

# Package ‘rcrossref’

December 4, 2017

**Title** Client for Various 'CrossRef' 'APIs'

**Description** Client for various 'CrossRef' 'APIs', including 'metadata' search with their old and newer search 'APIs', get 'citations' in various formats (including 'bibtex', 'citeproc-json', 'rdf-xml', etc.), convert 'DOIs' to 'PMIDs', and 'vice versa', get citations for 'DOIs', and get links to full text of articles when available.

**Version** 0.8.0

**License** MIT + file LICENSE

**URL** <https://github.com/ropensci/rcrossref>

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

**VignetteBuilder** knitr

**Imports** methods, utils, jsonlite (>= 1.5), crul (>= 0.4.0), xml2 (>= 1.1.1), plyr, bibtex, dplyr (>= 0.7.4), R6, shiny, miniUI, stringr

**Suggests** roxygen2 (>= 6.0.1), testthat, knitr

**RoxygenNote** 6.0.1

**NeedsCompilation** no

**Author** Scott Chamberlain [aut, cre],  
Carl Boettiger [aut],  
Ted Hart [aut],  
Karthik Ram [aut]

**Maintainer** Scott Chamberlain <myrmecocystus@gmail.com>

**Repository** CRAN

**Date/Publication** 2017-12-03 23:34:09 UTC

## R topics documented:

rcrossref-package . . . . .	2
cr_abstract . . . . .	4
cr_agency . . . . .	4

cr_citation_count . . . . .	5
cr_cn . . . . .	6
cr_funders . . . . .	9
cr_journals . . . . .	12
cr_licenses . . . . .	15
cr_members . . . . .	17
cr_prefixes . . . . .	20
cr_r . . . . .	23
cr_types . . . . .	24
cr_works . . . . .	26
filters . . . . .	30
get_styles . . . . .	31
id_converter . . . . .	32
rcrossref-defunct . . . . .	32
rcrossref-deprecated . . . . .	33
<b>Index</b>	<b>34</b>

---

rcrossref-package      *R Client for Various CrossRef APIs.*

---

## Description

R Client for Various CrossRef APIs.

## Crossref APIs

rcrossref interacts with the main Crossref metadata search API at [https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md), the old metadata search API at <http://search.labs.crossref.org/>, their DOI Content Negotiation service at <http://citation.crosscite.org/docs.html>, and the *Text and Data Mining* project <http://tdmsupport.crossref.org/>

## Defunct

See [rcrossref-deprecated](#) and [rcrossref-defunct](#) for details.

## What am I actually searching?

When you use the `cr_*`() functions in this package, you are using the Crossref search API described at [https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md). When you search with query terms, on Crossref servers they are not searching full text, or even abstracts of articles, but only what is available in the data that is returned to you. That is, they search article titles, authors, etc. For some discussion on this, see <https://github.com/CrossRef/rest-api-doc/issues/101>.

## Rate limiting

From time to time Crossref needs to impose rate limits to ensure that the free API is usable by all. Any rate limits that are in effect will be advertised in the `X-Rate-Limit-Limit` and `X-Rate-Limit-Interval` HTTP headers.

This boils down to: they allow X number of requests per some time period. The numbers can change so we can't give a rate limit that will always be in effect. If you're curious pass in `verbose = TRUE` to your function call, and you'll get headers that will display these rate limits.

## Text mining

All Crossref specific text mining functions are now deprecated, and moved to a new package `crminer`.

Another package `fulltext` is designed solely to do general purpose text mining involving Crossref and other sources of scholarly metadata and full text.

## High and Low Level APIs

For the Crossref search API (the functions `cr_funders()`, `cr_journals()`, `cr_licenses()`, `cr_members()`, `cr_prefixes()`, `cr_types()`, `cr_works()`), there is a high level API and a low level. The high level is accessible through those functions just listed (e.g., `cr_works()`), whereas the low level is accessible via the same fxn name with an underscore (e.g., `cr_works_()`). The high level API does data requests, and parses to `data.frame`'s. Since the high level API functions have been around a while, we didn't want to break their behavior, so the low level API functions are separate, and only do the data request, giving back json or a list, with no attempt to parse any further. The low level API functions will be faster because there's much less parsing, and therefore less prone to potential errors due to changes in the Crossref API that could cause parsing errors. Note that cursor feature works with both high and low level.

## RStudio Addin

On installation of `rcrossref` you get an RStudio Addin. To use the addin, go to the top toolbar `> Tools > Addins > Add Crossref Citations`. You'll get a window pop up that you can put in DOIs for. If the DOI is found, the bibtex citations will be added to a file called `crossref.bib`. New citations will be appended to that file. Addin authored by Hao Zhu <https://github.com/haozhu233>

## Be nice and share your email with Crossref

The Crossref team encourage requests with appropriate contact information and will forward you to a dedicated API cluster for improved performance when you share your email address with them. <https://github.com/CrossRef/rest-api-doc#good-manners--more-reliable-service>

To pass your email address to Crossref via this client, simply store it as environment variable in `.Renviron` like this:

1. Open file: `file.edit("~/Renviron")`
2. Add email address to be shared with Crossref `crossref_email = name@example.com`
3. Save the file and restart your R session

Don't wanna share your email any longer? Simply delete it from `~/Renviron`

---

`cr_abstract`*Get abstract*

---

**Description**

Get abstract

**Usage**

```
cr_abstract(doi, ...)
```

**Arguments**

`doi` (character) a DOI, required.  
`...` Named parameters passed on to [HttpClient](#)

**Examples**

```
## Not run:  
# abstract found  
cr_abstract(doi = '10.1109/TASC.2010.2088091')  
  
# doi not found  
# cr_abstract(doi = '10.5284/1011335')  
  
# abstract not found, throws warning  
# cr_abstract(doi = '10.1126/science.169.3946.635')  
# cr_abstract(doi = '10.1371/journal.pone.0033693')  
# cr_abstract(doi = '10.1007/12080.1874-1746')  
  
# cr_abstract(cr_r(1))  
  
## End(Not run)
```

---

`cr_agency`*Check the DOI minting agency on one or more dois*

---

**Description**

Check the DOI minting agency on one or more dois

**Usage**

```
cr_agency(dois = NULL, .progress = "none", ...)
```

**Arguments**

dois	(character) One or more article or organization dois.
.progress	Show a plyr-style progress bar? Options are "none", "text", "tk", "win", and "time". See <a href="#">create_progress_bar</a> for details of each. Only used when passing in multiple ids (e.g., multiple DOIs, DOI prefixes, etc.)
...	Named parameters passed on to <a href="#">HttpClient</a>

**Author(s)**

Scott Chamberlain <myrmecocystus@gmail.com>

**References**

[https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md)

**Examples**

```
## Not run:
cr_agency(dois = '10.13039/100000001')
cr_agency(
  dois = c('10.13039/100000001', '10.13039/100000015', '10.5284/1011335'))
## End(Not run)
```

---

cr\_citation\_count      *Get a citation count via CrossRef OpenURL*

---

**Description**

Get a citation count via CrossRef OpenURL

**Usage**

```
cr_citation_count(doi, url = "http://www.crossref.org/openurl/",
  key = "cboettig@ropensci.org", ...)
```

**Arguments**

doi	(character) digital object identifier for an article
url	(character) the url for the function (should be left to default)
key	your Crossref OpenURL email address, either enter, or loads from .Rprofile. We use a default, so you don't need to pass this.
...	Curl options passed on to <a href="#">crul::HttpClient()</a>

## Details

See <http://labs.crossref.org/openurl/> for more info on this Crossref API service.

This number is also known as **cited-by**

Note that this number may be out of sync/may not match that that the publisher is showing (if they show it) for the same DOI/article.

We've contacted Crossref about this, and they have confirmed this. Unfortunately, we can not do anything about this.

