

# Literature Research 1 – Tools for Studying

## Lecture Notes



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# Information Literacy 1 – Search and Find E-Books and E-Journals

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# 1 What we offer?

## 1.1 The TUM University Library

The university library is the academic center of information of the Technische Universität München (TUM). We offer more than two millions of printed and electronic media, among them professional journals, standards and dissertations. The extensive collection of E-books, E-journals and data-bases allows you to access our inventory online.

Besides academic literature, our branch libraries provide literature essential for studies in our **text-book collections**\*. There are always multiple copies of printed books available to allow access to as many students at a time as possible.

## 1.2 Branch libraries and opening hours

With **nine branch libraries** in total, TUM library is represented at all four locations of TUM.

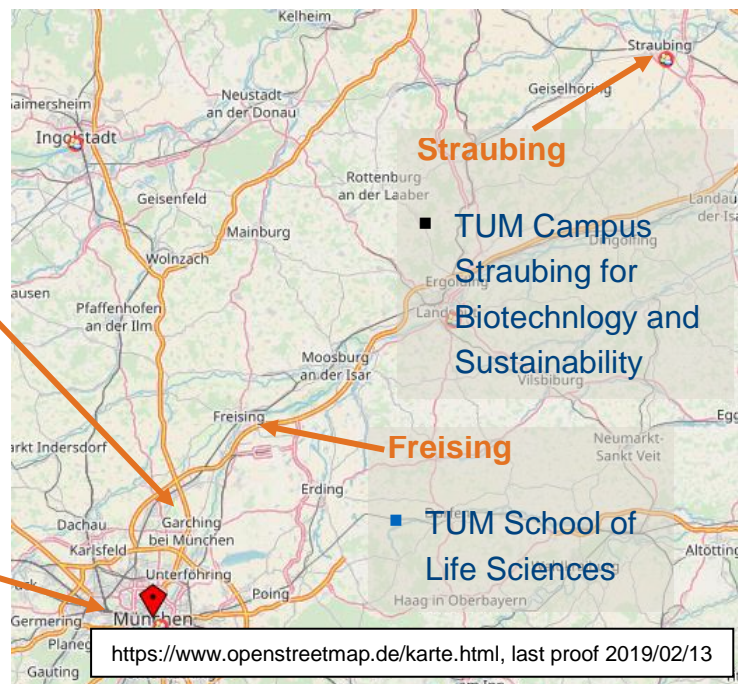
- In Munich you will find the branches “Main Campus”, “Medicine” and “Sports Science”.
- The branch libraries “Mathematics/Computer Science“, “Mechanical Engineering“, “Chemistry” and “Physics” are situated in Garching.
- The Weihenstephan branch library is in Freising and in Straubing there is a branch library belonging to the local science center (Wissenschaftszentrum Straubing).

### Garching

- Maths/  
Informatics
- Mechanical  
Engineering
- Chemistry
- Physics

### München

- Main Campus
- Medicine
- Sports Science



\* Terms **set in bold** and suffixed with \* are explained in the glossary at the end of this script.

Due to our extending opening hours (e.g. up to midnight on weekdays in the main campus branch) the library is a popular place for study.

The opening hours of all our branches can be found on our website:

<http://www.ub.tum.de/en/oeffnungszeiten>

### 1.3 Shelving and shelf mark

Most of our items are shelved open access, but parts of the book collection are held in closed stacks. In the library's **reading rooms\***, books in the shelves are arranged by topics according to TUM classification. (see 4).

This is an example for a shelf mark:

**0003/MAT 005f 2009 L 23-1(12)+3**

**Location** (see location identifier list)

**Topic:** Classification (see 3.4), indicated at the shelf unit itself

**Year of publication / acquisition**

**L** for a book which is part of a textbook collection  
(or A, B for the size of the book)

**Current number**

**Volume** (edition)

**+ Copy number**

Shelf marks are to be found in the TUM **OPAC\*** (see. 2.1). You can request/order media from the closed access collection or other branch libraries via OPAC.

### 1.4 Acquisition of literature

Our **inter-branch loan service\*** allows quick access to all our book collections. You may request up to 10 items at one time via the Online Catalogue. Library staff will have those items ready for collection at the branch library you have chosen. When the item is ready for you to collect, you will receive an arrival notice. Books and other library items may be returned at any of our 10 branch libraries, regardless of the check-out location. You will always receive a receipt as proof of return by or before the due date.

To order media, you need your **StudentCard / PersonalCard / Library card\***.

All Books, journal volumes and electronic media held by the TUM library may be found in our Online Catalogue.

**Tip:** As a TUM member, you are eligible to use our document delivery service **dokumenTUM\***. Scans of articles will be send for free to your e-mail-address.

**Tip:** Use the **interlibrary loan\*** service, If an item is not available at our library or any other Munich library.

## 1.5 Borrowing periods /online access

Borrowing periods at a glance:

<b>Loan Collection*:</b>	4 weeks + 2 x 4 weeks renewals
<b>Textbook collection:</b>	4 weeks + 5 x 4 weeks renewals
<b>Restricted Loan Collection*:</b>	4 weeks for TUM staff only, all others: short term loan (from 2 hrs. before library closing until 2 hrs. after the opening next day); item recognizable by <b>blue</b> back label
<b>Non-loan collection:</b>	short term loan; item recognizable by <b>yellow</b> back label

For borrowing items there is a recall system in place. After a loan period of 4 weeks, books are renewed automatically – unless another library user has reserved the item.

**Please note:** Automatic renewals of loan periods will only be granted if no reservations have been made within the loan period. But you may keep a borrowed book until the end of the actual loan/renewal period.

