scooping:

“Many repositories now mint data deposited in them with Digital Object Identifiers (DOIs) [...] By openly sharing your data you’ll get credit for all of your research [...] increase your overall visibility and potentially open new doors for collaboration”

Astell, M. (2017, June 19). Ask not what you can do for open data; ask what open data can do for you. Retrieved June 18, 2019, from Naturejobs blog website:

<http://blogs.nature.com/naturejobs/2017/06/19/ask-not-what-you-can-do-for-open-data-ask-what-open-data-can-do-for-you/>

A proposito dei costi dell’Open Access e delle Article Processing Charge (APC):

“There are a number of routes to OA [...] identified by ‘gold’, ‘bronze’, ‘green’, or ‘diamond’; the latter two explicitly having no APCs”

Tennant, J. P., Crane, H., Crick, T., Davila, J., Enkhbayar, A., Havemann, J., ... Vanholsbeeck, M. (2019). Ten Hot Topics around Scholarly Publishing. *Publications*, 7(2), 34. <https://doi.org/10.3390/publications7020034>

I preprint e il loro valore aggiunto

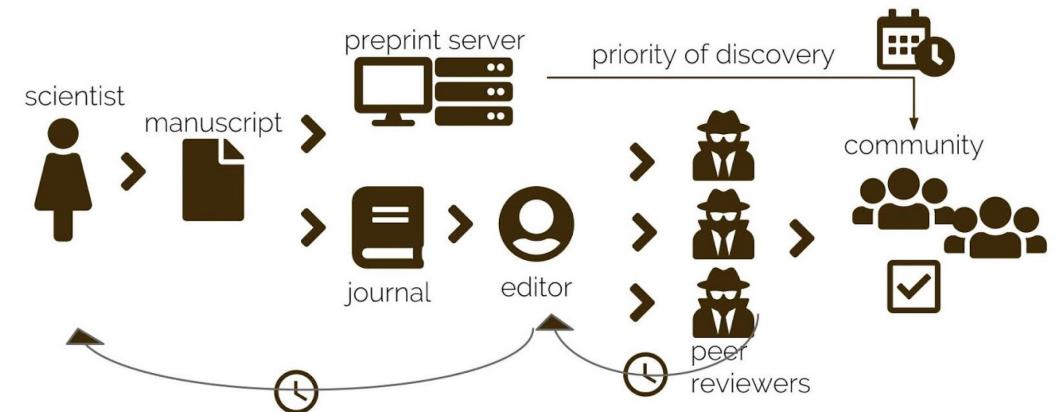
Processo editoriale tradizionale

Vantaggi: copy-editing, caratteri e impaginazione, interlink con collezioni di dati dello studio, gestione processo di revisione
Svantaggi: divulgazione lenta



Processo editoriale tradizionale accompagnato dal deposito di preprint

Vantaggi: come (A) + processo di revisione aperto a tutti (Open Peer Review), efficiente divulgazione dei risultati
Svantaggi: imparare a usare nuovi strumenti (come i preprint server)



Tennant, J. P., Crane, H., Crick, T., Davila, J., Enkhbayar, A., Havemann, J., ... Vanholsbeeck, M. (2019). Ten Hot Topics around Scholarly Publishing. *Publications*, 7(2), 34. <https://doi.org/10.3390/publications7020034>

Open Science e carriera accademica

“Faculties, funders and politicians should learn to reward those researchers who contribute to science transparency, and keep their own research open”

Schneider, L. (2015, December 5). Open Science, Open Scientists. Retrieved June 16, 2019, from For Better Science website: <https://forbetterscience.com/2015/12/07/open-science-open-scientists/>

“In order to increase the practice of Open Science, it is critical that researchers, who are the key agents of change towards OS, are encouraged and incentivised [...] it must be embedded in the evaluation of researchers at all stages of their career [...] this will require universities to change their approach in career assessment for recruitment and promotion”

Cabello Valdes, C., Rentier, B., Kaunismaa, E., Metcalfe, J., Esposito, F., McAllister, D., ... O'Carroll, C. (2017). Evaluation of research careers fully acknowledging Open Science practices: Rewards, incentives and/or recognition for researchers practicing Open Science [EU publications]. Retrieved from Publication Office of the European Union website: <https://doi.org/10.2777/75255>

Open Access

Mi sapreste dare una definizione?

