

# Building trust in preprints with discovery tools of the future



Europe PMC

# Indicators of trust for research

- FAIR open underlying data
  - Reproducible code
  - Comprehensive methods & materials description
  - Funding information
  - COI declaration
  - Open authors, affiliations and contributions information
  - Changes and updates: versions, retractions, removals, withdrawals
  - Open citations and citation context
  - Open peer review
  - Expert curation and recommendations
- ...

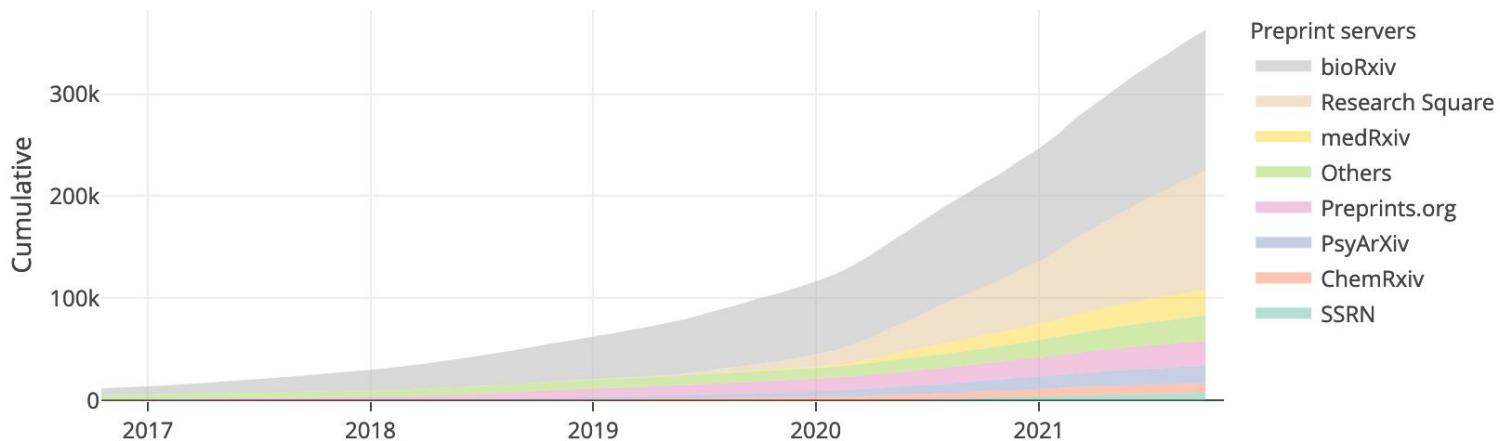


# How does open infrastructure help build trust in preprints?



# Europe PMC perspective

Europe PMC started indexing preprints in 2018 to improve their discoverability. Currently, it indexes abstracts and metadata for over 370,000 preprints from 21 different platforms and full text for over 25,000 COVID-19 related preprints.



# Preprints as part of the ecosystem

Preprints in Europe PMC are enriched with links to data, smart citations, peer review materials, funding, author IDs and more. Preprint versions are linked to each other, and to the journal published version, when possible.



**126,600** preprints  
were **published** in a journal



**12,200** preprints  
have been **cited**



**127,000** preprints  
were claimed to **ORCID**



**25,500** preprints  
have links to **data**



**3500** preprints  
have a preprint **peer review**



**2900** preprints  
have **funding information**



# What does this mean for the reader?

Abstract

Figures (6)

Free full text ▾

Summary

Introduction

Results

Discussion

Star Methods

Supplementary Material

Acknowledgements

References (60)

Full text links

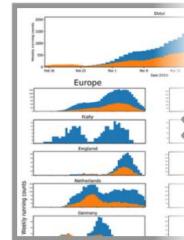
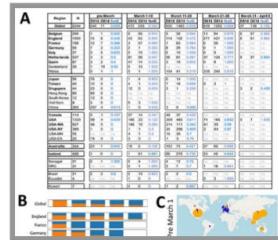
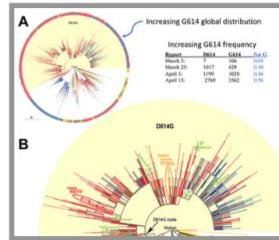
Citations & impact

Data

Reviews

Funding

## Figures (6)



Annotations (282)

Get citation

Open PDF

Claim to ORCID

## Free full text

**bioRxiv**

THE PREPRINT SERVER FOR BIOLOGY

bioRxiv preprint, version 2, posted 2020 May 05

doi: [10.1101/2020.04.29.069054](https://doi.org/10.1101/2020.04.29.069054)

PPRID: PPR157416

EMSID: EMS95314

Spike mutation pipeline reveals the emergence of a more transmissible form of



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<http://europepmc.org/article/PPR/PPR157416>

# What does this mean for the reader?

 This article is a preprint. A [journal published article](#) is available.

