



Crossref

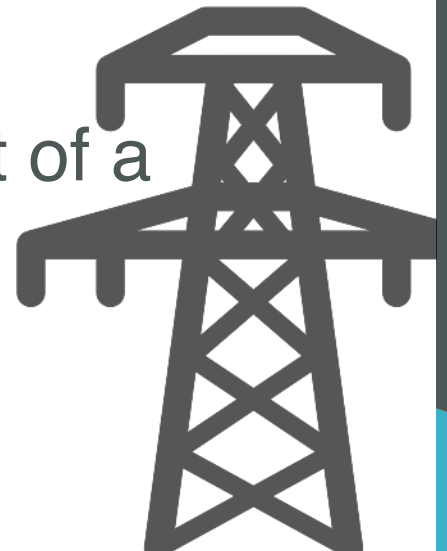


Peer review metadata to support the entire research process

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Crossref - scholarly infrastructure

- Founded to fight link-rot and ensure that the citation record is clear and up-to-date, functioning consistently across publishers
- The metadata is useful, freely available, human & machine accessible
- Works are connected to the full history of the published results
- Contributors are given credit for their work (ORCID)
- Everyone can identify the provenance and get context of a work



Science: opening the black box







Metadata:

Literature



Associated research entities



Associated research outputs



Events surrounding it



Metadata for (almost) any occasion

- Literature discovery
- Research integrity tracking
- Reproducibility
- Reporting to funders and institutions
- Funder policy compliance
- &tc...

Metadata for discoverability

- ORCID, Funder ID & Award No.
- Abstract
- References
- **Links to peer review assets**
- Links to data & software
- Links to preprints
- Links to conference papers and posters
- Links to research resource IDs (identifiers for assays, materials, etc.)
- Links to post-publication events (reviews, comments & discussions, bookmarks, shares, recommendations, references, media coverage)
- Access indicators (publication license for text & data mining, machine mining URLs)

Metadata for research integrity

- Updates (corrections, retraction, update, expressions of concern, etc.)
- **Peer review history, type, assets**
- Funding data (COI)
- ORCID IDs (authors, reviewers, editors, etc.)
- Affiliation (authors, reviewers, editors, etc.)
- License data (full text, abstract, etc.)

Metadata for reproducibility

- Updates (corrections, retraction, update, expressions of concern, etc.)
- Funding data (COI) & ORCID IDs (authors, reviewers, editors, etc.)
- License data (full text, abstract, etc.)
- **Links to peer review description & assets**
- Links to underlying data & software
- Links to protocols
- Links to versions
- Links to videos/audio and other supporting information
- Links to research resource IDs (identifiers for assays, materials, etc.)
- Links to clinical trial registry and trial number

Metadata for reporting & assessment

- ORCID, Funder ID, Grant ID & Award No.
- Abstract
- References
- **Peer review description & assets**
- Links to data & software
- Links to preprints
- Links to conference papers and posters
- Links to research resource IDs (identifiers for assays, materials, etc.)
- Links to post-publication events (reviews, comments & discussions, bookmarks, shares, recommendations, references, media coverage)
- Access indicators (publication license for text & data mining, machine mining URLs)



Crossref worked with our members to launch Peer Review Metadata:

BMJ

PeerJ

publons

SPRINGER NATURE



Copernicus Publications



eLIFE

New content type: Reviews

- Assets across peer review history for any and all review rounds: referee reports, decision letters, and author responses
- Pre & post publication
- Dedicated metadata
 - characterizes peer review asset: recommendation, type, license, contributor info, competing interests
 - makes the review process transparent: pre/post-publication, revision round, review date