Open Access: definizioni (1/2)

“Open access (OA) refers to the practice of providing online access to scientific information that is **free of charge** to the end-user and **reusable**”

Open access – H2020 Online Manual, European Commission –

http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/open-access_en.htm

“Open Access means **free access** to scientific information and **unrestricted use** of electronic data for everyone [...] expensive prices and copyrights will no longer be obstacles to the dissemination of knowledge [...] free to add information, modify contents, translate texts into other languages, and disseminate an entire electronic publication”

UNESCO Open Access Publications – <https://en.unesco.org/open-access/>

Open Access: definizioni (2/2)

“World-wide electronic distribution of the peer-reviewed journal literature and completely **free** and **unrestricted** access to it by all scientists, scholars, teachers, students, and other curious minds [...] this kind of free and unrestricted online availability, which we will call open access”

Budapest Open Access Initiative – <https://www.budapestopenaccessinitiative.org/read>

“Open Access is about **more than** access [...] most liberal Creative Commons license is **CC-BY**, which allows for unrestricted reuse of content, subject only to the requirement that the source work is appropriately attributed”

Why CC-BY?, Open Access Scholarly Publishers Association – <https://oaspa.org/why-cc-by/>

Riguardo all'uso non commerciale di un opera

Nelle licenze Creative Commons, una delle restrizioni che possono essere aggiunte si chiama “non commercial” (abbreviato “NC”), che vieta l'utilizzo dell'opera per fini commerciali

La clausola NC aggiunge qualche complicazione per l'assegnazione dello stato “Open Access” ad un lavoro scientifico, e ci sono pareri abbastanza discordanti sulla possibilità di adozione di questa clausola:

- La Open Definition non la contempla proprio
- La Open Access Scholarly Publishers Association (OASPA) la accetta, seppur chiarisce che può generare problemi relativamente al riuso dell'opera e, per questa ragione, viene comunque scoraggiata

Che tipi di soluzioni Open Access esistono?

Gratis: la sola lettura dell'articolo è completamente gratuita (NB: è davvero OA?)

Libre: la lettura e la possibilità di processare l'articolo con software è permessa

Gold: gli articoli sono pubblicati in riviste Open Access (Diamond se non c'è APC)

Green: i pre/postprint degli articoli sono messi a disposizione in preprint server

Ibrido: articoli in Open Access pubblicati (con APC) in riviste non Open Access

Black: articoli condivisi in siti illegali, ad esempio Sci-Hub

Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... Haustein, S. (2018). The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. PeerJ, 6, e4375.

<https://doi.org/10.7717/peerj.4375>

Lo strano caso del Gold OA e del pagamento doppio

L'Università di Bologna, nel 2018, ha speso più di 8 milioni di euro per l'acquisto di libri, periodici, e materiale bibliografico

Articoli pubblicati in OA con APC vengono di fatto pagati due volte!

Reazioni recenti a questa situazione: University of California vs. Elsevier

Gaind, N. (2019). Huge US university cancels subscription with Elsevier. *Nature*, 567(7746), 15–16.
<https://doi.org/10.1038/d41586-019-00758-x>

| Descrizione | Valore 31/12/2017 | Valore 31/12/2018 | Variazioni | Var. % |
|--|----------------------|----------------------|-------------------|-----------|
| 7) ACQUISTO DI LIBRI, PERIODICI E MATERIALE BIBLIOGRAFICO | 8.020.911,56 | 8.175.656,31 | 154.744,75 | 2% |
| Materiale bibliografico - escluse risorse elettroniche | 2.900.186,25 | 2.617.142,22 | -283.044,03 | -10% |
| Risorse elettroniche | 5.064.894,41 | 5.389.744,88 | 324.850,47 | 6% |
| Giornali e riviste | 55.830,90 | 168.769,21 | 112.938,31 | 202% |

Nota integrativa – Bilancio Unico di Esercizio 31 dicembre 2018. Direzione Generale, Area Finanza e Partecipate.

<https://www.unibo.it/it/ateneo/chi-siamo/bilanci-di-ateneo/documenti/2018/bilancio-di-esercizio-2018/nota-integrativa/nota-integrativa/>

Open Data

Mi sapreste dare una definizione?

Open Data: definizioni

“By open data in science we mean that it is **freely available** on the public internet permitting **any user** to download, copy, analyse, re-process, pass them to software or use them for **any other purpose without financial, legal, or technical barriers** other than those inseparable from gaining access to the internet itself [...] data related to published science should be explicitly placed in the **public domain**”

Panton Principles – <https://pantonprinciples.org>

“Open data is data that’s available to everyone to **access, use and share**”

What is ‘open data’ and why should we care?, The Open Data Institute –
<https://theodi.org/article/what-is-open-data-and-why-should-we-care/>

CC0 o CC-BY per i dati?

