

zbMATH Citation Matcher

Script API

The zbMATH Citation Matcher (available at <https://zbmath.org/citationmatching/>) provides a programmatic API for automated matching of citation strings with zbMATH entries, as well as BibTeX entries and files. The endpoints exposed by this API are documented below.

Use of the zbMATH Citation Matcher is subject to the [Terms & Conditions](#) and [Legal Notices](#) of zbMATH, as well as the [Privacy Policy](#) of FIZ Karlsruhe.

Note that we do not implement any form of traffic control at the moment, so please limit your requests to a reasonable rate. Due to resource limitations we may have to restrict access in cases of extensive usage. In the case of many requests, usage of the bulk API might be preferable (see page [3](#)).

API Description

The base URL for all endpoints is <https://zbmath.org/citationmatching/>. Parameters should be submitted in UTF-8 encoding.

Endpoint: match		Method: GET
Match a citation string to a zbMATH entry.		
Parameter	Description	Remarks
q	query string	
t ¹	title	
a/a[] ¹	author	Should be given multiple times in case of more than one author. Both forms (with or without trailing []) are supported in order to accommodate some frameworks which automatically add trailing brackets to GET parameters occurring more than once.
j ¹	journal	Currently not used for matching.
v ¹	volume	Only used when explicitly provided.
i ¹	issue	Only used when explicitly provided.
p ¹	pagination	First and last page, separated by hyphen(s).
y ¹	year	Specified as YYYY, or as XXXX-YYYY for ranges, or as XXXX/YYYY/ZZZZ for alternatives.
f	format of query data	Possible values: latex, utf8 (default). Specifying f=latex yields slightly better results in case the query data is encoded as L ^A T _E X (e. g. \ "o instead of ö).
n	number of results	Default: 1. The actual number of results returned may be less if the query does not match enough documents.
m	minimum score	Default: 5.0. Only documents achieving at least this matching score are returned.
<p>Response: Results are returned in JSON format (content MIME type application/json). The structure is as follows:</p> <pre>{ "results": [{ "score": ..., "zbl_id": ..., "title": ..., "authors": ..., "source": ..., "pagination": ..., "year": ... }, ...] }</pre> <p>Results are sorted by score in descending order.</p>		

¹When present, these parameters override the values parsed from the q parameter.

Endpoint: match

Method: POST

Match multiple citation strings to zbMATH entries.

The `match` endpoint can be accessed via the `POST` method to execute bulk requests containing multiple queries (up to 100 at a time). It accepts the same URL parameters as in the case of `GET`, which are globally applied to all queries in the request (thus only `f`, `n` and `m` make sense). The list of queries should be sent in the request body in JSON format, and the request must include the `Content-type: application/json` header. Each query can contain the same parameters as described for the `GET` method above, but encoded in JSON. If a parameter is given both in the URL and in a query, the local parameter overrides the global setting for that query only.

Example:

The following JSON body contains two queries. The first searches for a query string using the `q` parameter, while the second searches by title and authors. The second query also specifies a custom value for the `n` parameter, which overwrites the global value.

```
{
  "queries": [
    {
      "q": "a query string"
    },
    {
      "a": [ "author 1", "author 2" ],
      "t": "some title",
      "n": 2
    }
  ]
}
```

In the following response, the first query did not match any documents, while the second returned two hits (which are again sorted by score in descending order).

```
{
  "results": [
    [],
    [
      {
        "score": ...,
        "zbl_id": ...,
        "title": ...,
        "authors": ...,
        "source": ...,
        "pagination": ...,
        "year": ...
      },
      {
        "score": ...,
        "zbl_id": ...,
        "title": ...,
        "authors": ...,
        "source": ...,
        "pagination": ...,
        "year": ...
      }
    ]
  ]
}
```

Endpoint: bibtex/match		Methods: GET, POST
Match a BibTeX snippet to a zbMATH entry.		
Parameter	Description	Remarks
bibtex	BibTeX snippet	The BibTeX fields used for matching are <code>title</code> , <code>author</code> , <code>journal</code> , <code>pages</code> and <code>year</code> .
n	number of results	<i>see above</i>
m	minimum score	<i>see above</i>
Response: As for <code>match</code> (see page 2).		

Endpoint: bibtex/convert_file		Method: POST
Process a BibTeX file and add zbMATH article numbers.		
Parameter	Description	Remarks
bibtex_file	BibTeX file	Should be sent using the <code>multipart/form-data</code> content type. The corresponding <code>Content-Disposition: form-data</code> header must contain a <code>filename</code> attribute.
k	BibTeX key	Default: <code>zbl</code> . Name of the BibTeX field that should receive zbMATH article numbers.
m	minimum score	<i>see above</i>
Response: A new BibTeX file is returned containing zbMATH article numbers where found. The HTTP response will have a content type of <code>text/x-bibtex</code> and include a <code>Content-Disposition: attachment</code> header with a <code>filename</code> attribute set to the file name that was specified in the request.		