**Tip:** Consult your **library account** (see 2.1) frequently via the Online Catalogue for current due dates.

### Online access

In order to access electronic media off-campus, use our **eAccess\*** service (to log in you need your TUM ID or your *@tum.de* mail address).

Links to eAccess you can find on the homepage of our website and in a box to the right on the homepage of our Online Catalogue. Or you register under <https://eaccess.ub.tum.de/login> with your TUM ID or @tum.de-mail address.

## 1.6 Help

We are here for you Monday to Friday from 8 am to 8 pm.

<b>Chat:</b>	Chat with us on our website
<b>E-mail:</b>	Send us an e-mail: <a href="mailto:information@ub.tum.de">information@ub.tum.de</a>
<b>Telephone:</b>	Call us on +49 (0)89 189 659 220
<b>WhatsApp:</b>	Write us: 0173 861 8412
<b>Online:</b>	Use our electronic mailbox: <a href="http://www.ub.tum.de/webform/feedback">http://www.ub.tum.de/webform/feedback</a>

## 1.7 Training courses

In addition to personal advice via chatting, telephone or e-mail we offer various courses:

**Literature Research 1 – Tools for Studying:** In this course, we show you how to easily use our e-books and e-journals. You also learn how to develop a basic search strategy for literature, and find out about library services that can assist you in your studies and working routines from day one.

**Literature Research 2 – Search Strategies for Seminar Papers and Theses:** In this course, you learn how to find appropriate literature databases for your subject. We show you how to search literature successfully with targeted search strategies, and how to access the documents simply and comfortably.

**Compact Course Literature Research for Your Dissertation:** In our compact course for doctoral candidates and researchers, we show you how to find literature databases that are important for your field, and develop targeted search strategies for literature. You also learn how to access the researched material, quote correctly and publish electronically on our media server **mediaTUM\***.

Additionally we offer introductory courses to the reference management software **Citavi** and **End-Note**, which helps you to keep track of your literature. In our **citation course**, you will learn how to cite correctly and avoid unintended plagiarism.

You find course descriptions, schedules and the possibility to register on our homepage.

## 2 How to find a certain book

For literature search, please use our Online Catalogue.

### 2.1 OPAC

In the OPAC (Online Public Access Catalogue) you can search, order and reserve books, check the borrowing status of items and keep tabs on your loans in your library account. The OPAC lists all books and journals owned by the University Library, both printed and electronic.

When you are searching for a certain book, first open the OPAC and switch the language from German to English at the top right, next to the orange Login button.

#### Open the OPAC

1. In order to open the OPAC please choose the branch library (**Check-out library**) where you wish to collect requested items. Now if you order something or place a reservation, the book will be sent to that branch library.

- Next, log into the system by entering your library number (on the back of your library card/StudentCard/PersonalCard) and your password at the upper right of the screen (Login button). If not logged in you will not be able to order media from other TUM branch libraries or receive personalized information about whether books are available for loan for example.

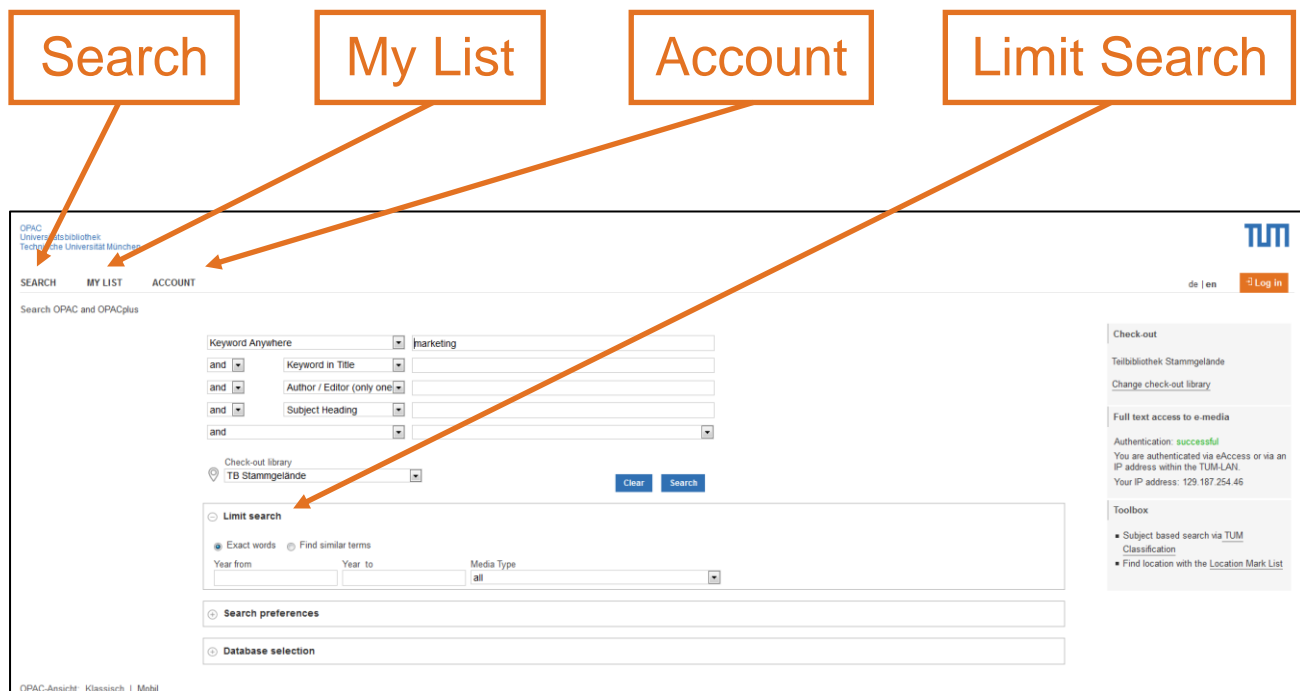
**Please note:** No matter which check-out library you choose, you are always searching the entire collection of the university library (including the collections of all branch libraries).