I would imagine it's best to use this data instead of from the publishers, and this data you can get programatically :)

## Value

single numeric value - the citation count, or NA if not found or no count available

## Author(s)

Carl Boettiger <cboettig@gmail.com>

## See Also

[cr\\_search\(\)](#), [cr\\_r\(\)](#)

## Examples

```
## Not run:
cr_citation_count(doi="10.1371/journal.pone.0042793")
cr_citation_count(doi="10.1016/j.fbr.2012.01.001")
# DOI not found
cr_citation_count(doi="10.1016/j.fbr.2012")

## End(Not run)
```

---

cr\_cn

*Get citations in various formats from CrossRef.*

---

## Description

Get citations in various formats from CrossRef.

## Usage

```
cr_cn(dois, format = "bibtex", style = "apa", locale = "en-US",
      raw = FALSE, .progress = "none", ...)
```

## Arguments

<code>dois</code>	Search by a single DOI or many DOIs.
<code>format</code>	Name of the format. One of "rdf-xml", "turtle", "citeproc-json", "citeproc-json-ish", "text", "ris", "bibtex" (default), "crossref-xml", "datacite-xml", "bibentry", or "crossref-tdm". The format "citeproc-json-ish" is a format that is not quite proper citeproc-json
<code>style</code>	a CSL style (for text format only). See <code>get_styles()</code> for options. Default: apa. If there's a style that CrossRef doesn't support you'll get a (500) Internal Server Error
<code>locale</code>	Lansguage locale. See <code>?Sys.getlocale</code>
<code>raw</code>	(logical) Return raw text in the format given by format parameter. Default: FALSE
<code>.progress</code>	Show a plyr-style progress bar? Options are "none", "text", "tk", "win", and "time". See <code>create_progress_bar</code> for details of each. Only used when passing in multiple ids (e.g., multiple DOIs, DOI prefixes, etc.)
<code>...</code>	Named parameters passed on to <code>HttpClient</code>

## Details

See <http://citation.crosscite.org/docs.html> for more info on the Crossref Content Negotiation API service.

DataCite DOIs: Some values of the format parameter won't work with DataCite DOIs, i.e. "citeproc-json", "crossref-xml", "crossref-tdm", "onix-xml".

MEDRA DOIs only work with "rdf-xml", "turtle", "citeproc-json-ish", "ris", "bibtex", "bibentry", "onix-xml".

See examples below.

See `cr_agency()`

Note that the format type citeproc-json uses the CrossRef API at `api.crossref.org`, while all others are content negotiated via `http://data.crossref.org`, `http://data.datacite.org` or `http://data.medra.org`. DOI agency is checked first (see `cr_agency()`).

## Examples

```
## Not run:
cr_cn(dois="10.1126/science.169.3946.635")
cr_cn(dois="10.1126/science.169.3946.635", "citeproc-json")
cr_cn(dois="10.1126/science.169.3946.635", "citeproc-json-ish")
cr_cn("10.1126/science.169.3946.635", "rdf-xml")
cr_cn("10.1126/science.169.3946.635", "crossref-xml")
cr_cn("10.1126/science.169.3946.635", "text")

# return an R bibentry type
cr_cn("10.1126/science.169.3946.635", "bibentry")
cr_cn("10.6084/m9.figshare.97218", "bibentry")

# return an apa style citation
cr_cn("10.1126/science.169.3946.635", "text", "apa")
```

```

cr_cn("10.1126/science.169.3946.635", "text", "harvard3")
cr_cn("10.1126/science.169.3946.635", "text", "elsevier-harvard")
cr_cn("10.1126/science.169.3946.635", "text", "ecoscience")
cr_cn("10.1126/science.169.3946.635", "text", "heredity")
cr_cn("10.1126/science.169.3946.635", "text", "oikos")

# example with many DOIs
dois <- cr_r(2)
cr_cn(dois, "text", "apa")

# Cycle through random styles - print style on each try
stys <- get_styles()
foo <- function(x){
  cat(sprintf("<Style>:%s\n", x), sep = "\n\n")
  cat(cr_cn("10.1126/science.169.3946.635", "text", style=x))
}
foo(sample(stys, 1))

# Using DataCite DOIs
## some formats don't work
# cr_cn("10.5284/1011335", "text")
# cr_cn("10.5284/1011335", "crossref-xml")
# cr_cn("10.5284/1011335", "crossref-tdm")
## But most do work
cr_cn("10.5284/1011335", "datacite-xml")
cr_cn("10.5284/1011335", "rdf-xml")
# cr_cn("10.5284/1011335", "turtle")
cr_cn("10.5284/1011335", "citeproc-json-ish")
cr_cn("10.5284/1011335", "ris")
cr_cn("10.5284/1011335", "bibtex")
cr_cn("10.5284/1011335", "bibentry")

dois <- c('10.5167/UZH-30455', '10.5167/UZH-49216', '10.5167/UZH-503',
          '10.5167/UZH-38402', '10.5167/UZH-41217')
cat(cr_cn(dois[1]))
cat(cr_cn(dois[2]))
cat(cr_cn(dois[3]))
cat(cr_cn(dois[4]))

# Using Medra DOIs
cr_cn("10.3233/ISU-150780", "onix-xml")

# Get raw output
cr_cn(dois = "10.1002/app.27716", format = "citeproc-json", raw = TRUE)

# sometimes messy DOIs even work
## in this case, a DOI minting agency can't be found
## but we proceed anyway, just assuming it's "crossref"
cr_cn("10.1890/0012-9615(1999)069[0569:EDILSA]2.0.CO;2")

## End(Not run)

```



---

 cr\_funders

 Search the CrossRef Fundref API
 

---

**Description**

Search the CrossRef Fundref API

**Usage**

```
cr_funders(dois = NULL, query = NULL, filter = NULL, offset = NULL,
  limit = NULL, sample = NULL, sort = NULL, order = NULL,
  facet = FALSE, works = FALSE, cursor = NULL, cursor_max = 5000,
  .progress = "none", flq = NULL, select = NULL, ...)
```

```
cr_funders_(dois = NULL, query = NULL, filter = NULL, offset = NULL,
  limit = NULL, sample = NULL, sort = NULL, order = NULL,
  facet = FALSE, works = FALSE, cursor = NULL, cursor_max = 5000,
  .progress = "none", parse = FALSE, flq = NULL, select = NULL, ...)
```

**Arguments**

dois	Search by a single DOI or many DOIs.
query	Query terms
filter	Filter options. See details.
offset	Number of record to start at. Minimum: 1. For <code>cr_works</code> , and any function setting <code>works = TRUE</code> , the maximum offset value is 10000. For larger requests use <code>cursor</code> .
limit	Number of results to return in the query. Not relevant when searching with specific dois. Default: 20. Max: 1000
sample	(integer) Number of random results to return. when you use the <code>sample</code> parameter, the <code>rows</code> and <code>offset</code> parameters are ignored. Ignored unless <code>works=TRUE</code> . Max: 100
sort	Field to sort on. Acceptable set of fields to sort on: <ul style="list-style-type: none"> <li>• <code>score OR relevance</code> - Sort by relevance score</li> <li>• <code>updated</code> - Sort by date of most recent change to metadata. Currently the same as <code>deposited</code>.</li> <li>• <code>deposited</code> - Sort by time of most recent deposit</li> <li>• <code>indexed</code> - Sort by time of most recent index</li> <li>• <code>published</code> - Sort by publication date</li> <li>• <code>published-print</code> - Sort by print publication date</li> <li>• <code>published-online</code> - Sort by online publication date</li> <li>• <code>issued</code> - Sort by issued date (earliest known publication date)</li> <li>• <code>is-referenced-by-count</code> - Sort by number of times this DOI is referenced by other Crossref DOIs</li> </ul>