“I want to share my data, but it is **important to me that I’m cited** when people use it. I prefer CC BY to CC0 because this **kind of attribution** is what I care about most”

Wolfe, M. (2017, August 9). CC0 and Data Citation. Retrieved June 19, 2019, from
<https://www.library.ucdavis.edu/news/cc0-and-data-citation/>

“[CC0] does it exempt researchers from the **obligation of citing the original data authors** [...] like other scientific norms, these expectations are best articulated and enforced by the community itself”

Why does Dryad use CC0?, Dryad – <https://blog.datadryad.org/2011/10/05/why-does-dryad-use-cc0/>

FAIR

Principi fondamentali per la creazione e la divulgazione dei dati

FAIR data non implica open data – ma open data FAIR sono desiderabili

Wilkinson, M. D., Dumontier, M., Aalbersberg, IJ. J., Appleton, G., Axton, M., Baak, A., ... Mons, B. (2016). The FAIR Guiding Principles for scientific data management and stewardship. *Scientific Data*, 3, 160018.

<https://doi.org/10.1038/sdata.2016.18>

TO BE FINDABLE:

- F1. (meta)data are assigned a globally unique and eternally persistent identifier.
- F2. data are described with rich metadata.
- F3. (meta)data are registered or indexed in a searchable resource.
- F4. metadata specify the data identifier.

TO BE ACCESSIBLE:

- A1 (meta)data are retrievable by their identifier using a standardized communications protocol.
 - A1.1 the protocol is open, free, and universally implementable.
 - A1.2 the protocol allows for an authentication and authorization procedure, where necessary.
- A2 metadata are accessible, even when the data are no longer available.

TO BE INTEROPERABLE:

- I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
- I2. (meta)data use vocabularies that follow FAIR principles.
- I3. (meta)data include qualified references to other (meta)data.

TO BE RE-USABLE:

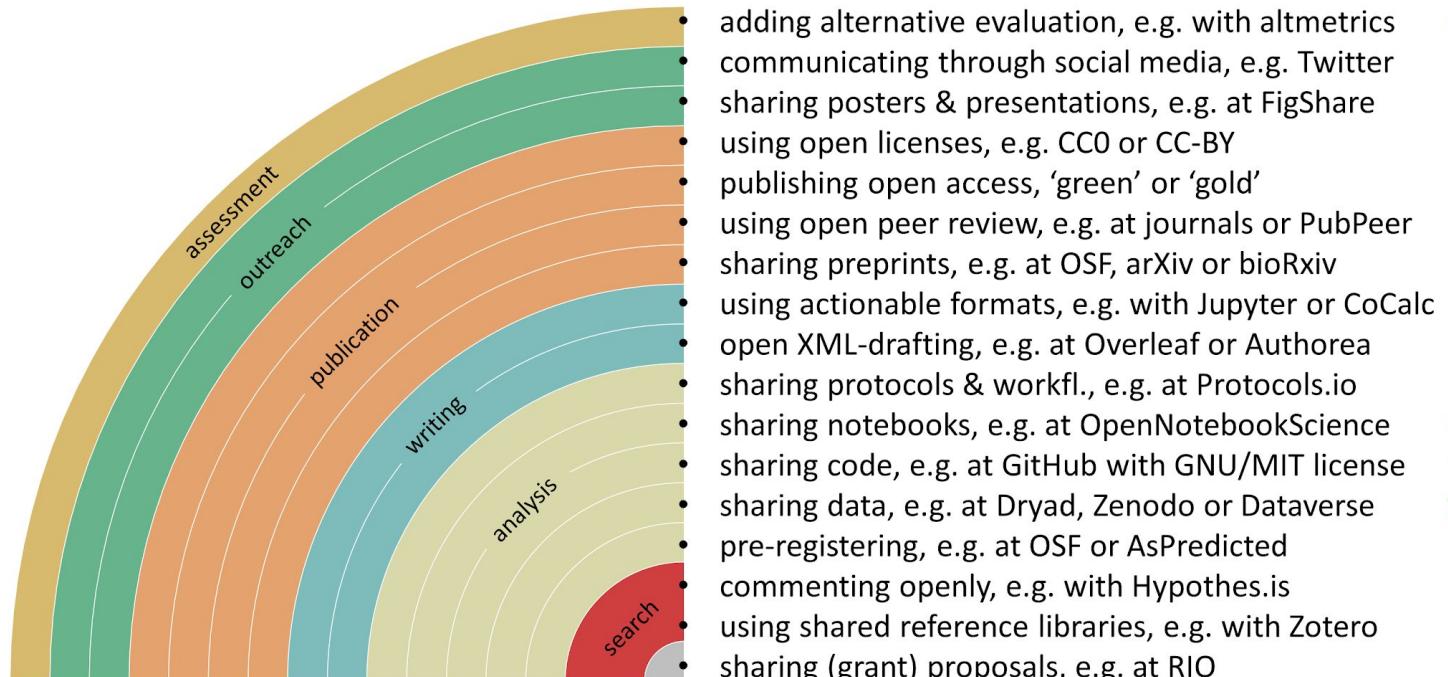
- R1. meta(data) have a plurality of accurate and relevant attributes.
 - R1.1. (meta)data are released with a clear and accessible data usage license.
 - R1.2. (meta)data are associated with their provenance.
 - R1.3. (meta)data meet domain-relevant community standards.