Initially, the interface of the catalogue shows you the tab **“Search”** containing the search interface. Next to it there is the tab **“My List”**: this tab enables you to store the results of your searches for later use. You can create temporary or permanent lists. It is also possible to export lists to reference management programs via the "Send" tab.

**Tip:** With the loss of the library card, the saved lists are also lost. You can prevent this by using a reference management program.

The **“Account”** tab shows you the media you currently have on loan and their respective due dates. There you can change your personal data, your password and your address and destine the branch library for your interlibrary loan.

In the area below, you can limit your search or change the search settings.



The screenshot shows the TUM library search interface. At the top, there are four orange boxes with labels: "Search", "My List", "Account", and "Limit Search". Arrows point from these labels to the corresponding tabs in the interface. The "Search" tab is active, showing a search form with fields for "Keyword Anywhere", "Keyword in Title", "Author / Editor (only one)", and "Subject Heading". There are also checkboxes for "Exact words" and "Find similar terms", and a "Limit search" section with "Year from", "Year to", and "Media Type" fields. The "Account" tab is also visible, showing a "Check-out" section with "Teilbibliothek Stammgelande" and "Change check-out library" options. The "Limit Search" section is highlighted with an orange box and an arrow pointing to it from the label above.

In **Basic Search** there is only one search slot, where you enter all your search terms.

In **Advanced Search** (see picture above) you can limit your search to one particular search field / search category or combine several search fields into one search query.

The most important search fields are ...

1. **Keyword Anywhere** (many results, as all fields are searched)
2. **Keyword in Title\*** (possibly **truncate\***, consider other languages)
3. **Autor/Editor (only one)** (enter only one author/editor name)
4. **Subject Heading\*** (describes the content of a document, assigned by librarians using standardized terms according to defined criteria)
5. **Exact Title** (don't forget articles like English "the", "a" or German "der", "die", "das", "ein", "eine"!) )
6. **Year** (ranges can be restricted using ">" or "<")
7. **ISBN/ISSN** (10 or 13 places, entering hyphens or spaces is not necessary)

All search fields can be combined using "and", "or" or "and not" (Boolean Operators). Please note: Depending on the type of combination, the size of the hit list changes.

**Tip:** The fastest way to find a certain book is to enter significant terms from the title and the surname of the author/editor in the central search slot. If you are interested in a certain edition, it is also advisable to enter the year.

## 2.2 OPACplus

In **OPACplus\*** you can simultaneously search for newspaper and journal articles. It also gives you access to bibliographic metadata, abstracts and scientific materials of all kinds.

OPACplus lists the electronic media offered by the University Library as comprehensively as possible. However, it also searches contents from the open web, literature databases and publishing platforms.

**Please note:** OPACplus evaluates numerous data sources, so you receive usually not only a larger number of hits than in the OPAC, but also a very heterogeneous hit picture. You should be aware that a single title is often displayed more than once. In addition, check carefully whether the title you are looking for is actually identical to one of the hits.

By default, a search query always searches both catalogs at the same time. To search for a specific book, use the OPAC.

## 2.3 How to read a reference list

In order to conduct your search properly from the outset, you have to identify the type of literature you wish to find.



Let us have a look at the following references!

### Example 1

Peters, C. / Raabe-Oetker, A.: Neurologie und Sport. Möglichkeiten und Grenzen der Sporttherapie zentralnervöser Schadensbilder. Köln: Sport und Buch Strauss, 1997.

A **Book**: You usually recognize a reference to an "ordinary" book (in libraries and in literature management programs also called a **monograph**) by the following characteristics: the author's name, the title of the book, the location of the publisher (not always but often combined with the publisher's name) and the date of publication.

Books are listed in the OPAC. You can search using all characteristics. We recommend entering the author's last name and most specific words of the title in the search fields of the catalogue – in this way you will find almost all books.

**Tip**: If the international standard number of the book, the **ISBN\***, is known, search best with it.

### Example 2

Abel T., Kröner M., Rojas Vega S., Peters C., Klose C. & Platen P.: Energy expenditure in wheelchair racing and handbiking - a basis for prevention of cardiovascular diseases in those with disabilities. In: European Journal of Cardiovascular Prevention and Rehabilitation, 10 (2003), S. 371 - 376.

An **article in a journal**: First, all information concerning the individual article is provided: the authors and the title of the article. This is followed by the details of the journal in which the article is published (often introduced with "**In:**"): the journal title, the year and the page numbers indicating the place where the article can be found in the journal.

**Please note**: The OPAC only lists a complete work, but no parts thereof. In the OPAC, you may search for the title or ISSN of a journal **but not** for a single article; you may search for books **but not** for individual chapters.

**Tip**: If the international standard number of the journal, the **ISSN\***, is known, search best with it. Journal titles are often very similar while the ISSN is always unique! (see 4)

### Example 3

Lötzerich, H. & Peters C.: Die Bedeutung sportlicher Aktivität in der Primär- und Sekundärprävention von Tumorerkrankungen. In: Deimel, H. & Anneken, V. (Hrsg.), Neue aktive Wege in Prävention und Rehabilitation. Köln: Deutscher Ärzte-Verlag, 2007, S. 125 – 140.