	<ul style="list-style-type: none"> <li>• <code>references-count</code> - Sort by number of references included in the references section of the document identified by this DOI</li> </ul>
<code>order</code>	(character) Sort order, one of 'asc' or 'desc'
<code>facet</code>	(logical) Include facet results. Boolean or string with field to facet on. Valid fields are *, affiliation, funder-name, funder-doi, orcid, container-title, assertion, archive, update-type, issn, published, source, type-name, publisher-name, license, category-name, assertion-group. Default: FALSE
<code>works</code>	(logical) If TRUE, works returned as well, if not then not.
<code>cursor</code>	(character) Cursor character string to do deep paging. Default is None. Pass in '*' to start deep paging. Any combination of query, filters and facets may be used with deep paging cursors. While rows may be specified along with cursor, offset and sample cannot be used. See <a href="https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors">https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors</a>
<code>cursor_max</code>	(integer) Max records to retrieve. Only used when cursor param used. Because deep paging can result in continuous requests until all are retrieved, use this parameter to set a maximum number of records. Of course, if there are less records found than this value, you will get only those found.
<code>.progress</code>	Show a plyr-style progress bar? Options are "none", "text", "tk", "win", and "time". See <a href="#">create_progress_bar</a> for details of each. Only used when passing in multiple ids (e.g., multiple DOIs, DOI prefixes, etc.)
<code>flq</code>	field queries. One or more field queries. Acceptable set of field query parameters are: <ul style="list-style-type: none"> <li>• <code>query.title</code> - Query title and subtitle</li> <li>• <code>query.container-title</code> - Query container-title aka. publication name</li> <li>• <code>query.author</code> - Query author first and given names</li> <li>• <code>query.editor</code> - Query editor first and given names</li> <li>• <code>query.chair</code> - Query chair first and given names</li> <li>• <code>query.translator</code> - Query translator first and given names</li> <li>• <code>query.contributor</code> - Query author, editor, chair and translator first and given names</li> <li>• <code>query.bibliographic</code> - Query bibliographic information, useful for citation lookup. Includes titles, authors, ISSNs and publication years</li> <li>• <code>query.affiliation</code> - Query contributor affiliations</li> </ul>
<code>select</code>	(character) One or more field to return (only those fields are returned)
<code>...</code>	Named parameters passed on to <a href="#">HttpClient</a>
<code>parse</code>	(logical) Whether to output json FALSE or parse to list TRUE. Default: FALSE

## Details

BEWARE: The API will only work for CrossRef DOIs.

This function name changing to `cr_funders` in the next version - both work for now

**NOTE**

Funders without IDs don't show up on the /funders route, and in this function. Some funders don't have assigned IDs in Crossref's system, so won't show up in searches.

**References**

[https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md)

**Examples**

```
## Not run:
cr_funders(query="NSF", limit=1)
cr_funders(query="NSF")
cr_funders(dois='10.13039/100000001')
out <- cr_funders(dois=c('10.13039/100000001', '10.13039/100000015'))
out['10.13039/100000001']
out[['10.13039/100000001']]

cr_funders(dois='10.13039/100000001')
cr_funders(dois='10.13039/100000001', works=TRUE, limit=5)

cr_funders(dois=c('10.13039/100000001', '10.13039/100000015'))
cr_funders(dois=c('10.13039/100000001', '10.13039/100000015'), works=TRUE)

## get facets back
cr_funders("10.13039/100000001", works=TRUE, facet=TRUE, limit = 0)
cr_funders("10.13039/100000001", works=TRUE, facet="license:*", limit = 0)
cr_funders('100000001', works = TRUE, cursor = "*", cursor_max = 500,
  limit = 100, facet=TRUE)

# Curl options
cr_funders(dois='10.13039/100000001', verbose = TRUE)

# If not found, and > 1 DOI given, those not found dropped
cr_funders(dois=c("adfadfaf", "asfaf"))
cr_funders(dois=c("adfadfaf", "asfaf"), works=TRUE)
cr_funders(dois=c("10.13039/100000001", "asfaf"))
cr_funders(dois=c("10.13039/100000001", "asfaf"), works=TRUE)

# Use the cursor for deep paging
cr_funders('100000001', works = TRUE, cursor = "*", cursor_max = 500,
  limit = 100)
cr_funders(c('100000001', '100000002'), works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)

# Low level function - does no parsing to data.frame, get json or a list
cr_funders_(query = 'nsf')
cr_funders_('10.13039/100000001')
cr_funders_(query = 'science', parse=TRUE)
cr_funders_('10.13039/100000001', works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)
cr_funders_('10.13039/100000001', works = TRUE, cursor = "*",
```

```

    cursor_max = 300, limit = 100, parse = TRUE)

# field queries
## query.container-title
cr_funders('10.13039/100000001', works = TRUE,
  flq = c(`query.container-title` = 'Ecology'))

# select only certain fields to return
res <- cr_funders('10.13039/100000001', works = TRUE,
  select = c('DOI', 'title'))
names(res$data)

## End(Not run)

```

---

cr\_journals

*Search CrossRef journals*


---

## Description

Search CrossRef journals

## Usage

```

cr_journals(issn = NULL, query = NULL, filter = NULL, offset = NULL,
  limit = NULL, sample = NULL, sort = NULL, order = NULL,
  facet = FALSE, works = FALSE, cursor = NULL, cursor_max = 5000,
  .progress = "none", flq = NULL, select = NULL, ...)

```

```

cr_journals_(issn = NULL, query = NULL, filter = NULL, offset = NULL,
  limit = NULL, sample = NULL, sort = NULL, order = NULL,
  facet = FALSE, works = FALSE, cursor = NULL, cursor_max = 5000,
  .progress = "none", parse = FALSE, flq = NULL, select = NULL, ...)

```

## Arguments

issn	(character) One or more ISSN's. Format: XXXX-XXXX.
query	Query terms
filter	Filter options. See details.
offset	Number of record to start at. Minimum: 1. For <code>cr_works</code> , and any function setting <code>works = TRUE</code> , the maximum offset value is 10000. For larger requests use <code>cursor</code> .
limit	Number of results to return in the query. Not relevant when searching with specific <code>dois</code> . Default: 20. Max: 1000
sample	(integer) Number of random results to return. when you use the <code>sample</code> parameter, the <code>rows</code> and <code>offset</code> parameters are ignored. Ignored unless <code>works=TRUE</code> . Max: 100

sort	<p>Field to sort on. Acceptable set of fields to sort on:</p> <ul style="list-style-type: none"> <li>• score OR relevance - Sort by relevance score</li> <li>• updated - Sort by date of most recent change to metadata. Currently the same as deposited.</li> <li>• deposited - Sort by time of most recent deposit</li> <li>• indexed - Sort by time of most recent index</li> <li>• published - Sort by publication date</li> <li>• published-print - Sort by print publication date</li> <li>• published-online - Sort by online publication date</li> <li>• issued - Sort by issued date (earliest known publication date)</li> <li>• is-referenced-by-count - Sort by number of times this DOI is referenced by other Crossref DOIs</li> <li>• references-count - Sort by number of references included in the references section of the document identified by this DOI</li> </ul>
order	(character) Sort order, one of 'asc' or 'desc'
facet	(logical) Include facet results. Boolean or string with field to facet on. Valid fields are *, affiliation, funder-name, funder-doi, orcid, container-title, assertion, archive, update-type, issn, published, source, type-name, publisher-name, license, category-name, assertion-group. Default: FALSE
works	(logical) If TRUE, works returned as well, if not then not.
cursor	(character) Cursor character string to do deep paging. Default is None. Pass in '*' to start deep paging. Any combination of query, filters and facets may be used with deep paging cursors. While rows may be specified along with cursor, offset and sample cannot be used. See <a href="https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors">https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors</a>
cursor_max	(integer) Max records to retrieve. Only used when cursor param used. Because deep paging can result in continuous requests until all are retrieved, use this parameter to set a maximum number of records. Of course, if there are less records found than this value, you will get only those found.
.progress	Show a plyr-style progress bar? Options are "none", "text", "tk", "win", and "time". See <a href="#">create_progress_bar</a> for details of each. Only used when passing in multiple ids (e.g., multiple DOIs, DOI prefixes, etc.)
flq	<p>field queries. One or more field queries. Acceptable set of field query parameters are:</p> <ul style="list-style-type: none"> <li>• query.title - Query title and subtitle</li> <li>• query.container-title - Query container-title aka. publication name</li> <li>• query.author - Query author first and given names</li> <li>• query.editor - Query editor first and given names</li> <li>• query.chair - Query chair first and given names</li> <li>• query.translator - Query translator first and given names</li> <li>• query.contributor - Query author, editor, chair and translator first and given names</li> <li>• query.bibliographic - Query bibliographic information, useful for citation lookup. Includes titles, authors, ISSNs and publication years</li> </ul>