The FAIR data principles, FORCE11 –

<https://www.force11.org/group/fairgroup/fairprinciples>

Strumenti

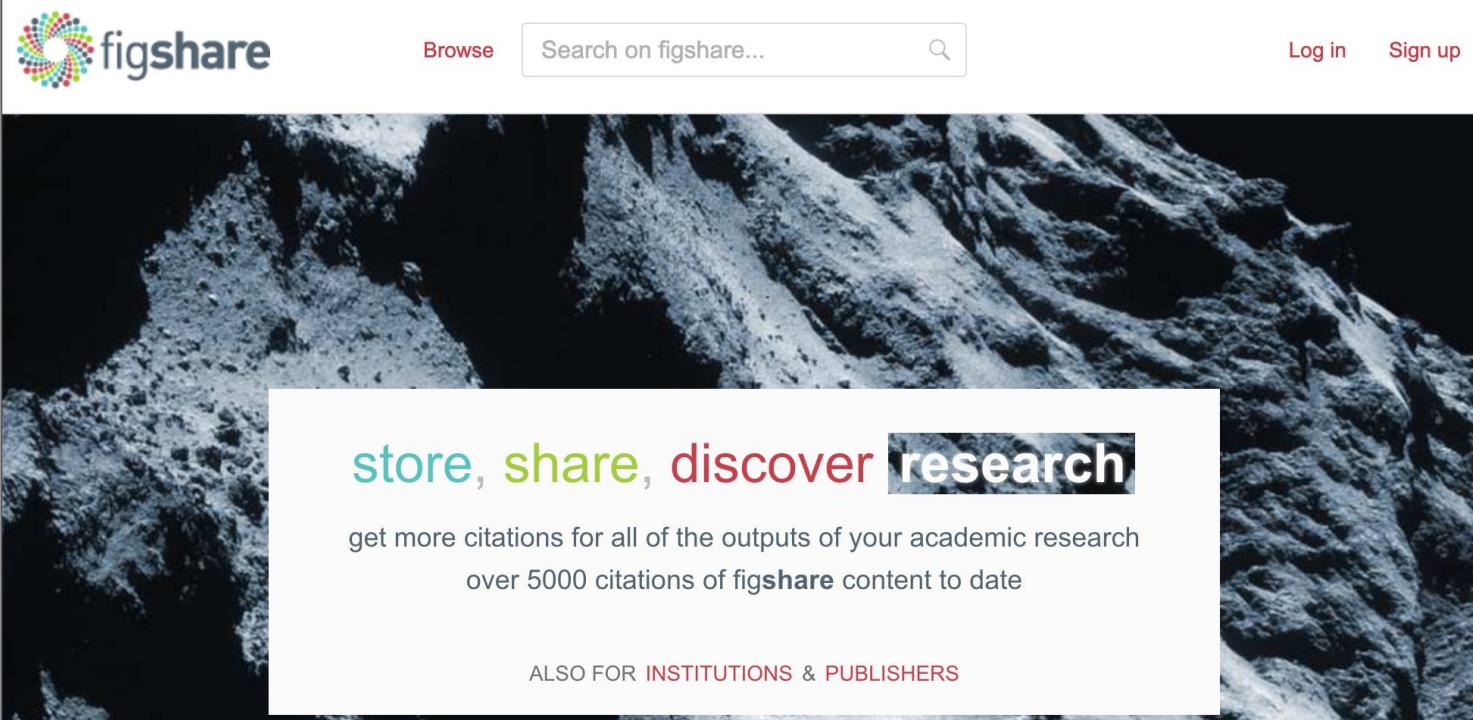
L'arcobaleno delle pratiche Open Science



Kramer, B., & Bosman, J. (2018). Rainbow of open science practices. Zenodo.

<http://doi.org/10.5281/zenodo.1147025>

Figshare



The image shows a close-up view of rugged, light-colored rock formations against a dark background, possibly a canyon wall or a steep slope.