An **article in an edited book (anthology)**: Edited books ("Sammelbände") or anthologies are books containing contributions by different authors; you recognize these books by an editor's name in place of the author's; the German abbreviation for editor(s) is **Hrsg.** or **Hg.** The reference for an article in an edited book is very similar to the reference of a journal article (see Example 2). It begins with information about the article / contribution: author name and title of the article. Then it lists

(normally introduced by “In:”) the information about the edited book, in which the article was published. This include the name of the editor, the title of the book, the page numbers of the article, the location of publication, the publisher (not always but often) and the year of publication.

**Please note:** In OPAC you can search for the book, but not for the article; for article search, please use the OPACplus or relevant databases. Articles from printed books are only partially indexed in OPACplus and may not be displayed in every case; therefore, please make sure by an OPAC search that the TUM library actually does not hold the book.

#### Example 4

Humboldt-Universität zu Berlin / Institut für Biologie (Hrsg.): History, Current Structure and Future Perspectives. / **URL:** <http://www.biologie.hu-berlin.de/institut/geschichte/standardseite> (zuletzt geprüft am 17.05.2011).

An **Internet source:** Internet sources can be recognized by the complete URL or URN. These sources can be easily accessed using a browser. If they are no longer accessible, search via a reverse search engine, for example “Internet Archive Wayback Machine”.

## 2.4 Types of loans

After a successful search, there are three ways for you to borrow a book from TUM library:

1. If the book is located in the branch library you choose for collection (which, in the following example, is the branch library Stammgelände / Main Campus), just make a note of your book’s shelf mark or scan the QR code and take the book from the shelf. In this case, the book is marked “**available**” in the online catalogue



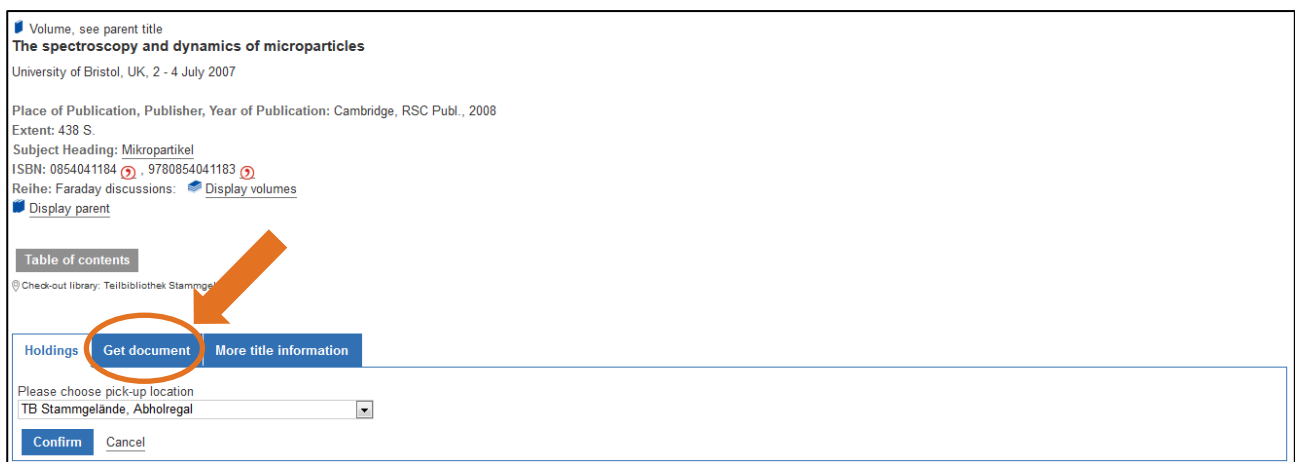
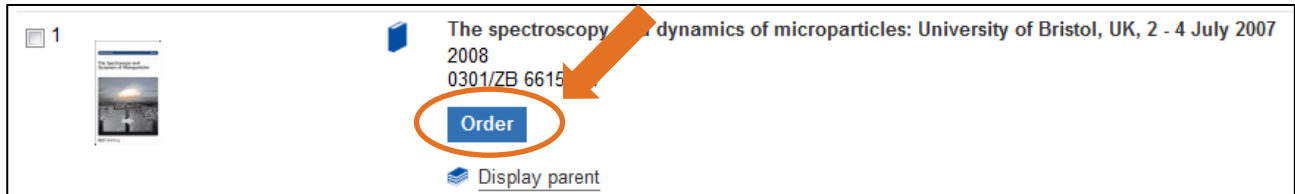
The screenshot displays the library catalog entry for the book "Architects' houses: die Wohnhäuser der innovativsten Architekten" by Webb, Michael and Kretschmer, Ulrike. The status "available" is highlighted with an orange circle and an arrow. Below, the holdings table shows the book is available at the Stammgelände / Lesesaal location, with the shelfmark 0002/ARC 660f 2007 C 20. The status "available" in the table is also highlighted with an orange circle and an arrow.

**Architects' houses: die Wohnhäuser der innovativsten Architekten**  
Webb, Michael ; Kretschmer, Ulrike  
1. Auflage  
[2018] © 2018  
0002/ARC 660f 2018 B 1477

