



Creating a collection

```
> library(httr)
> library(jsonlite)
> # source("https://raw.githubusercontent.com/bavla/OpenAlex/main/code/OpenAlex2.R")
> wdir <- "C:/Users/vlado/work/OpenAlex/API"
> setwd(wdir)
> source("OpenAlex2.R")
```

Query

<https://api.openalex.org/works?search=SEARCH&filter=FILTER&select=SELECT>

```
> wd <- GET("https://api.openalex.org/works",
+   query = list(search=SEARCH,filter=FILTER,select=SELECT))
```

Some elements in the query list can be omitted. Some additional parameters can be used such as `per_page`, `page`, `sort`, etc.

```
> selPub <- "id,primary_location,title,publication_year,publication_date"
> selRef <- "biblio,type,language,referenced_works_count,referenced_works"
> selAut <- "authorships,keywords,countries_distinct_count,cited_by_count"
> selCite <- paste(selPub,selRef,sep=",")
> selAll <- paste(selCite,selAut,sep=",")
> selInfo <- "id,title,type,publication_year"

https://api.openalex.org/works?filter=countries_distinct_count:>1&select=id,title
```

```
{
  meta: {
    count: 15907135,
    db_response_time_ms: 90,
    page: 1,
    per_page: 25,
    groups_count: null
  },
  results: [
    {
      id: "https://openalex.org/W1979290264",
      title: "Using thematic analysis in psychology"
    },
    {
      id: "https://openalex.org/W2064675550",
      title: "Long Short-Term Memory"
    },
    {
      ...
    }
  ],
  group_by: [ ]
}
```

IMFM [<https://openalex.org/works/I4210106342>]

```
https://api.openalex.org/works?filter=authorships.institutions.lineage:i4210106342&select=id,title
https://api.openalex.org/works?filter=institutions.id:I4210106342&select=id,title
https://api.openalex.org/works?filter=institutions.id:I4210106342,publication_year:2010-2020&select=id,title
```

OpenAlex / boolean-searches [<https://docs.openalex.org/how-to-use-the-api/get-lists-of-entities/search-entities#boolean-searches>]

```
https://api.openalex.org/works?search=(SNA OR "social network" OR "complex network")&select=id,title

https://api.openalex.org/works?filter=authorships.institutions.country_code:SI,publication_year:2010-2020&group-by=authorships.countries
https://api.openalex.org/works?filter=authorships.institutions.country_code:SI,publication_year:2010-2020,countries_distinct_count:1&select=id,title
https://api.openalex.org/works?filter=publication_year:2010-2020,countries_distinct_count:1&group-by=authorships.countries
https://api.openalex.org/works?filter=authorships.institutions.continent:europe&group-by=authorships.institutions.country_code
```