Metadata about the publication

Research publication

Review

Review

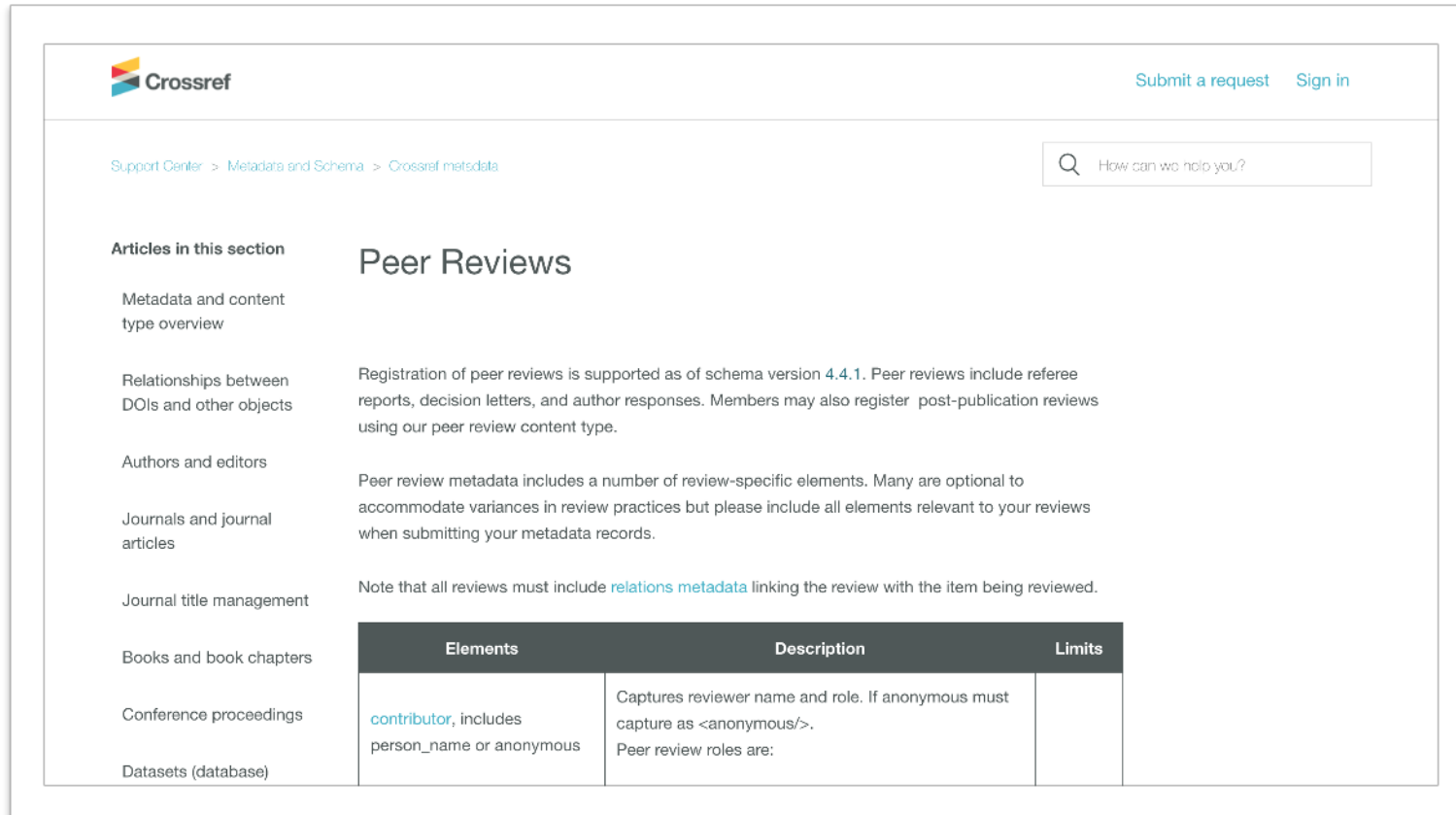
Review

Metadata about the review

Metadata for reviews

- Party registering review content
- DOI of review
- Identifier of publication reviewed and link to it (relationship)
- Review stage (pre or post-publication)
- Title of review
- Date of review
- Person or organization: Name, ORCID, Affiliation, Role (Reader, Reviewer, Editor, Assistant to reviewer, Stats reviewer, Author, External commenter)
- Review type (Referee Report, Editor Report, Author Comment, Community Comment)
- License
- Competing interest
- Recommendation (major-revision, minor-revision, reject, reject-with-resubmit, accept)
- Running number/ review identifier (Internal number/identifier used to identify specific review)
- Revision round (Revision round number, first submission defined as revision round 0)

Registering peer reviews



The screenshot shows the Crossref support page for Peer Reviews. The page includes a navigation menu on the left with links to various metadata topics. The main content area is titled 'Peer Reviews' and contains introductory text about registration and a table of metadata elements.