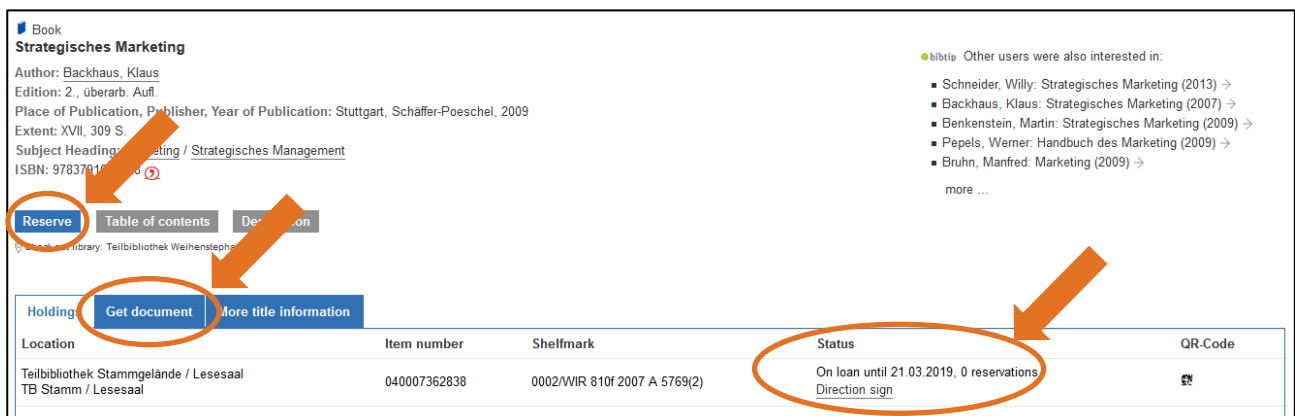
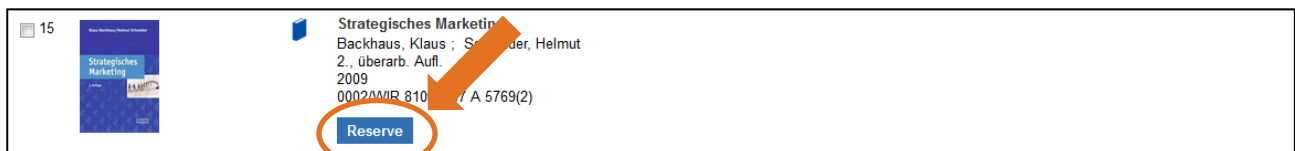
**available**

Holdings	Get document	More title information		
Location	Item number	Shelfmark	Status	QR-Code
Teilbibliothek Stammgelände / Lesesaal TB Stamm / Lesesaal	040006650164	0002/ARC 660f 2007 C 20	<b>available</b> <a href="#">Direction etc.</a>	

2. If the book is located at a different library than your chosen pick-up location or if it is in a **closed stack**, you will receive the message "**Order**". After clicking on the tab "Order" and then on the tab "**Get document**" you will get a link to order the book online. If you are not yet logged in, the system will ask you at this point for your library number and password.



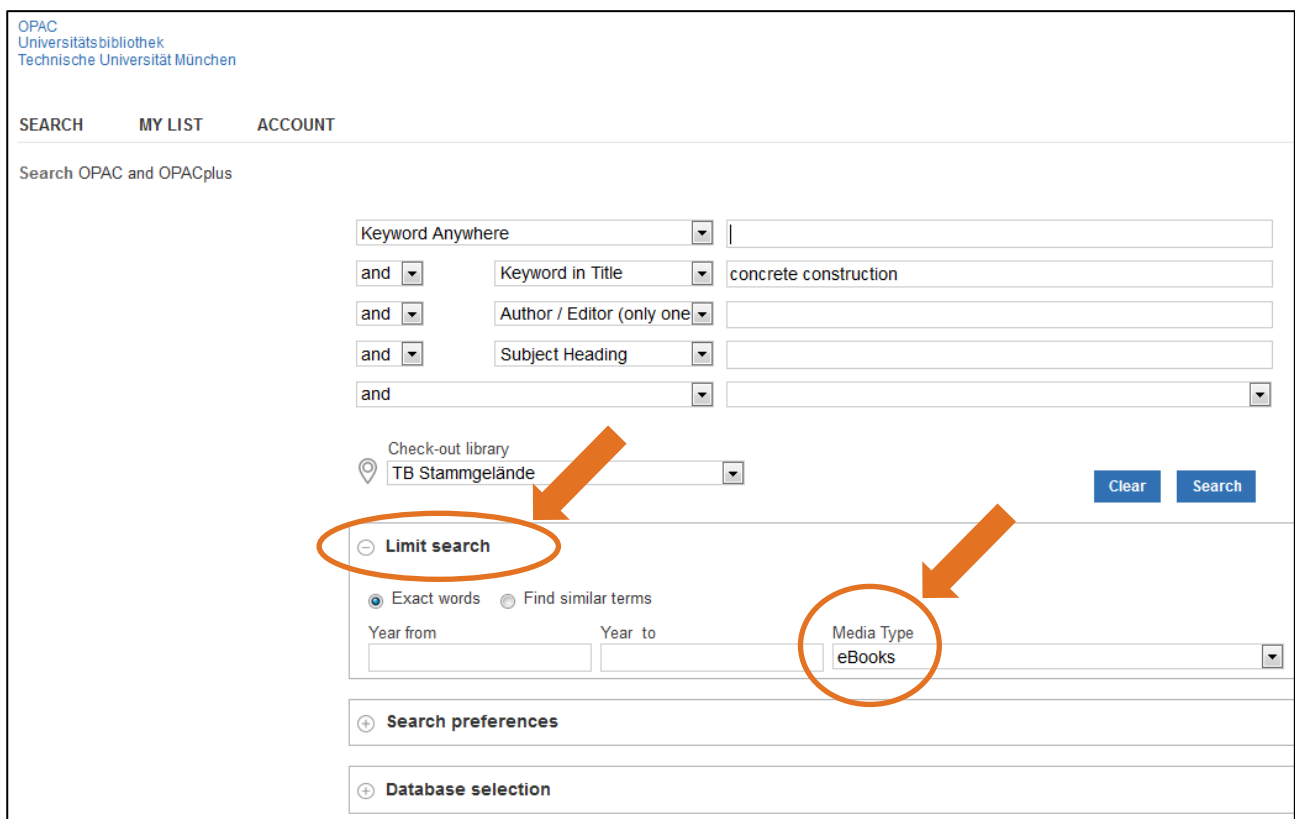
3. If a book is already out on loan, it is automatically marked with "**Reserve**". Click on this tab to see when the loan period ends. If you click on the tab "**Get document**" you can place a reservation for this book. We will inform you by e-mail as soon as the reserved book is available for collection in the library.