- `query.affiliation` - Query contributor affiliations

`select` (character) One or more field to return (only those fields are returned)

`...` Named parameters passed on to [HttpClient](#)

`parse` (logical) Whether to output json FALSE or parse to list TRUE. Default: FALSE

### Details

BEWARE: The API will only work for CrossRef DOIs.

Note that some parameters are ignored unless `works=TRUE`: `sample`, `sort`, `order`, `filter`

### Explanation of some data fields

- `backfile_dois`: Back file records have a publication date older than two years ago.
- `current_dois`: Current records are anything published in the last two years.

### References

[https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md)

### Examples

```
## Not run:
cr_journals(issn="2167-8359")
cr_journals()
cr_journals(issn="2167-8359", works=TRUE)
cr_journals(issn=c('1803-2427', '2326-4225'))
cr_journals(query="ecology")
cr_journals(issn="2167-8359", query='ecology', works=TRUE,
  sort='score', order="asc")
cr_journals(issn="2167-8359", query='ecology', works=TRUE, sort='score',
  order="desc")
cr_journals(issn="2167-8359", works=TRUE,
  filter=c(from_pub_date='2014-03-03'))
cr_journals(query="peerj")
cr_journals(issn='1803-2427', works=TRUE)
cr_journals(issn='1803-2427', works=TRUE, sample=1)
cr_journals(limit=2)

## get facets back
cr_journals('1803-2427', works=TRUE, facet=TRUE)
cr_journals('1803-2427', works=TRUE, facet="published:*", limit = 0)
cr_journals(issn=c('1803-2427', '2326-4225'), works=TRUE,
  facet="published:*", limit = 10)

# Use the cursor for deep paging
cr_journals(issn='1932-6203', works = TRUE, cursor = "*", cursor_max = 500,
  limit = 100)
cr_journals(c('1932-6203', '0028-0836'), works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)
```

```

# fails, if you want works, you must give an ISSN
# cr_journals(query = "ecology", filter=c(has_full_text = TRUE),
#   works = TRUE)

# Low level function - does no parsing to data.frame, get json or a list
cr_journals_(query = 'ecology')
cr_journals_("2167-8359")
cr_journals_(query = 'ecology', parse=TRUE)
cr_journals_("2167-8359", works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)
cr_journals_("2167-8359", works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100, parse = TRUE)

# field queries
## query.author
cr_journals("2167-8359", works = TRUE, flq = c(`query.author` = 'Jane'))

# select only certain fields to return
res <- cr_journals('2167-8359', works = TRUE,
  select = c('DOI', 'title'))
names(res$data)

## End(Not run)

```

---

cr\_licenses

*Search CrossRef licenses*


---

## Description

Search CrossRef licenses

## Usage

```
cr_licenses(query = NULL, offset = NULL, limit = NULL, sort = NULL,
  order = NULL, .progress = "none", ...)
```

```
cr_licenses_(query = NULL, offset = NULL, limit = NULL, sort = NULL,
  order = NULL, .progress = "none", parse = FALSE, ...)
```

## Arguments

query	Query terms
offset	Number of record to start at, from 1 to infinity.
limit	Number of results to return in the query. Not relevant when searching with specific dois. Default: 20. Max: 1000
sort	Field to sort on. Acceptable set of fields to sort on: <ul style="list-style-type: none"> <li>• score OR relevance - Sort by relevance score</li> </ul>

- updated - Sort by date of most recent change to metadata. Currently the same as deposited.
- deposited - Sort by time of most recent deposit
- indexed - Sort by time of most recent index
- published - Sort by publication date
- published-print - Sort by print publication date
- published-online - Sort by online publication date
- issued - Sort by issued date (earliest known publication date)
- is-referenced-by-count - Sort by number of times this DOI is referenced by other Crossref DOIs
- references-count - Sort by number of references included in the references section of the document identified by this DOI

order	(character) Sort order, one of 'asc' or 'desc'
.progress	Show a plyr-style progress bar? Options are "none", "text", "tk", "win, and "time". See <code>plyr::create_progress_bar()</code> for details of each.
...	Named parameters passed on to <code>curl::HttpClient()</code>
parse	(logical) Whether to output json FALSE or parse to list TRUE. Default: FALSE

## Details

BEWARE: The API will only work for CrossRef DOIs.

NOTE: The API route behind this function does not support filters any more, so the `filter` parameter has been removed.

## References

[https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md)

## Examples

```
## Not run:
cr_licenses()
# query for something, e.g. a publisher
cr_licenses(query = 'elsevier')

# Low level function - does no parsing to data.frame, get json or a list
cr_licenses_()
cr_licenses_(query = "elsevier")
cr_licenses_(query = "elsevier", parse=TRUE)

## End(Not run)
```



---

cr\_members

*Search CrossRef members*


---

**Description**

Search CrossRef members

**Usage**

```
cr_members(member_ids = NULL, query = NULL, filter = NULL,
  offset = NULL, limit = NULL, sample = NULL, sort = NULL,
  order = NULL, facet = FALSE, works = FALSE, cursor = NULL,
  cursor_max = 5000, .progress = "none", flq = NULL, select = NULL, ...)
```

```
cr_members_(member_ids = NULL, query = NULL, filter = NULL,
  offset = NULL, limit = NULL, sample = NULL, sort = NULL,
  order = NULL, facet = FALSE, works = FALSE, cursor = NULL,
  cursor_max = 5000, .progress = "none", parse = FALSE, flq = NULL,
  select = NULL, ...)
```

**Arguments**

member_ids	One or more member ids. See examples. Alternatively, you can query for them using the query parameter.
query	Query terms
filter	Filter options. See details.
offset	Number of record to start at. Minimum: 1. For <code>cr_works</code> , and any function setting <code>works = TRUE</code> , the maximum offset value is 10000. For larger requests use <code>cursor</code> .
limit	Number of results to return in the query. Not relevant when searching with specific <code>dois</code> . Default: 20. Max: 1000
sample	(integer) Number of random results to return. when you use the <code>sample</code> parameter, the <code>rows</code> and <code>offset</code> parameters are ignored. Ignored unless <code>works=TRUE</code> . Max: 100
sort	Field to sort on. Acceptable set of fields to sort on: <ul style="list-style-type: none"> <li>• <code>score</code> OR <code>relevance</code> - Sort by relevance score</li> <li>• <code>updated</code> - Sort by date of most recent change to metadata. Currently the same as <code>deposited</code>.</li> <li>• <code>deposited</code> - Sort by time of most recent deposit</li> <li>• <code>indexed</code> - Sort by time of most recent index</li> <li>• <code>published</code> - Sort by publication date</li> <li>• <code>published-print</code> - Sort by print publication date</li> <li>• <code>published-online</code> - Sort by online publication date</li> <li>• <code>issued</code> - Sort by issued date (earliest known publication date)</li> </ul>