Articles in this section

- Metadata and content type overview
- Relationships between DOIs and other objects
- Authors and editors
- Journals and journal articles
- Journal title management
- Books and book chapters
- Conference proceedings
- Datasets (database)

Peer Reviews

Registration of peer reviews is supported as of schema version 4.4.1. Peer reviews include referee reports, decision letters, and author responses. Members may also register post-publication reviews using our peer review content type.

Peer review metadata includes a number of review-specific elements. Many are optional to accommodate variances in review practices but please include all elements relevant to your reviews when submitting your metadata records.

Note that all reviews must include [relations metadata](#) linking the review with the item being reviewed.

| Elements | Description | Limits |
|---|---|--------|
| contributor , includes <code>person_name</code> or <code>anonymous</code> | Captures reviewer name and role. If anonymous must capture as <code><anonymous/></code> . Peer review roles are: | |

Support Documentation: <https://support.crossref.org/hc/en-us/articles/115005255706-Peer-Reviews>

Current peer reviews registered

Publishers registering peer reviews (as of 23 Jan 2018):

- 10.7287 - PeerJ (9544 reviews)
- 10.21468 - SciPost, (317 reviews)
- 10.14293 - ScienceOpen (125 reviews)

The logo for PeerJ, featuring the word "PeerJ" in a blue, sans-serif font.The logo for SciPost, featuring the word "SciPost" in a blue, sans-serif font with a vertical orange bar between "Sci" and "Post".The logo for scienceOPEN, featuring the word "scienceOPEN" in a dark grey, sans-serif font with "OPEN" in green.

Since launch Nov 2017:

9986 reviews total, pre and post-publication


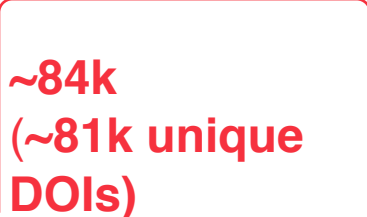
Research nexus: Clusterflock

Clusterflock: an algorithm optimizing distance-based clusters in orthologous gene families that share an evolutionary history

- Paper: <https://doi.org/10.1186/s13742-016-0152-3>
- Preprint: <https://doi.org/10.1101/045773>
- Supporting data: <http://dx.doi.org/10.5524/100247>
- Code: <https://github.com/narechan/clusterflock>
- Docker hub: <https://hub.docker.com/r/narechan/clusterflock-0.1>
- Video demo: <https://youtu.be/ELZTVOiqKn8>
- **Peer reviews:** <https://doi.org/10.5524/review.100507> and <https://doi.org/10.5524/review.100508>



Reviews on non-publisher platforms

- Crossref Event Data links research publications (91 mil) to their commentaries across the web
- Coverage expanding over time, currently includes:
 - blogs
 - Hypothes.is  ~28k (~27k unique DOIs)
 - F1000Prime  ~84k (~81k unique DOIs)
 - (*Twitter, StackExchange, Reddit, etc.*)
- Metadata via API: free to access and to reuse

Crossref metadata reaches:

- Funders
- Institutions
- Archives & repositories
- Research councils
- Data centers
- Professional networks
- Patent offices
- Indexing services
- Publishing vendors
- Metrics providers
- Reference manager systems
- Lab & diagnostics suppliers
- Sharing platforms
- Data analytics systems
- Literature discovery services
- Educational tools
- PID providers, registration agencies

Thank you

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