## 2.5 How to find e-books

Many books in the library are also available in electronic format ("e-books"). TUM members can read e-books online anywhere if they log in with eAccess. You can find and access our complete selection of e-books in the TUM Online Catalogue OPAC.

**Tip:** You want to limit your results to e-books? Click on the tab „Limit search“, select “eBooks” as “Media Type”, then enter the title keyword of your desired media and/or the author’s last name in the respective search fields.



OPAC  
Universitätsbibliothek  
Technische Universität München

SEARCH MY LIST ACCOUNT

Search OPAC and OPACplus

Keyword Anywhere

and  Keyword in Title  concrete construction

and  Author / Editor (only one)

and  Subject Heading

and

Check-out library  
TB Stammgelände

**Limit search**

☒ Exact words ☐ Find similar terms


Year from  Year to

Media Type  
eBooks

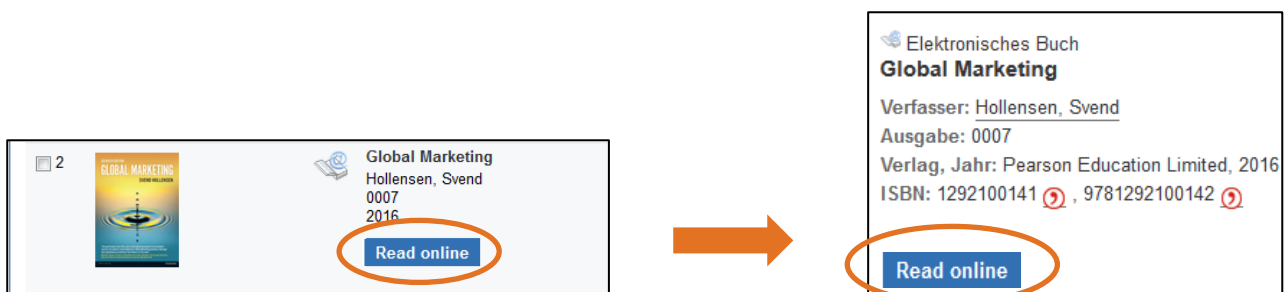
Clear Search


Search preferences

Database selection



Titles available as e-books carry the e-book symbol: 

In the results list as well as in the title bar the button "**read online**" leads you to the full text of the item.



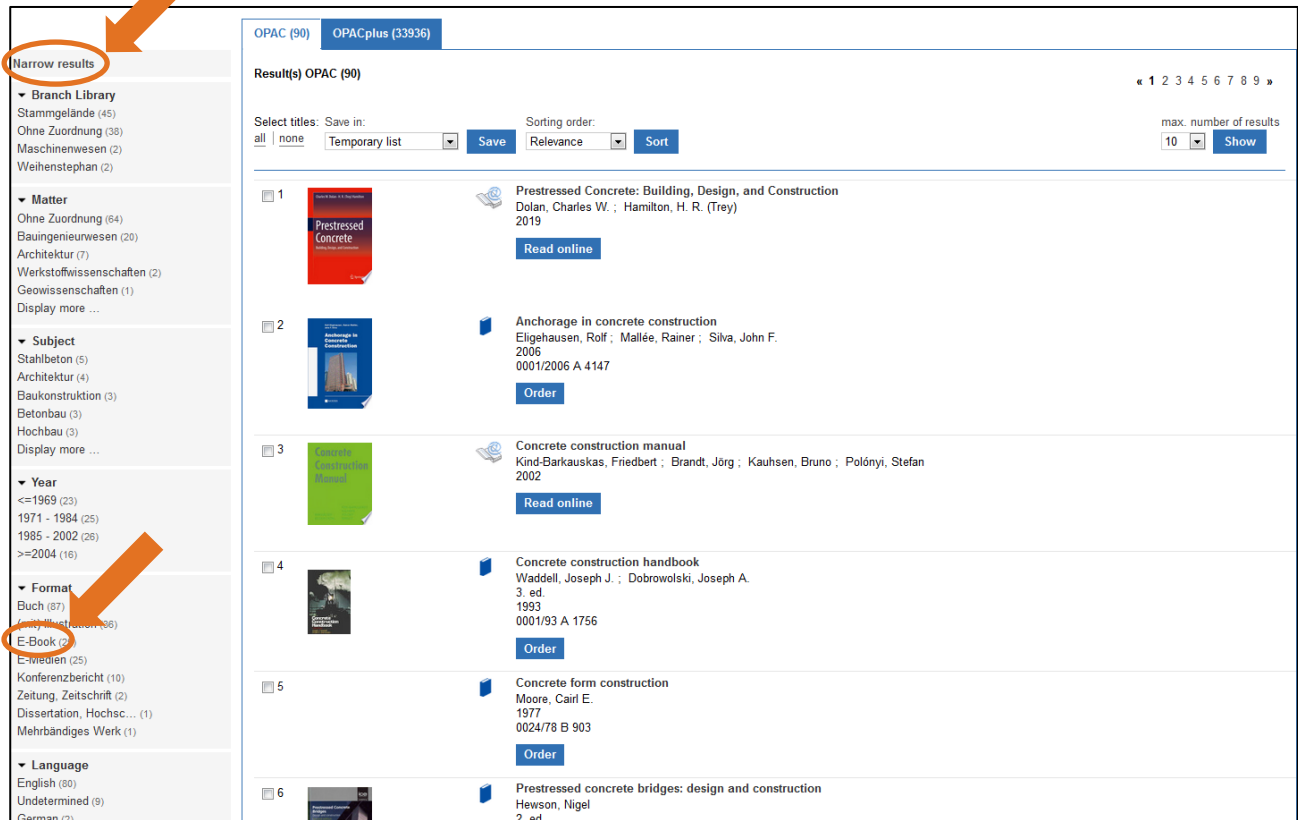
2  Global Marketing  
Hollensen, Svend  
0007  
2016