- is-referenced-by-count - Sort by number of times this DOI is referenced by other Crossref DOIs
- references-count - Sort by number of references included in the references section of the document identified by this DOI

order	(character) Sort order, one of 'asc' or 'desc'
facet	(logical) Include facet results. Boolean or string with field to facet on. Valid fields are *, affiliation, funder-name, funder-doi, orcid, container-title, assertion, archive, update-type, issn, published, source, type-name, publisher-name, license, category-name, assertion-group. Default: FALSE
works	(logical) If TRUE, works returned as well, if not then not.
cursor	(character) Cursor character string to do deep paging. Default is None. Pass in '*' to start deep paging. Any combination of query, filters and facets may be used with deep paging cursors. While rows may be specified along with cursor, offset and sample cannot be used. See <a href="https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors">https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors</a>
cursor_max	(integer) Max records to retrieve. Only used when cursor param used. Because deep paging can result in continuous requests until all are retrieved, use this parameter to set a maximum number of records. Of course, if there are less records found than this value, you will get only those found.
.progress	Show a plyr-style progress bar? Options are "none", "text", "tk", "win", and "time". See <a href="#">create_progress_bar</a> for details of each. Only used when passing in multiple ids (e.g., multiple DOIs, DOI prefixes, etc.)
flq	field queries. One or more field queries. Acceptable set of field query parameters are: <ul style="list-style-type: none"> <li>• query.title - Query title and subtitle</li> <li>• query.container-title - Query container-title aka. publication name</li> <li>• query.author - Query author first and given names</li> <li>• query.editor - Query editor first and given names</li> <li>• query.chair - Query chair first and given names</li> <li>• query.translator - Query translator first and given names</li> <li>• query.contributor - Query author, editor, chair and translator first and given names</li> <li>• query.bibliographic - Query bibliographic information, useful for citation lookup. Includes titles, authors, ISSNs and publication years</li> <li>• query.affiliation - Query contributor affiliations</li> </ul>
select	(character) One or more field to return (only those fields are returned)
...	Named parameters passed on to <a href="#">HttpClient</a>
parse	(logical) Whether to output json FALSE or parse to list TRUE. Default: FALSE

## Details

BEWARE: The API will only work for CrossRef DOIs.

## References

[https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md)

## Examples

```
## Not run:
cr_members(member_ids=98)
cr_members(member_ids=340)

cr_members(member_ids=98, works=TRUE)
cr_members(member_ids=c(10,98,45,1,9))
cr_members(member_ids=c(10,98,45,1,9), works=TRUE)

cr_members(query='hindawi')
cr_members(query='ecology')

# facets
cr_members(member_ids=98, works=TRUE, facet=TRUE, limit = 0)
cr_members(member_ids=98, works=TRUE, facet="license:*", limit = 0)

# curl options
cr_members(member_ids=98, verbose = TRUE)

# Use the cursor for deep paging
cr_members(member_ids=98, works = TRUE, cursor = "*",
  cursor_max = 500, limit = 100)
cr_members(member_ids=c(10, 98, 45), works = TRUE, cursor = "*",
  cursor_max = 200, limit = 100)

# data not found
# cr_members(query="adfdf")
# cr_members(member_ids=c(323234343434,3434343434), works=TRUE, facet=TRUE)
# cr_members(member_ids=c(323234343434,3434343434,98), works=TRUE, facet=TRUE)

# Low level function - does no parsing to data.frame, get json or a list
cr_members_(query = 'hindawi')
cr_members_(member_ids = 98)
cr_members_(query = 'hindawi', parse=TRUE)
cr_members_(member_ids = 98, works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)
cr_members_(member_ids = 98, works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100, parse=TRUE)

# field queries
## query.container-title
cr_members(98, works = TRUE, flq = c(`query.container-title` = 'Ecology'))

# select only certain fields to return
res <- cr_members(98, works = TRUE, select = c('DOI', 'title'))
names(res$data)
```

```
## End(Not run)
```

---

cr_prefixes	<i>Search CrossRef prefixes</i>
-------------	---------------------------------

---

## Description

Search CrossRef prefixes

## Usage

```
cr_prefixes(prefixes, query = NULL, filter = NULL, offset = NULL,
  limit = NULL, sample = NULL, sort = NULL, order = NULL,
  facet = FALSE, works = FALSE, cursor = NULL, cursor_max = 5000,
  .progress = "none", flq = NULL, select = NULL, ...)
```

```
cr_prefixes_(prefixes, query = NULL, filter = NULL, offset = NULL,
  limit = NULL, sample = NULL, sort = NULL, order = NULL,
  facet = FALSE, works = FALSE, cursor = NULL, cursor_max = 5000,
  .progress = "none", parse = FALSE, flq = NULL, select = NULL, ...)
```

## Arguments

prefixes	(character) Publisher prefixes, one or more in a vector or list. Required.
query	Query terms
filter	Filter options. See details.
offset	Number of record to start at. Minimum: 1. For <code>cr_works</code> , and any function setting <code>works = TRUE</code> , the maximum offset value is 10000. For larger requests use <code>cursor</code> .
limit	Number of results to return in the query. Not relevant when searching with specific <code>dois</code> . Default: 20. Max: 1000
sample	(integer) Number of random results to return. when you use the <code>sample</code> parameter, the <code>rows</code> and <code>offset</code> parameters are ignored. Ignored unless <code>works=TRUE</code> . Max: 100
sort	Field to sort on. Acceptable set of fields to sort on: <ul style="list-style-type: none"> <li>• <code>score OR relevance</code> - Sort by relevance score</li> <li>• <code>updated</code> - Sort by date of most recent change to metadata. Currently the same as <code>deposited</code>.</li> <li>• <code>deposited</code> - Sort by time of most recent deposit</li> <li>• <code>indexed</code> - Sort by time of most recent index</li> <li>• <code>published</code> - Sort by publication date</li> <li>• <code>published-print</code> - Sort by print publication date</li> <li>• <code>published-online</code> - Sort by online publication date</li> <li>• <code>issued</code> - Sort by issued date (earliest known publication date)</li> </ul>

- is-referenced-by-count - Sort by number of times this DOI is referenced by other Crossref DOIs
- references-count - Sort by number of references included in the references section of the document identified by this DOI

order	(character) Sort order, one of 'asc' or 'desc'
facet	(logical) Include facet results. Boolean or string with field to facet on. Valid fields are *, affiliation, funder-name, funder-doi, orcid, container-title, assertion, archive, update-type, issn, published, source, type-name, publisher-name, license, category-name, assertion-group. Default: FALSE
works	(logical) If TRUE, works returned as well, if not then not.
cursor	(character) Cursor character string to do deep paging. Default is None. Pass in '*' to start deep paging. Any combination of query, filters and facets may be used with deep paging cursors. While rows may be specified along with cursor, offset and sample cannot be used. See <a href="https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors">https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors</a>
cursor_max	(integer) Max records to retrieve. Only used when cursor param used. Because deep paging can result in continuous requests until all are retrieved, use this parameter to set a maximum number of records. Of course, if there are less records found than this value, you will get only those found.
.progress	Show a plyr-style progress bar? Options are "none", "text", "tk", "win", and "time". See <a href="#">create_progress_bar</a> for details of each. Only used when passing in multiple ids (e.g., multiple DOIs, DOI prefixes, etc.)
flq	field queries. One or more field queries. Acceptable set of field query parameters are: <ul style="list-style-type: none"> <li>• query.title - Query title and subtitle</li> <li>• query.container-title - Query container-title aka. publication name</li> <li>• query.author - Query author first and given names</li> <li>• query.editor - Query editor first and given names</li> <li>• query.chair - Query chair first and given names</li> <li>• query.translator - Query translator first and given names</li> <li>• query.contributor - Query author, editor, chair and translator first and given names</li> <li>• query.bibliographic - Query bibliographic information, useful for citation lookup. Includes titles, authors, ISSNs and publication years</li> <li>• query.affiliation - Query contributor affiliations</li> </ul>
select	(character) One or more field to return (only those fields are returned)
...	Named parameters passed on to <a href="#">HttpClient</a>
parse	(logical) Whether to output json FALSE or parse to list TRUE. Default: FALSE

### Details

**BEWARE:** The API will only work for CrossRef DOIs.

Note that any one publisher can have more than one DOI. If you want to search on all DOIs for a publisher, pass in all DOIs, or see [cr\\_members\(\)](#), and pass in the member\_ids parameter.