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<https://figshare.com> – per dati e altri contenuti, associa DOI a tutto il materiale

Zenodo

The screenshot shows the Zenodo website interface. At the top, there is a blue header bar with the Zenodo logo on the left, a search bar with a magnifying glass icon in the center, and navigation links for "Upload" and "Communities" on the right. Below the header, the main content area has a white background. A large section title "Recent uploads" is centered. Underneath it, a specific dataset card is displayed. The card includes a timestamp "April 9, 2019 (v2)", a category "Dataset", and an access level "Open Access". To the right of the card is a "View" button. The dataset title is "Real-time optical and electronic sensing with a β-amino enone linked, triazine-containing 2D covalent organic framework". Below the title, a list of authors is shown, each preceded by a green circular profile icon with the letter "ID": Kulkarni, Ranjit; Noda, Yu; Barange, Deepak K.; Kochergin, Yaroslav S.; Balcarova, Barbora; Lyu, Pengbo; Nachtigal, Petr; Bojdys, Michael J. At the bottom of the card, a descriptive text states: "[This repository contains the source data for the manuscript "Real-time optical and electronic sensing with a β-amino enone linked, triazine-containing 2D covalent organic framework"...]

Recent uploads

April 9, 2019 (v2) Dataset Open Access

View

Real-time optical and electronic sensing with a β -amino enone linked, triazine-containing 2D covalent organic framework

ID Kulkarni, Ranjit; ID Noda, Yu; ID Barange, Deepak K.; ID Kochergin, Yaroslav S.; ID Balcarova, Barbora; ID Lyu, Pengbo; ID Nachtigal, Petr; ID Bojdys, Michael J.

[This repository contains the source data for the manuscript "Real-time optical and electronic sensing with a β -amino enone linked, triazine-containing 2D covalent organic framework"...

<https://zenodo.org> – per dati e altri contenuti, associa DOI a tutto il materiale

Protocols

 **protocols.io**

SEARCH 

EXPLORE PLANS + SIGN UP

Make your methods reproducible

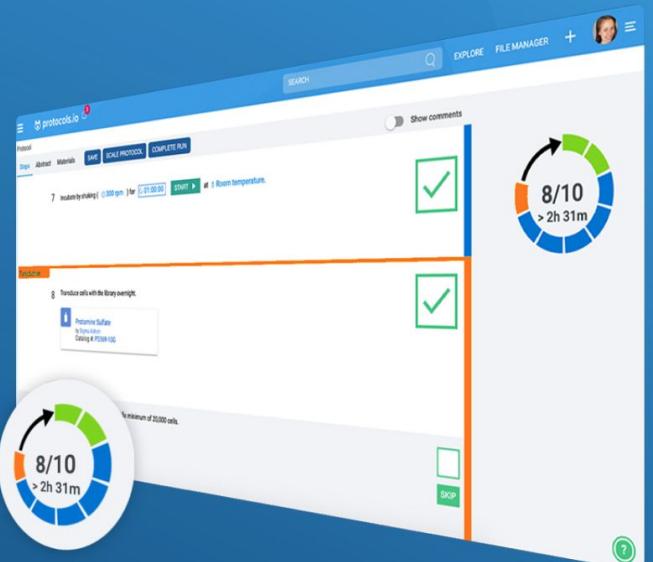
The collaborative platform and preprint server for:

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 Open Access!



<https://www.protocols.io> – per creare e condividere (via DOI) protocolli di ricerca



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arXiv.org

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Physics



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[Form Interface](#)

[Catchup](#)

14 Jun 2019: **Attention Users:** there will be intermittent service disruptions on Sunday, June 16 due to [network maintenance](#)

12 Jun 2019: We are hiring: Executive Director of arXiv

11 Jun 2019: Announcing a new category and category mergers

20 May 2019: We are hiring: arXiv Service Reliability Engineer

See cumulative "[What's New](#)" pages. Read [robots beware](#) before attempting any automated download

<https://arxiv.org> – preprint server (uno dei primi sviluppati)

Current Issue - May 2019

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<https://doi.org/10.7287/peerj.preprints.2320v6>

<https://peerj.com/preprints/> – preprint server (assegna DOI ai preprint)

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Journal titles or ISSNs Publisher names

 Exact title starts with contains ISSN
[Advanced Search](#)

Use this site to find a summary of permissions that are normally given as part of each publisher's copyright transfer agreement.

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- [Application Programmers' Interface \(API\)](#)
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- [Definitions and Terms](#)

Additions and Updates

[RSS1 Feed](#)

- [Ediciones de la Universidad de Valladolid](#) - Ediciones de la Universidad de Valladolid - 04-Dec-2018
- [Springer \(part of Springer Nature\)](#) - Springer (part of Springer Nature) - 26-Sep-2018
- [Nature Research \(part of Springer Nature\)](#) - Nature Research (part of Springer Nature) - 20-Sep-2018

<https://www.sherpa.ac.uk/romeo/> – copyright e preprint policy delle riviste

DOAJ

The screenshot shows the homepage of the Directory of Open Access Journals (DOAJ). The header features the DOAJ logo in orange and the text "DIRECTORY OF OPEN ACCESS JOURNALS". A navigation bar below includes links for Home, Search, Browse Subjects, Apply, News, About, For Publishers, and API. The main search area contains a search bar with the placeholder "Search DOAJ" and a magnifying glass icon. Below the search bar are checkboxes for "journals" and "articles", and a link to "[Advanced Search]". A large orange-bordered box at the bottom left contains the title "DOAJ (Directory of Open Access Journals)" and a descriptive paragraph about the service. It also includes a link to "Why index your journal in DOAJ?".