Saturation

```
> source("OpenAlex2.R")
> Q <- list(
+   filter="author.id:A5001676164",
+   select=selCite,
```

```

+   per_page="200"
+ )

> OpenAlex2PajakCite(Q,1,name="cite",step=100)
OpenAlex2Pajak / Cite - Start Tue May 7 21:36:01 2024
*** OpenAlex2Pajak / Cite - Process Tue May 7 21:36:01 2024
Tue May 7 21:36:03 2024 n = 100
Tue May 7 21:36:03 2024 n = 200
*** OpenAlex2Pajak / Cite - Data Collected Tue May 7 21:36:04 2024
hits: 251 works: 1283
>>> Citation Cite
*** OpenAlex2Pajak / Cite - Stop Tue May 7 21:36:04 2024
> # cite1Ci.net: Pajak + TextPad / deg > 1 -> VB1.csv
> OpenAlex2PajakCite(Q,2,name="cite",listF="VB1.csv",step=100)
OpenAlex2Pajak / Cite - Start Tue May 7 21:53:31 2024
*** OpenAlex2Pajak / Cite - Process Tue May 7 21:53:31 2024
Tue May 7 21:53:33 2024 n = 100
Tue May 7 21:53:33 2024 n = 200
Tue May 7 21:53:53 2024 n = 300
Tue May 7 21:54:25 2024 n = 400
Tue May 7 21:54:56 2024 n = 500
*** OpenAlex2Pajak / Cite - Data Collected Tue May 7 21:55:28 2024
hits: 594 works: 5906
>>> Citation Cite
*** OpenAlex2Pajak / Cite - Stop Tue May 7 21:55:31 2024
> # cite2Ci.net: Pajak + TextPad / deg > 1 -> VB2.csv
> joinLists("VB1.csv","VB2.csv","VB2u.csv")
OnN = 108 O\N = 235 N\O = 935 OUN = 1278
> OpenAlex2PajakCite(Q,3,name="cite",listF="VB2u.csv",step=100)
OpenAlex2Pajak / Cite - Start Tue May 7 22:07:18 2024
*** OpenAlex2Pajak / Cite - Process Tue May 7 22:07:18 2024
Tue May 7 22:07:19 2024 n = 100
Tue May 7 22:07:20 2024 n = 200
Tue May 7 22:07:32 2024 n = 300
...
Tue May 7 22:13:22 2024 n = 1400
Tue May 7 22:13:55 2024 n = 1500
*** OpenAlex2Pajak / Cite - Data Collected Tue May 7 22:14:06 2024
hits: 1529 works: 15076
>>> Citation Cite
*** OpenAlex2Pajak / Cite - Stop Tue May 7 22:14:16 2024
> # cite3Ci.net: Pajak + TextPad / deg>2 -> VB3.csv
> joinLists("VB2u.csv","VB3.csv","VB3u.csv")
OnN = 196 O\N = 1082 N\O = 1073 OUN = 2351
> OpenAlex2PajakCite(Q,4,name="cite",listF="VB3u.csv",step=100)
OpenAlex2Pajak / Cite - Start Tue May 7 22:24:15 2024
*** OpenAlex2Pajak / Cite - Process Tue May 7 22:24:15 2024
Tue May 7 22:24:17 2024 n = 100
Tue May 7 22:24:17 2024 n = 200
Tue May 7 22:24:30 2024 n = 300
...
Tue May 7 22:34:57 2024 n = 2500
Tue May 7 22:35:29 2024 n = 2600
*** OpenAlex2Pajak / Cite - Data Collected Tue May 7 22:35:30 2024
hits: 2602 works: 24564
>>> Citation Cite
*** OpenAlex2Pajak / Cite - Stop Tue May 7 22:35:59 2024
> # cite4Ci.net: Pajak + TextPad / deg>4 -> VB4.csv
> joinLists("VB3u.csv","VB4.csv","VB4u.csv")
OnN = 292 O\N = 2059 N\O = 270 OUN = 2621
> OpenAlex2PajakCite(Q,5,name="cite",listF="VB4u.csv",step=500)
OpenAlex2Pajak / Cite - Start Tue May 7 22:48:09 2024
*** OpenAlex2Pajak / Cite - Process Tue May 7 22:48:09 2024
Tue May 7 22:49:15 2024 n = 500
Tue May 7 22:51:19 2024 n = 1000
Tue May 7 22:53:31 2024 n = 1500
Tue May 7 22:55:36 2024 n = 2000
Tue May 7 22:57:35 2024 n = 2500
*** OpenAlex2Pajak / Cite - Data Collected Tue May 7 23:00:34 2024
hits: 2872 works: 26735
>>> Citation Cite
*** OpenAlex2Pajak / Cite - Stop Tue May 7 23:01:12 2024
> # cite5Ci.net: Pajak + TextPad / deg>4 -> VB5.csv
> joinLists("VB4u.csv","VB5.csv","VB5u.csv")
OnN = 377 O\N = 2244 N\O = 126 OUN = 2747
> OpenAlex2PajakCite(Q,6,name="cite",listF="VB5u.csv",step=500)
OpenAlex2Pajak / Cite - Start Tue May 7 23:27:00 2024
*** OpenAlex2Pajak / Cite - Process Tue May 7 23:27:00 2024
Tue May 7 23:28:35 2024 n = 500
Tue May 7 23:31:18 2024 n = 1000
Tue May 7 23:33:52 2024 n = 1500
Tue May 7 23:36:31 2024 n = 2000
Tue May 7 23:40:15 2024 n = 2500