Notes from CrossRef (quoting them):

The prefix of a CrossRef DOI does NOT indicate who currently owns the DOI. It only reflects who originally registered the DOI. CrossRef metadata has an `owner_prefix` element that records the current owner of the CrossRef DOI in question.

CrossRef also has member IDs for depositing organisations. A single member may control multiple owner prefixes, which in turn may control a number of DOIs. When looking at works published by a certain organisation, member IDs and the member routes should be used.

## References

[https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md)

## Examples

```
## Not run:
cr_prefixes(prefixes="10.1016")
cr_prefixes(prefixes="10.1016", works=TRUE)
cr_prefixes(prefixes=c('10.1016', '10.1371', '10.1023', '10.4176', '10.1093'))
cr_prefixes(prefixes=c('10.1016', '10.1371'), works=TRUE)
cr_prefixes(prefixes="10.1016", works=TRUE, filter=c(has_full_text=TRUE),
  limit=5)
cr_prefixes(prefixes="10.1016", works=TRUE, query='ecology', limit=4)
cr_prefixes(prefixes="10.1016", works=TRUE, query='ecology', limit=4)

# facets - only avail. when works=TRUE
cr_prefixes(prefixes="10.1016", works=TRUE, facet=TRUE)
cr_prefixes(prefixes="10.1016", works=TRUE, facet="license:*", limit=0)
cr_prefixes(prefixes=c('10.1016', '10.1371'), works=TRUE, facet=TRUE,
  limit=0)

# Use the cursor for deep paging
cr_prefixes("10.1016", works = TRUE, cursor = "*", cursor_max = 500,
  limit = 100)
cr_prefixes(c('10.1016', '10.1371'), works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)

# Low level function - does no parsing to data.frame, get json or a list
cr_prefixes_("10.1016")
cr_prefixes_(c('10.1016', '10.1371'))
cr_prefixes_("10.1016", works = TRUE, query = 'ecology', limit = 10)
cr_prefixes_("10.1016", works = TRUE, query = 'ecology', parse=TRUE,
  limit = 10)
cr_prefixes_("10.1016", works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)
cr_prefixes_("10.1016", works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100, parse = TRUE)

# field queries
## query.container-title
cr_prefixes("10.1016", works = TRUE,
  flq = c(`query.container-title` = 'Ecology'))
```

```
# select only certain fields to return
res <- cr_prefixes("10.1016", works = TRUE, select = c('DOI', 'title'))
names(res$data)

## End(Not run)
```

---

cr\_r

*Get a random set of DOI's through CrossRef.*

---

### Description

Get a random set of DOI's through CrossRef.

### Usage

```
cr_r(sample = 10, ...)
```

### Arguments

sample	The number of returned random DOIs. Maximum: 100. Default: 20.
...	Further args passed on to <a href="#">cr_works()</a>

### Value

A character vector of DOIs

### Author(s)

Scott Chamberlain <[myrmecocystus@gmail.com](mailto:myrmecocystus@gmail.com)>

### Examples

```
## Not run:
# Default search gets 10 random DOIs
cr_r()

# Get 30 DOIs
cr_r(30)

## End(Not run)
```

---

 cr\_types

*Search CrossRef types*


---

**Description**

Search CrossRef types

**Usage**

```
cr_types(types = NULL, query = NULL, filter = NULL, offset = NULL,
         limit = NULL, sample = NULL, sort = NULL, order = NULL,
         facet = FALSE, works = FALSE, cursor = NULL, cursor_max = 5000,
         .progress = "none", flq = NULL, select = NULL, ...)
```

```
cr_types_(types = NULL, query = NULL, filter = NULL, offset = NULL,
          limit = NULL, sample = NULL, sort = NULL, order = NULL,
          facet = FALSE, works = FALSE, cursor = NULL, cursor_max = 5000,
          .progress = "none", parse = FALSE, flq = NULL, select = NULL, ...)
```

**Arguments**

types	(character) Type identifier, e.g., journal
query	Query terms
filter	Filter options. See details.
offset	Number of record to start at. Minimum: 1. For <code>cr_works</code> , and any function setting <code>works = TRUE</code> , the maximum offset value is 10000. For larger requests use <code>cursor</code> .
limit	Number of results to return in the query. Not relevant when searching with specific <code>dois</code> . Default: 20. Max: 1000
sample	(integer) Number of random results to return. when you use the <code>sample</code> parameter, the <code>rows</code> and <code>offset</code> parameters are ignored. Ignored unless <code>works=TRUE</code> . Max: 100
sort	Field to sort on. Acceptable set of fields to sort on: <ul style="list-style-type: none"> <li>• <code>score OR relevance</code> - Sort by relevance score</li> <li>• <code>updated</code> - Sort by date of most recent change to metadata. Currently the same as <code>deposited</code>.</li> <li>• <code>deposited</code> - Sort by time of most recent deposit</li> <li>• <code>indexed</code> - Sort by time of most recent index</li> <li>• <code>published</code> - Sort by publication date</li> <li>• <code>published-print</code> - Sort by print publication date</li> <li>• <code>published-online</code> - Sort by online publication date</li> <li>• <code>issued</code> - Sort by issued date (earliest known publication date)</li> <li>• <code>is-referenced-by-count</code> - Sort by number of times this DOI is referenced by other Crossref DOIs</li> </ul>



	<ul style="list-style-type: none"> <li>• <code>references-count</code> - Sort by number of references included in the references section of the document identified by this DOI</li> </ul>
<code>order</code>	(character) Sort order, one of 'asc' or 'desc'
<code>facet</code>	(logical) Include facet results. Boolean or string with field to facet on. Valid fields are *, affiliation, funder-name, funder-doi, orcid, container-title, assertion, archive, update-type, issn, published, source, type-name, publisher-name, license, category-name, assertion-group. Default: FALSE
<code>works</code>	(logical) If TRUE, works returned as well, if not then not.
<code>cursor</code>	(character) Cursor character string to do deep paging. Default is None. Pass in '*' to start deep paging. Any combination of query, filters and facets may be used with deep paging cursors. While rows may be specified along with cursor, offset and sample cannot be used. See <a href="https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors">https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors</a>
<code>cursor_max</code>	(integer) Max records to retrieve. Only used when cursor param used. Because deep paging can result in continuous requests until all are retrieved, use this parameter to set a maximum number of records. Of course, if there are less records found than this value, you will get only those found.
<code>.progress</code>	Show a <code>plyr</code> -style progress bar? Options are "none", "text", "tk", "win", and "time". See <a href="#">create_progress_bar</a> for details of each. Only used when passing in multiple ids (e.g., multiple DOIs, DOI prefixes, etc.)
<code>flq</code>	field queries. One or more field queries. Acceptable set of field query parameters are: <ul style="list-style-type: none"> <li>• <code>query.title</code> - Query title and subtitle</li> <li>• <code>query.container-title</code> - Query container-title aka. publication name</li> <li>• <code>query.author</code> - Query author first and given names</li> <li>• <code>query.editor</code> - Query editor first and given names</li> <li>• <code>query.chair</code> - Query chair first and given names</li> <li>• <code>query.translator</code> - Query translator first and given names</li> <li>• <code>query.contributor</code> - Query author, editor, chair and translator first and given names</li> <li>• <code>query.bibliographic</code> - Query bibliographic information, useful for citation lookup. Includes titles, authors, ISSNs and publication years</li> <li>• <code>query.affiliation</code> - Query contributor affiliations</li> </ul>
<code>select</code>	(character) One or more field to return (only those fields are returned)
<code>...</code>	Named parameters passed on to <a href="#">HttpClient</a>
<code>parse</code>	(logical) Whether to output json FALSE or parse to list TRUE. Default: FALSE

### Details

BEWARE: The API will only work for CrossRef DOIs.