DOAJ (Directory of Open Access Journals)

DOAJ is a community-curated online directory that indexes and provides access to high quality, open access, peer-reviewed journals. DOAJ is independent. All funding is via donations, 40% of which comes from [sponsors](#) and 60% from [members and publisher members](#). All DOAJ services are free of charge including being indexed in DOAJ. All data is freely available.

DOAJ operates an education and outreach program across the globe, focussing on improving the quality of applications submitted.

[Why index your journal in DOAJ?](#)

<https://doaj.org> – elenco delle riviste Open Access e eventuali costi associati

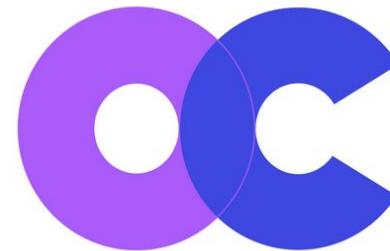
OpenCitations

OpenCitations

Search...



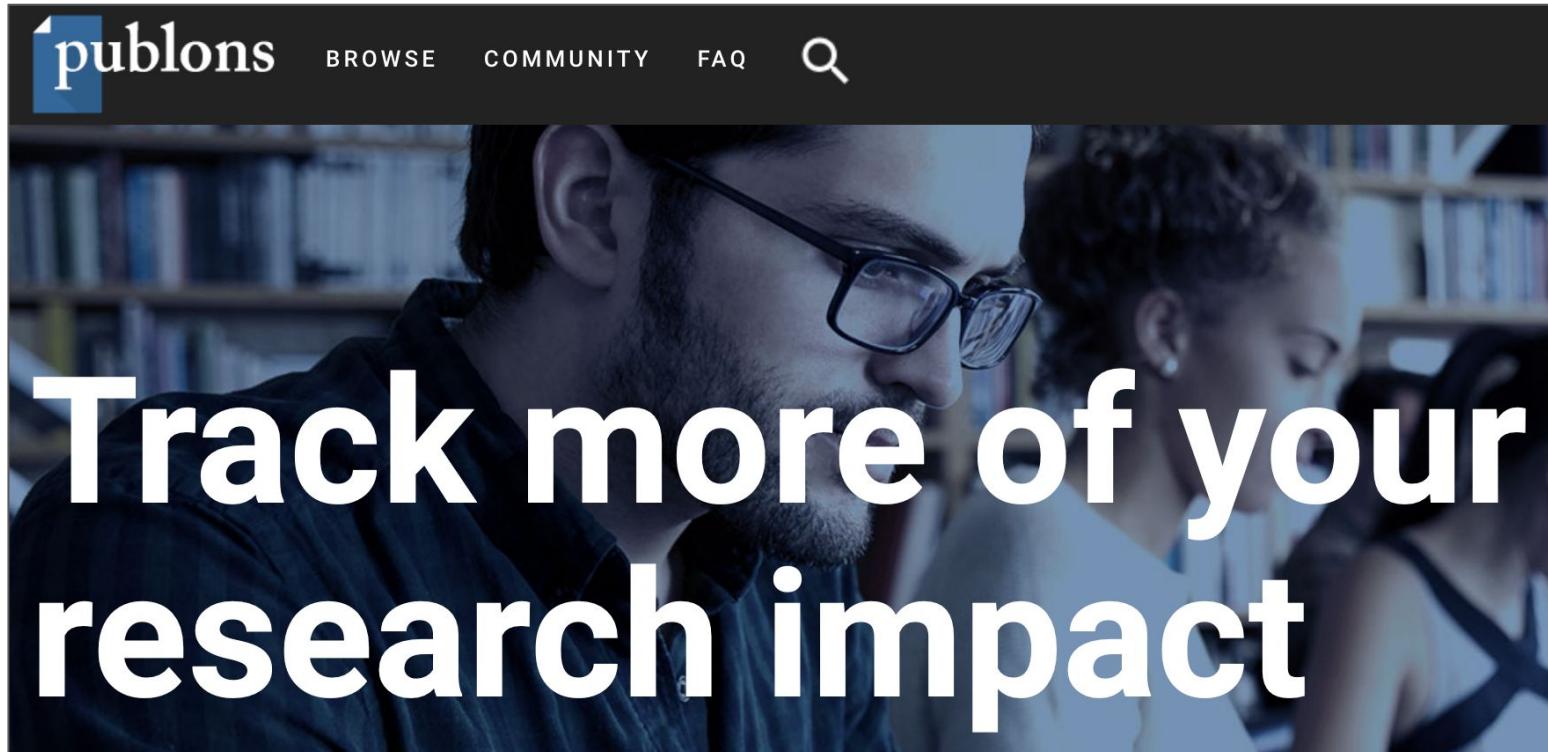
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Welcome to the [OpenCitations](#) homepage!