**Read online**

Elektronisches Buch  
**Global Marketing**  
Verfasser: Hollensen, Svend  
Ausgabe: 0007  
Verlag, Jahr: Pearson Education Limited, 2016  
ISBN: 1292100141  , 9781292100142 

**Read online**

Generally you can/should limit your search when you get too many results. Therefore there is a box on the left side titled “Narrow results”. You can limit by different categories, e.g. “E-Book” under “Format”



The screenshot shows the OPAC search results page. On the left, there is a sidebar with filters. The 'Narrow results' section is highlighted with an orange circle and an arrow. Below it, the 'Format' category is expanded, and 'E-Book' is highlighted with an orange circle and an arrow. The main results area shows a list of books with their titles, authors, and publication details. The first result is 'Prestressed Concrete: Building, Design, and Construction' by Dolan, Charles W. ; Hamilton, H. R. (Trey), 2019. Other results include 'Anchorage in concrete construction', 'Concrete construction manual', 'Concrete construction handbook', 'Concrete form construction', and 'Prestressed concrete bridges: design and construction'.

### 3 How to find a book on a given topic?

There are several ways to conduct a subject-specific search.

#### 3.1 Search using the field “Keyword anywhere”

This search query includes all fields.

If you enter “Max Weber” for example, the results will contain

- works by Max Weber
- works about Max Weber
- colloquia of the Max-Weber-College
- all documents in which Max and Weber occur (e.g. a book by Max Passon published by the Weber Publishing House or a publication on the occasion of the extension of the tram line 15/25 to the Max-Weber-Platz (Max Weber square)).

**Please note:** Your query may return very many results, most of which are usually irrelevant.

### 3.2 Search using the field “Keyword in Title”

Queries entered in the field “Keyword in Title” only search for words that occur in the title or subtitle. If you choose the option “**Find similar terms**” in the area “Limit Search”, the catalogue will also find titles that contain the stem plus inflection of the search word, e.g. plural or genitive forms.

**Please note:**

1. The title of a publication does not always correspond to its content.
2. Words are used in a different sense and possibly provide additional hits that do not match the topic you are looking for.
3. If you search using German keywords only, you will miss publications in foreign languages.

### 3.3 Search using the field “Subject Heading”

Subject headings describe the content of a book; they employ a standardized German vocabulary. The language does not play a role in this kind of search. For example, if you search in German, you will even find books on your topic, which are written in other languages.

Potential problem: You are not able to find the relevant subject heading(s).

**Tip:** Use for your search subject headings or keywords of books on your topic already found in the OPAC. And look for (automatically produced) keywords of books while searching Internet or other databases.

### 3.4 Search using the field „TUM-Systematik“

The stock of TUM Library is classified systematically and according to content, using the TUM Classification Scheme. The notation consists of three parts, e.g. **BIO 532f**.

1. a **letter code** for the main group: BIO = biological sciences (ARC = architecture, EDU = educational science)
2. a 3-figure **digit code** for the subclass: BIO 532 = fern plants
3. a **key letter**: f = monograph (b = lexicon, d = dissertation)

If a book deals with multiple topics, multiple notations are assigned to it. When placing books in the reading room, we use one of these notations as the shelf mark.

In order to identify the classification of your topic, you can follow one of these three paths:

1. You search for a relevant term in the **alphabetical register** of the TUM Classification:

Next to the term, you will find its notation, which you can then use in the field TUM Classification in the online catalogue.

2. You search the classification system for the relevant notation(s) for your topic.

You may then be referred to similar terms.

3. Snowballing technique

If you have already found a book which comes very close to what you are searching for, make a note of the notation (to be found in the signature or in the tab "Details") and then display all titles with this notation in the TUM system.