### References

[https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md)

**Examples**

```

## Not run:
cr_types()
cr_types("monograph")
cr_types("monograph", works=TRUE)
cr_types(c('monograph', 'book-set', 'book', 'book-track'))
cr_types(c('monograph', 'book-set'), works=TRUE)

## get facets back
cr_types("journal-article", works=TRUE, facet=TRUE)$facets
cr_types("monograph", works=TRUE, facet="license:*", limit = 0)
cr_types(c('monograph', 'book-set'), works=TRUE, facet=TRUE)

# Use the cursor for deep paging
cr_types("journal-article", works = TRUE, cursor = "*",
  cursor_max = 500, limit = 100)
cr_types(c('monograph', 'book-set'), works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)

# query doesn't work unless using works=TRUE
### you get results, but query param is silently dropped
cr_types(query = "ecology")

# print progress - only works when passing more than one type
cr_types(c('monograph', 'book-set'), works=TRUE, .progress='text')

# Low level function - does no parsing to data.frame, get json or a list
cr_types_('monograph')
cr_types_('monograph', parse = TRUE)
cr_types_("journal-article", works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100)
cr_types_("journal-article", works = TRUE, cursor = "*",
  cursor_max = 300, limit = 100, parse = TRUE)

# field queries
## query.container-title
cr_types("journal-article", works = TRUE,
  flq = c(`query.container-title` = 'Ecology'))

# select only certain fields to return
res <- cr_types("journal-article", works = TRUE, select = c('DOI', 'title'))
names(res$data)

## End(Not run)

```

---

cr\_works

*Search CrossRef works (articles)*


---

**Description**

Search CrossRef works (articles)

**Usage**

```
cr_works(dois = NULL, query = NULL, filter = NULL, offset = NULL,
  limit = NULL, sample = NULL, sort = NULL, order = NULL,
  facet = FALSE, cursor = NULL, cursor_max = 5000, .progress = "none",
  flq = NULL, select = NULL, ...)
```

```
cr_works_(dois = NULL, query = NULL, filter = NULL, offset = NULL,
  limit = NULL, sample = NULL, sort = NULL, order = NULL,
  facet = FALSE, cursor = NULL, cursor_max = 5000, .progress = "none",
  parse = FALSE, flq = NULL, select = NULL, ...)
```

**Arguments**

dois	Search by a single DOI or many DOIs.
query	Query terms
filter	Filter options. See details.
offset	Number of record to start at. Minimum: 1. For <code>cr_works</code> , and any function setting <code>works = TRUE</code> , the maximum offset value is 10000. For larger requests use <code>cursor</code> .
limit	Number of results to return in the query. Not relevant when searching with specific dois. Default: 20. Max: 1000
sample	(integer) Number of random results to return. when you use the <code>sample</code> parameter, the <code>rows</code> and <code>offset</code> parameters are ignored. Ignored unless <code>works=TRUE</code> . Max: 100
sort	Field to sort on. Acceptable set of fields to sort on: <ul style="list-style-type: none"> <li>• <code>score OR relevance</code> - Sort by relevance score</li> <li>• <code>updated</code> - Sort by date of most recent change to metadata. Currently the same as <code>deposited</code>.</li> <li>• <code>deposited</code> - Sort by time of most recent deposit</li> <li>• <code>indexed</code> - Sort by time of most recent index</li> <li>• <code>published</code> - Sort by publication date</li> <li>• <code>published-print</code> - Sort by print publication date</li> <li>• <code>published-online</code> - Sort by online publication date</li> <li>• <code>issued</code> - Sort by issued date (earliest known publication date)</li> <li>• <code>is-referenced-by-count</code> - Sort by number of times this DOI is referenced by other Crossref DOIs</li> <li>• <code>references-count</code> - Sort by number of references included in the references section of the document identified by this DOI</li> </ul>
order	(character) Sort order, one of 'asc' or 'desc'
facet	(logical) Include facet results. Boolean or string with field to facet on. Valid fields are <code>*</code> , <code>affiliation</code> , <code>funder-name</code> , <code>funder-doi</code> , <code>orcid</code> , <code>container-title</code> , <code>assertion</code> , <code>archive</code> , <code>update-type</code> , <code>issn</code> , <code>published</code> , <code>source</code> , <code>type-name</code> , <code>publisher-name</code> , <code>license</code> , <code>category-name</code> , <code>assertion-group</code> . Default: FALSE

cursor	(character) Cursor character string to do deep paging. Default is None. Pass in '*' to start deep paging. Any combination of query, filters and facets may be used with deep paging cursors. While rows may be specified along with cursor, offset and sample cannot be used. See <a href="https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors">https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md#deep-paging-with-cursors</a>
cursor_max	(integer) Max records to retrieve. Only used when cursor param used. Because deep paging can result in continuous requests until all are retrieved, use this parameter to set a maximum number of records. Of course, if there are less records found than this value, you will get only those found.
.progress	Show a plyr-style progress bar? Options are "none", "text", "tk", "win", and "time". See <a href="#">create_progress_bar</a> for details of each. Only used when passing in multiple ids (e.g., multiple DOIs, DOI prefixes, etc.)
flq	field queries. One or more field queries. Acceptable set of field query parameters are: <ul style="list-style-type: none"> <li>• query.title - Query title and subtitle</li> <li>• query.container-title - Query container-title aka. publication name</li> <li>• query.author - Query author first and given names</li> <li>• query.editor - Query editor first and given names</li> <li>• query.chair - Query chair first and given names</li> <li>• query.translator - Query translator first and given names</li> <li>• query.contributor - Query author, editor, chair and translator first and given names</li> <li>• query.bibliographic - Query bibliographic information, useful for citation lookup. Includes titles, authors, ISSNs and publication years</li> <li>• query.affiliation - Query contributor affiliations</li> </ul>
select	(character) One or more field to return (only those fields are returned)
...	Named parameters passed on to <a href="#">HttpClient</a>
parse	(logical) Whether to output json FALSE or parse to list TRUE. Default: FALSE

### Beware

The API will only work for CrossRef DOIs.

### Functions

- cr\_works() - Does data request and parses to data.frame for easy downstream consumption
- cr\_works\_( ) - Does data request, and gives back json (default) or lists, with no attempt to parse to data.frame's

### Explanation of some data fields

- score: a term frequency, inverse document frequency score that comes from the CrossRef Solr backend, based on bibliographic metadata fields title, publication title, authors, ISSN, publisher, and date of publication.