<http://opencitations.net> – Open Data di citazioni e relativi servizi

Publons

The image shows the homepage of the Publons website. At the top left is the Publons logo, which consists of a blue square with a white 'P' and the word 'publons' in white lowercase letters. To the right of the logo are three navigation links: 'BROWSE', 'COMMUNITY', and 'FAQ'. Further to the right is a magnifying glass icon representing a search function. The main visual is a photograph of two people in what appears to be a library or office setting. A man with a beard and glasses is in the foreground, looking down at a screen. A woman is visible behind him, also looking at the screen. Bookshelves filled with books are in the background.

Track more of your
research impact

<https://publons.com> – Piattaforma per salvare le proprie peer review

GitHub

The screenshot shows the GitHub homepage with a dark background. On the left, the text "Built for developers" is displayed in large white font. Below it, a paragraph explains GitHub's purpose: "GitHub is a development platform inspired by the way you work. From open source to business, you can host and review code, manage projects, and build software alongside 36 million developers." At the top, there is a navigation bar with links for "Why GitHub?", "Enterprise", "Explore", "Marketplace", and "Pricing". A search bar and user authentication buttons ("Sign in" and "Sign up") are also present. A prominent sign-up form is overlaid on the right side, containing fields for "Username", "Email", and "Password". A note below the password field states: "Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more.](#)". A green "Sign up for GitHub" button is at the bottom of the form.

Username

Email

Password

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more.](#)

Sign up for GitHub

<https://github.com> – Piattaforma per salvare software e per tenere traccia della sua evoluzione

ORCID

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We recently updated our privacy policy - a summary of the changes is available in [this blog post](#)

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<https://orcid.org> – identificatore univoco e metadati per persone e organizzazioni

Pratica

Scopo dello studio

Analizzare tutte le riviste pubblicate dall'Università di Bologna, elencate in <https://journals.unibo.it/riviste/> per capire quante di queste:

1. sono effettivamente riviste Open Access in base alla definizione di "open" introdotta dalla Open Definition
2. specificano esplicitamente la licenza dell'articolo nei vari formati (es. PDF e HTML) in cui l'articolo è messo a disposizione

Fase 1: raccolta dati



AlmaDLJournals
Open Access Scientific Journals

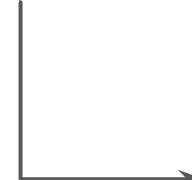
by AlmaDL University of Bologna Digital Library



Entrare nel sito web delle riviste pubblicate dall'Università di Bologna, <https://journals.unibo.it/riviste/>



Organizzarsi in gruppi da due persone e identificare quali riviste sono di propria competenza



| Rivista | A | B | C | D | E | F | G | H | I | J |
|---------|---------|------|---------------|---------|-----|---------|---------------------|------|---|---|
| 1 | Rivista | ISSN | Dichiarato OA | Licenza | OA? | Formato | Licenza per formato | Note | | |
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Compilare lo spreadsheet con i dati delle riviste analizzate



Pubblicare i dati raccolti su Zenodo

Tabella da compilare

<https://tinyurl.com/open-sci-seminar-2019-06-data>

È una tabella di spreadsheet fatta con Google Docs, che può essere modificata da tutti, anche da chi non ha delle credenziali Google, e contiene i seguenti campi

- **Rivista:** il nome della rivista
- **ISSN:** l'ISSN della rivista, che permette di identificarla univocamente
- **Dichiarato OA:** specifica se la rivista si autodichiara Open Access
- **Licenza:** il tipo di licenza associata agli articoli della rivista
- **OA?:** specifica se la licenza associata è conforme alla Open Definition
- **Formato:** i formati in cui gli articoli sono messi a disposizione
- **Licenza per formato:** i formati in cui la licenza è chiaramente specificata
- **Note:** delle note aggiuntive testuali, se necessarie

Clausole Creative Commons

0: Donazione al Pubblico Dominio

BY: attribuzione

SA: condividi allo stesso modo

NC: non commerciale

ND: no opere derivate

(le clausole in **rosso** non sono conformi con la Open Definition)

