

# Package ‘roadoi’

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**Type** Package

**Title** Find Free Versions of Scholarly Publications via Unpaywall

**Version** 0.7.2

## Description

This web client interfaces Unpaywall <<https://unpaywall.org/products/api>>, formerly oaDOI, a service finding free full-texts of academic papers by linking DOIs with open access journals and repositories. It provides unified access to various data sources for open access full-text links including Crossref and the Directory of Open Access Journals (DOAJ). API usage is free and no registration is required.

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**URL** <https://docs.ropensci.org/roadoi/>,  
<https://github.com/ropensci/roadoi/>

**BugReports** <https://github.com/ropensci/roadoi/issues/>

**Imports** htr, jsonlite, dplyr, plyr, purrr, tibble, miniUI, shiny (>= 1.0.3), tidyr, rlang

**Suggests** roxygen2 (>= 6.0.1), testthat, knitr, covr, rmarkdown, linter

**RoxygenNote** 7.1.1

**VignetteBuilder** knitr

**NeedsCompilation** no

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roadoi-package	<i>R Client for the Unpaywall-API</i>
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### Description

What is this client for?: roadoi interacts with the Unpaywall data service, which links DOIs representing scholarly works with open access versions.

### Details

Use the `oadoi_fetch()` function in this package to get open access status information and full-text links from Unpaywall.

You are welcome to contribute to this package. Use GitHub's issue tracker for bug reporting and feature requests.

More details about the Unpaywall API: <https://unpaywall.org/products/api>.

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oadoi_fetch	<i>Fetch open access status information and full-text links using Unpaywall</i>
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### Description

This is the main function to retrieve comprehensive open access status information from Unpaywall data service. Please play nice with the API. For each user, 100k calls per day are suggested. If you need to access more data, there is also a data dump available. For more info see <https://unpaywall.org/products/snapshot>.

### Usage

```
oadoi_fetch(
  dois = NULL,
  email = Sys.getenv("roadoi_email"),
  .progress = "none",
  .flatten = FALSE
)
```

**Arguments**

<code>dois</code>	character vector, search by a single DOI or many DOIs. A rate limit of 100k requests per day is suggested. If you need to access more data, request the data dump <a href="https://unpaywall.org/dataset">https://unpaywall.org/dataset</a> instead.
<code>email</code>	character vector, mandatory! Unpaywall requires your email address, so that they can track usage and notify you when something breaks. Set email address in your <code>.Renviron</code> file with the option <code>'roadoi_email'</code> <code>options(roadoi_email = "najko.jahn@gmail.com")</code> . You can open your <code>.Renviron</code> file calling <code>'file.edit("~/Renviron")'</code> . Save the file and restart your R session. To stop sharing your email when using <code>crossref</code> , delete it from your <code>.Renviron</code> file.
<code>.progress</code>	Shows the plyr-style progress bar. Options are "none", "text", "tk", "win", and "time". See <a href="#">create_progress_bar</a> for details of each. By default, no progress bar is displayed.
<code>.flatten</code>	Simplify open access evidence output. If <code>'TRUE'</code> it transforms the nested column <code>oa_locations</code> so that each open access evidence variable has its own column and each row represents a single full-text. Following these basic principles of "Tidy Data" makes data analysis and export as a spreadsheet more straightforward.

**Value**

The result is a tibble with each row representing a publication. Here are the returned columns and descriptions according to the API docu:

<code>doi</code>	DOI (always in lowercase).
<code>best_oa_location</code>	list-column describing the best OA location. Algorithm prioritizes publisher hosted content (eg
<code>oa_locations</code>	list-column of all the OA locations.
<code>oa_locations_embargoed</code>	list-column of locations expected to be available in the future based on information like license
<code>data_standard</code>	Indicates the data collection approaches used for this resource. 1 mostly uses Crossref for hybrid
<code>is_oa</code>	Is there an OA copy (logical)?
<code>is_paratext</code>	Is the item an ancillary part of a journal, like a table of contents? See here for more information
<code>genre</code>	Publication type
<code>oa_status</code>	Classifies OA resources by location and license terms as one of: gold, hybrid, bronze, green or c
<code>has_repository_copy</code>	Is a full-text available in a repository?
<code>journal_is_oa</code>	Is the article published in a fully OA journal?
<code>journal_is_in_doaj</code>	Is the journal listed in the Directory of Open Access Journals (DOAJ).
<code>journal_issns</code>	ISSNs, i.e. unique numbers to identify journals.
<code>journal_issn_l</code>	Linking ISSN.
<code>journal_name</code>	Journal title, not normalized.
<code>publisher</code>	Publisher, not normalized.
<code>published_date</code>	Date published
<code>year</code>	Year published.
<code>title</code>	Publication title.
<code>updated_resource</code>	Time when the data for this resource was last updated.
<code>authors</code>	Lists author information (family name, given name and author role sequence), if available.

The columns `best_oa_location`, `oa_locations` and `oa_locations_embargoed` are list-columns that contain useful metadata about the OA sources found by Unpaywall.

If `.flatten = TRUE` the list-column `oa_locations` will be restructured in a long format where each OA fulltext is represented by one row.

These are:

<code>endpoint_id</code>	Unique repository identifier.
<code>evidence</code>	How the OA location was found and is characterized by Unpaywall?
<code>host_type</code>	OA full-text provided by publisher or repository.
<code>is_best</code>	Is this location the <code>best_oa_location</code> for its resource?
<code>license</code>	The license under which this copy is published, e.g. Creative Commons license.
<code>pmh_id</code>	OAI-PMH endpoint where we found this location.
<code>repository_institution</code>	Hosting institution of the repository.
<code>updated</code>	Time when the data for this location was last updated.
<code>url</code>	The <code>url_for_pdf</code> if there is one; otherwise landing page URL.
<code>url_for_landing_page</code>	The URL for a landing page describing this OA copy.
<code>url_for_pdf</code>	The URL with a PDF version of this OA copy.
<code>version</code>	The content version accessible at this location following the DRIVER 2.0 Guidelines ( <a href="https://">https://</a>

Note that Unpaywall schema is only informally described. Check also <https://unpaywall.org/data-format>.

## Examples

```
## Not run:
oadoi_fetch("10.1038/nature12373", email = "name@example.com")
oadoi_fetch(dois = c("10.1016/j.jbiotec.2010.07.030",
"10.1186/1471-2164-11-245"), email = "name@example.com")
# flatten OA evidence
roadoi::oadoi_fetch(dois = c("10.1186/s12864-016-2566-9",
"10.1103/physreve.88.012814",
"10.1093/reseval/rvaa038"),
email = "najko.jahn@gmail.com", .flatten = TRUE)

## End(Not run)
```

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oadoi\_fetch\_

*Get open access status information.*

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## Description

In general, use `oadoi_fetch` instead. It calls this method, returning open access status information from all your requests.

**Usage**

```
oadoi_fetch_(doi = NULL, email = NULL)
```

**Arguments**

**doi** character vector, a DOI

**email** character vector, mandatory! Unpaywall requires your email address, so that they can track usage and notify you when something breaks. Set email address in your `‘.Renviron‘` file with the option `‘roadoi_email‘` `options(roadoi_email = "najko.jahn@gmail.com")`. You can open your `‘.Renviron‘` file calling `‘file.edit("~/Renviron")‘`. Save the file and restart your R session. To stop sharing your email when using `rcrossref`, delete it from your `‘.Renviron‘` file.

**Value**

A tibble

**Examples**

```
## Not run:
oadoi_fetch_(doi = c("10.1016/j.jbiotec.2010.07.030"))

## End(Not run)
```

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roadoi_addin	<i>Find OA copies with RStudio addin</i>
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**Description**

An **RStudio addin** to call `oadoi_fetch()`. Shows up as "Find free full-texts" in the RStudio addin menu.

**Usage**

```
roadoi_addin()
```

**Details**

The addin works as follows:

1. Copy up to ten line-separated DOIs into the text area
2. Press the button "Run!"
3. Click on the links in the table to download full-text

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