## References

[https://github.com/CrossRef/rest-api-doc/blob/master/rest\\_api.md](https://github.com/CrossRef/rest-api-doc/blob/master/rest_api.md)

## Examples

```
## Not run:
# Works funded by the NSF
cr_works(query="NSF")

# Works that include renew but not ontologies
cr_works(query="renew+-ontologies")

# Filter
cr_works(query="global state", filter=c(has_orcid=TRUE), limit=3)
# Filter by multiple fields
cr_works(filter=c(has_orcid=TRUE, from_pub_date='2004-04-04'))
# Only full text articles
cr_works(filter=c(has_full_text = TRUE))
# has affiliation data
cr_works(filter=c(has_affiliation = TRUE))
# has abstract
cr_works(filter=c(has_abstract = TRUE))
# has clinical trial number
cr_works(filter=c(has_clinical_trial_number = TRUE))

# Querying dois
cr_works(dois='10.1063/1.3593378')
cr_works('10.1371/journal.pone.0033693')
cr_works(dois='10.1007/12080.1874-1746')
cr_works(dois=c('10.1007/12080.1874-1746', '10.1007/10452.1573-5125',
  '10.1111/(issn)1442-9993'))

# progress bar
cr_works(dois=c('10.1007/12080.1874-1746', '10.1007/10452.1573-5125'),
  .progress="text")

# Include facetting in results
cr_works(query="NSF", facet=TRUE)
## Get facets only, by setting limit=0
cr_works(query="NSF", facet=TRUE, limit=0)
## you can also set facet to a query
cr_works(facet = "license:*", limit=0)

# Sort results
cr_works(query="ecology", sort='relevance', order="asc")
res <- cr_works(query="ecology", sort='score', order="asc")
res$data$score

# Get a random number of results
cr_works(sample=1)
cr_works(sample=10)
```

```

# You can pass in dot separated fields to filter on specific fields
cr_works(filter=c(award.number='CBET-0756451',
  award.funder='10.13039/100000001'))

# Use the cursor for deep paging
cr_works(query="NSF", cursor = "*", cursor_max = 300, limit = 100)
cr_works(query="NSF", cursor = "*", cursor_max = 300, limit = 100,
  facet = TRUE)

# Low level function - does no parsing to data.frame, get json or a list
cr_works_(query = "NSF")
cr_works_(query = "NSF", parse=TRUE)
cr_works_(query="NSF", cursor = "*", cursor_max = 300, limit = 100)
cr_works_(query="NSF", cursor = "*", cursor_max = 300, limit = 100,
  parse=TRUE)

# field queries
## query.author
res <- cr_works(query = "ecology", flq = c(query.author = 'Boettiger'))

## query.container-title
res <- cr_works(query = "ecology",
  flq = c(`query.container-title` = 'Ecology'))

## query.author and query.title
res <- cr_works(query = "ecology",
  flq = c(query.author = 'Smith', query.title = 'cell'))

# select only certain fields to return
res <- cr_works(query = "NSF", select = c('DOI', 'title'))
names(res$data)

## End(Not run)

```

---

filters

*Get filter details and names.*

---

### Description

Get filter details and names.

### Usage

```
filter_names()
```

```
filter_details(x = NULL)
```

### Arguments

x (character) Optional filter name. If not given, all filters returned.

## Details

Note that all filter names in this package have periods and dashes replaced with underscores as they both cause problems in an R console.

## Examples

```
filter_names()
filter_details()
filter_details()$has_authenticated_orcid
filter_details()$has_authenticated_orcid$possible_values
filter_details()$has_authenticated_orcid$description
filter_details("issn")
filter_details("iss")
filter_details(c("issn", "alternative_id"))
```

---

get\_styles

*Get list of styles from [github.com/citation-style-language/styles](https://github.com/citation-style-language/styles)*

---

## Description

Get list of styles from [github.com/citation-style-language/styles](https://github.com/citation-style-language/styles)

## Usage

```
get_styles(...)
```

## Arguments

...           Named parameters passed on to [crul::HttpClient](#)

## Examples

```
## Not run:
x <- get_styles()
x[1:10]

## End(Not run)
```

---

id_converter	<i>Get a PMID from a DOI, and vice versa.</i>
--------------	---

---

### Description

Get a PMID from a DOI, and vice versa.

### Usage

```
id_converter(x, type = "doi", ...)
```

### Arguments

x	(character) One doi, pmid, or pmcid
type	(character) one of doi, pmid, or pmcid
...	Curl args passed on to <a href="#">curl::HttpClient</a>

### References

Uses the <http://www.ncbi.nlm.nih.gov/pmc/tools/id-converter-api/>

### Examples

```
## Not run:  
# get a pmid/pmcid from a doi  
id_converter("10.1038/ng.590")  
  
# pmid to doi/pmcid  
id_converter("20495566", "pmid")  
  
# pmcid to doi/pmid  
id_converter("PMC2883744", "pmcid")  
  
# error, wrong type passed for id given  
# id_converter("PMC2883744", "doi")  
  
## End(Not run)
```

---

rcrossref-defunct	<i>Defunct functions in rcrossref</i>
-------------------	---------------------------------------

---

### Description

These functions are gone, no longer available.



## Details

- `cr_citation()`: Crossref is trying to sunset their OpenURL API, which this function uses. So this function is now removed. See the function `cr_cn()`, which does the same things, but with more functionality, using the new Crossref API.
- `pmid2doi()` and `doi2pmid()`: The API behind these functions is down for good, see `id_converter()` for similar functionality.
- `cr_search()`: The functionality of this function can be achieved with the new Crossref API. See functions `cr_works()` et al.
- `cr_search_free()`: The functionality of this function can be achieved with the new Crossref API. See functions `cr_works()` et al.
- `crosscite()`: The functionality of this function can be achieved with `cr_cn()`
- `cr_fundref()`: Crossref changed their name "fundref" to "funders", so we've changed our function, see `cr_funders()`
- `cr_ft_text()`: This function and other text mining functions are incorporated in a new package `crminer`.
- `cr_ft_links()`: This function and other text mining functions are incorporated in a new package `crminer`.
- `cr_ft_pdf()`: This function and other text mining functions are incorporated in a new package `crminer`.
- `cr_ft_plain()`: This function and other text mining functions are incorporated in a new package `crminer`.
- `cr_ft_text()`: This function and other text mining functions are incorporated in a new package `crminer`.
- `cr_ft_xml()`: This function and other text mining functions are incorporated in a new package `crminer`.
- `as.tdmurl()`: This function and other text mining functions are incorporated in a new package `crminer`.
- `extract_xpdf()`: This function and other text mining functions are incorporated in a new package `crminer`.

---

rcrossref-deprecated    *Deprecated functions in rcrossref*

---

## Description

None at the moment

# Index

## \*Topic **package**

rcrossref-package, 2

as.tdmurl(), 33

cr\_abstract, 4

cr\_agency, 4

cr\_agency(), 7

cr\_citation(), 33

cr\_citation\_count, 5

cr\_cn, 6

cr\_cn(), 33

cr\_ft\_links(), 33

cr\_ft\_pdf(), 33

cr\_ft\_plain(), 33

cr\_ft\_text(), 33

cr\_ft\_xml(), 33

cr\_funders, 9

cr\_funders(), 3, 33

cr\_funders\_(cr\_funders), 9

cr\_fundref(), 33

cr\_journals, 12

cr\_journals(), 3

cr\_journals\_(cr\_journals), 12

cr\_licenses, 15

cr\_licenses(), 3

cr\_licenses\_(cr\_licenses), 15

cr\_members, 17

cr\_members(), 3, 21

cr\_members\_(cr\_members), 17

cr\_prefixes, 20

cr\_prefixes(), 3

cr\_prefixes\_(cr\_prefixes), 20

cr\_r, 23

cr\_r(), 6

cr\_search(), 6, 33

cr\_search\_free(), 33

cr\_types, 24

cr\_types(), 3

cr\_types\_(cr\_types), 24

cr\_works, 9, 12, 17, 20, 24, 26, 27

cr\_works(), 3, 23, 33

cr\_works\_(cr\_works), 26

cr\_works\_(), 3

create\_progress\_bar, 5, 7, 10, 13, 18, 21, 25, 28

crosscite(), 33

crul::HttpClient, 31, 32

crul::HttpClient(), 5, 16

doi2pmid(), 33

extract\_xpdf(), 33

filter\_details(filters), 30

filter\_names(filters), 30

filters, 30

get\_styles, 31

get\_styles(), 7

HttpClient, 4, 5, 7, 10, 14, 18, 21, 25, 28

id\_converter, 32

id\_converter(), 33

plyr::create\_progress\_bar(), 16

pmid2doi(), 33

rcrossref(rcrossref-package), 2

rcrossref-defunct, 2, 32

rcrossref-deprecated, 2, 33

rcrossref-package, 2