Fase 2: scrittura articolo

| Rivista | ISSN | Dichiarato OA | Licenza | OA? | Formato | Licenza per formato | Note |
|---------|------|---------------|---------|-----|---------|---------------------|------|
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Recuperare i dati salvati precedentemente nella tabella disponibile a
<https://tinyurl.com/open-sci-seminar-2019-06-data>



Organizzarsi in 4 gruppi di persone, ove ogni gruppo è responsabile per la scrittura di una specifica sezione dell'articolo

Conformità all'Open Access delle riviste pubblicate dall'Università di Bologna

Autori:
Silvio Peroni, silvio.peroni@unibo.it, <https://orcid.org/0000-0003-0530-4305>
[inserire qui tutti gli autori, in ordine alfabetico per cognome]

Introduzione
TODO

Metodologia
TODO

Scrivere l'articolo,
aggiungendo gli opportuni
riferimenti (ad esempio ai
dati precedenti) ove
necessario

Pubblicare l'articolo su Zenodo



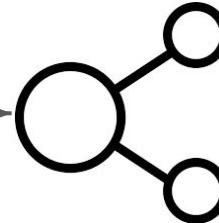
Articolo da scrivere

<https://tinyurl.com/open-sci-seminar-2019-06-paper>

È un documento fatto con Google Docs, che può essere modificato da tutti, anche da chi non ha delle credenziali Google, ed è suddiviso in 5 sezioni:

1. **Introduzione:** si introduce lo studio che è stato fatto e le motivazioni che lo caratterizzano
2. **Metodologia:** si spiega qual è stato il processo per la raccolta dei dati dello studio
3. **Risultati:** si introducono i dati ottenuti, eventualmente presentati raggruppati
4. **Discussione:** si discutono i risultati, per fare emergere punti di forza e criticità
5. **Bibliografia:** la lista delle risorse citate nell'articolo

Fase 3: divulgazione risorse



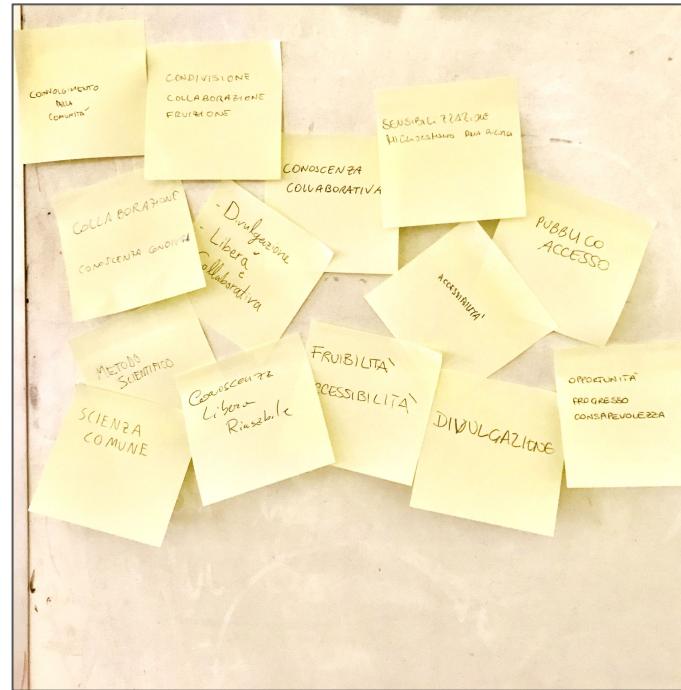
Spedire una serie di email a persone potenzialmente interessate allo studio fatto

Condividere le risorse caricate su Zenodo mediante i social network, ad esempio Twitter

Per concludere

Descrivete con una, massimo due parole quel che vi evoca il concetto di ***Open Science***

Foto delle parole indicate dai partecipanti al seminario



Grazie per l'attenzione

Open Science e Open Access nelle Scienze (Umane e non solo)

Silvio Peroni

<https://orcid.org/0000-0003-0530-4305>

Digital Humanities Advanced Research Centre (DHARC),
Dipartimento di Filologia Classica e Italianistica (FICLIT), Università di Bologna, Bologna, Italia
silvio.peroni@unibo.it – [@essepuntato](https://www.unibo.it/sitoweb/silvio.peroni/en) – <https://www.unibo.it/sitoweb/silvio.peroni/en>

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Seminario 20 giugno 2019
Aula Affreschi, Università di Bologna, Bologna, Italia
<https://github.com/open-sci/seminar-2019-06>



DIPARTIMENTO DI FILOLOGIA CLASSICA E ITALIANISTICA