## Preprint version history ▾

- Version 11 [04 Aug 2019]
- Version 10 [19 Jul 2019]
- Version 9 [09 Jul 2019]
- Version 8 [02 Jul 2019]
- Version 7 [26 Jun 2019]
- Version 6 [20 Jun 2019]
- Version 5 [18 Jun 2019]
- Version 4 [13 Jun 2019]
- Version 3 [30 May 2019]
- Version 2 [17 May 2019]
- Version 1 [13 Apr 2019]



# What does this mean for the reader?

## Data

### Data behind the article

This data has been text mined from the article, or deposited into data resources.

#### GISAID (Showing 5 of 751)

[GISAID - EPI\\_ISL\\_2403956](#)

(2 citations)

[GISAID - EPI\\_ISL\\_2403997](#)

(2 citations)

#### Protein Structures (2)

[PDBe - 7jtl](#)

(1 citation)

[View structure](#)

#### RefSeq (2)

[RefSeq - NC\\_045512.2](#)

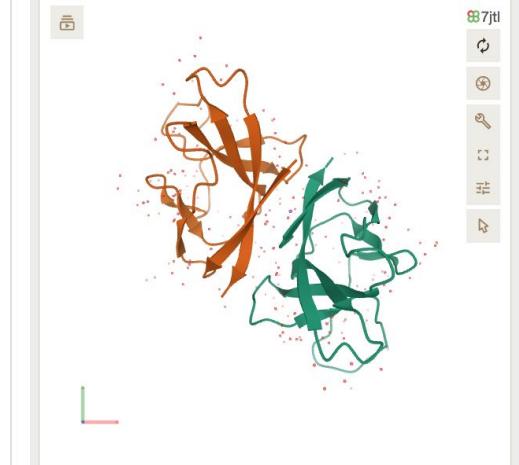
(1 citation)

[RefSeq - NC\\_045512](#)

(1 citation)

PDBe - 7jtl

[View structure](#)



# What does this mean for the reader?

## Reviews

*Reviews, recommendations & commentary from expert sources.*

### Outbreak Science Rapid PREreview

<https://prereview.org/preprints/doi-10.1101-861799> ↗

### preLights

<https://prelights.biologists.com/?p=15677> ↗



# What does this mean for the reader?

## Funding



Funders who supported this work.

Department for International Development

Department of Health

Medical Research Council (1) ▶

Wellcome Trust



# What does this mean for the reader?

## Evaluation of rapid antibody test and chest computed tomography results of COVID-19 patients: A retrospective study

Ozturk A, Bozok T, Bozok TS

Preprint from medRxiv, 20 Feb 2021

DOI: [10.1101/2021.02.15.21251772](https://doi.org/10.1101/2021.02.15.21251772) PPR: PPR286317

Preprint

Free to read & use



⚠ This preprint has been withdrawn by the author(s). [View this record on the preprint server](#) for more information. A [journal published article](#) is available.



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<http://europepmc.org/article/PPR/PPR286317>

# The future of preprint discovery



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# What is on the roadmap?

- Handling preprints in multiple languages (SciELO, Crossref)



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  - Adding preprint license data (Crossref)
  - Labelling curated & reviewed preprints in search results (multiple External Link partners)
- ...



# The future of preprint discovery

Developing new tools for preprint discovery will require joint groundwork of developing community standards, producing high quality open metadata, and implementing open protocols to share preprint-related information.

<b>repositoryName</b>	Y	Y	N	Y	N	Y	Y	Y	-
<b>postedDate</b>	Y	Y	Y	Y	Y	Y	Y	Y	Required
<b>articleTitle</b>	Y	Y	Y	Y	Y	Y	Y	Y	Required
<b>abstract</b>	Y	Y	Y	Y	Y	Y	N	Y	Required
<b>authorName</b>	Y	Y	Y	Y	Y	Y	N	Y	Required
ORCID	Y	Y	Y	Y	Y	Y	N	Y	Desired
authorAffiliation	N	Y	N	N	N	N	N	N	Desired
license	N	Y	Y	Y	Y	N	Y	Y	Desired
funding	N	N	N	Y	N	N	N	N	Desired
references	N	N	N	Y	N	Y	N	N	Desired
isPreprintOf	Y	N	N	NA	Y	Y	N	Y	Desired