```

```

*** OpenAlex2Pajek / Cite - Data Collected Tue May  7 23:43:29 2024
hits: 2998 works: 27629
>>> Citation Cite
*** OpenAlex2Pajek / Cite - Stop Tue May  7 23:44:06 2024
> # cite6Ci.net: Pajek + TextPad / deg>4 -> VB6.csv
> joinLists("VB5u.csv", "VB6.csv", "VB6u.csv")
OnN = 418  O\N = 2329  N\O = 62  OUN = 2809
> OpenAlex2PajekCite(Q,7,name="cite",listF="VB6u.csv",step=500)
OpenAlex2Pajek / Cite - Start Tue May  7 23:55:55 2024
*** OpenAlex2Pajek / Cite - Process Tue May  7 23:55:55 2024
Tue May  7 23:56:49 2024  n = 500
Tue May  7 23:58:34 2024  n = 1000
Wed May  8 00:00:22 2024  n = 1500
Wed May  8 00:02:16 2024  n = 2000
Wed May  8 00:04:08 2024  n = 2500
Wed May  8 00:06:28 2024  n = 3000
*** OpenAlex2Pajek / Cite - Data Collected Wed May  8 00:06:47 2024
hits: 3060 works: 28097
>>> Citation Cite
*** OpenAlex2Pajek / Cite - Stop Wed May  8 00:07:38 2024
> # cite7Ci.net: Pajek + TextPad / deg>4 -> VB7.csv
> joinLists("VB6u.csv", "VB7.csv", "VB7u.csv")
OnN = 436  O\N = 2373  N\O = 26  OUN = 2835
> OpenAlex2PajekCite(Q,8,name="cite",listF="VB7u.csv",prop=TRUE,step=500)
OpenAlex2Pajek / Cite - Start Wed May  8 00:41:37 2024
*** OpenAlex2Pajek / Cite - Process Wed May  8 00:41:37 2024
Wed May  8 00:42:50 2024  n = 500
Wed May  8 00:45:12 2024  n = 1000
Wed May  8 00:47:34 2024  n = 1500
Wed May  8 00:49:53 2024  n = 2000
Wed May  8 00:53:29 2024  n = 2500
Wed May  8 00:55:59 2024  n = 3000
*** OpenAlex2Pajek / Cite - Data Collected Wed May  8 00:56:18 2024
hits: 3086 works: 28206
>>> Citation Cite
>>> publication year
>>> type of publication
>>> language of publication
>>> cited by count
>>> countries distinct count
>>> referenced works
*** OpenAlex2Pajek / Cite - Stop Wed May  8 00:57:04 2024
> # cite8Ci.net: Pajek + TextPad / deg>4 -> VB8.csv
> joinLists("VB7u.csv", "VB8.csv", "VB8u.csv")
OnN = 443  O\N = 2392  N\O = 14  OUN = 2849

> Q <- list(
+   search="handball",
+   # filter="publication_year:1980-2023",
+   select=selAll,
+   per_page="200"
+ )

```

Networks

```

> source("OpenAlex2.R")
> OpenAlex2PajekAll(Q,name="batagelj",listF="VB8u.csv")
OpenAlex2Pajek / All - Start Wed May  8 03:50:51 2024
*** OpenAlex2Pajek / All - Process Wed May  8 03:50:51 2024
Wed May  8 03:51:46 2024  n = 500
Wed May  8 03:54:02 2024  n = 1000
Wed May  8 03:56:23 2024  n = 1500
Wed May  8 03:58:49 2024  n = 2000
Wed May  8 04:01:57 2024  n = 2500
Wed May  8 04:04:28 2024  n = 3000
*** OpenAlex2Pajek / All - Data Collected Wed May  8 04:04:58 2024
hits: 3100 works: 28287 authors: 4265 anon: 38 sources: 563
>>> Citation Cite
>>> publication year
>>> type of publication
>>> language of publication
>>> cited by count
>>> countries distinct count
>>> referenced works
>>> Authorship WA
>>> Sources WJ
>>> Keywords WK
>>> Countries WC
*** OpenAlex2Pajek / All - Stop Wed May  8 04:06:00 2024
>

```