## 4 How to get books the library doesn't have.

### 4.1 Interlibrary loan

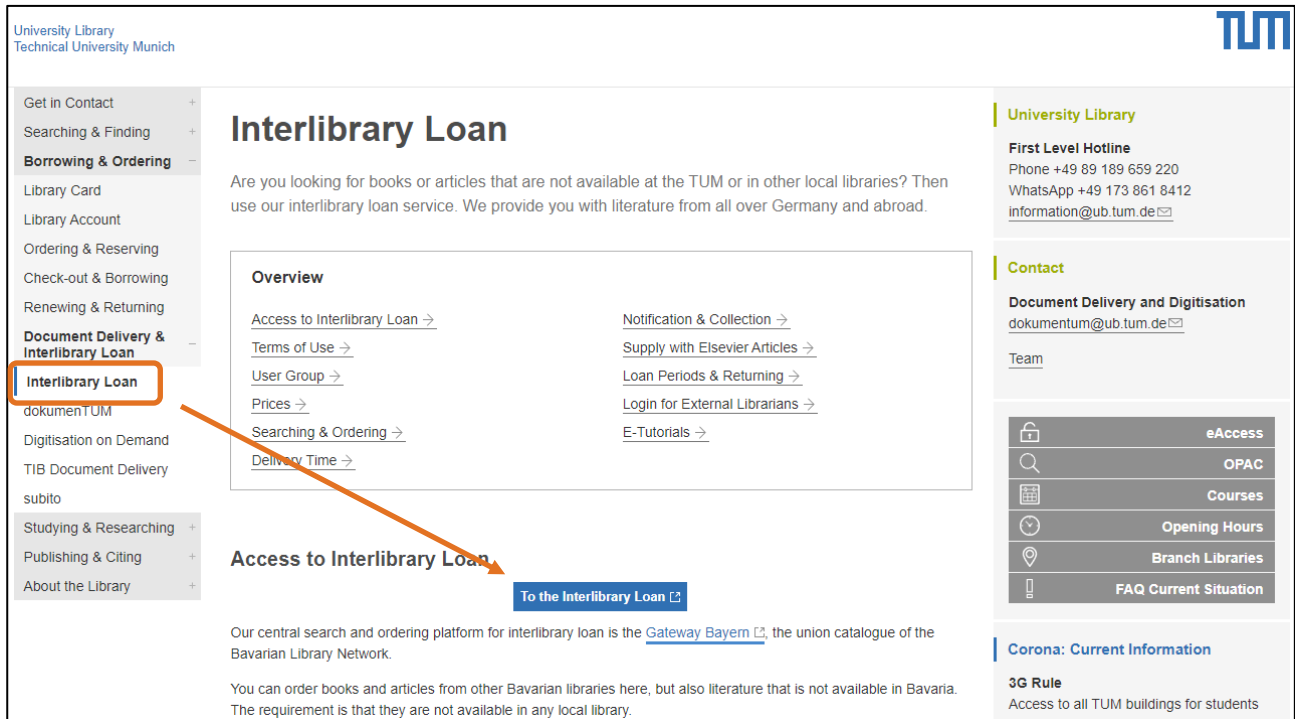
If you cannot find a book in the OPAC, there are two options: You can order the title via interlibrary loan or suggest it to the university library for purchase.

**Please note:** You cannot order via interlibrary loan locally available literature, even if it is not available for loan (in other generally accessible libraries) or is currently on loan by another user. That means: Interlibrary loan within Munich or Freising is not possible.

Interlibrary loan orders for books across Germany are free of charge for members of TUM. For journal articles (up to 40 pages) a flat fee (1.50 €) has to be paid.

*International interlibrary* loan is possible if the book or article in question is not available in any German library. This service (only necessary in exceptional cases) is usually also chargeable. We will inform you in advance about the approximate amount of the costs. You can then decide whether you want to accept this or whether the order should be canceled.

**Please note:** Interlibrary loan orders are only possible via Gateway Bayern!



University Library  
Technical University Munich

**Interlibrary Loan**

Are you looking for books or articles that are not available at the TUM or in other local libraries? Then use our interlibrary loan service. We provide you with literature from all over Germany and abroad.

**Overview**

- [Access to Interlibrary Loan →](#)
- [Terms of Use →](#)
- [User Group →](#)
- [Prices →](#)
- [Searching & Ordering →](#)
- [Delivery Time →](#)
- [Notification & Collection →](#)
- [Supply with Elsevier Articles →](#)
- [Loan Periods & Returning →](#)
- [Login for External Librarians →](#)
- [E-Tutorials →](#)

**Access to Interlibrary Loan**

Our central search and ordering platform for interlibrary loan is the [Gateway Bayern](#), the union catalogue of the Bavarian Library Network.

You can order books and articles from other Bavarian libraries here, but also literature that is not available in Bavaria. The requirement is that they are not available in any local library.

[To the Interlibrary Loan](#)

**University Library**

**First Level Hotline**  
Phone +49 89 189 659 220  
WhatsApp +49 173 861 8412  
[information@ub.tum.de](mailto:information@ub.tum.de)

**Contact**

**Document Delivery and Digitisation**  
[dokumentum@ub.tum.de](mailto:dokumentum@ub.tum.de)

**Team**

**eAccess**  
[OPAC](#)  
[Courses](#)  
[Opening Hours](#)  
[Branch Libraries](#)  
[FAQ Current Situation](#)

**Corona: Current Information**

**3G Rule**  
Access to all TUM buildings for students and staff with proof of effective

## 4.2 Five steps to order

1. Select the desired title and click on the button **SFX**. You now receive an overview of possible procurement channels. To order, please select the option "Das will ich haben!" (That's what I want!).

**Please note:** As a TUM member, please also tick the box "Ich bin für den Campus-Lieferdienst berechtigt" (I am authorized for the campus delivery service). You will automatically be forwarded to the free copy order via dokumentTUM if the desired work is available at the TUM. The title of a publication does not always correspond to its content.

2. Select the TUM location where you want to collect your order.
3. For orders from a journal, select the desired delivery service and specify the year of publication and the volume in the next step.

**Please note:** These steps are not necessary when ordering books.

4. Log in with your library user ID and password.

**Please note:** It is not possible to log on with the TUM ID.

5. Interlibrary loan order: Please fill in missing information in the order form (including the desired library where you would like to collect your orders) and submit the order.



### 4.3. How to propose a book for purchase

Is there literature you cannot find at the TUM University Library? Then suggest the missing title for purchase. Our subject librarians will then decide whether the book can be purchased, depending on the budget and the acquisition profile of the particular subject area.

**Tip:** You don't need to write an email: Simply fill out the form and send it off.

## 5 How to find journals

### 5.1 Researching journals in the OPAC

The search for a journal is basically the same as the search for a book. You are searching in OPAC, and you need significant search information for your search.

**Please note:** In order to find a journal article, you must search OPAC for the title of the journal.

**Tip:** The easiest way, however, is to enter the journal's International Standard Number into the field ISSN (e.g. 0005-6855) – this way you should find the correct journal immediately.

If you do not have the ISSN, you can try the following:

1. Enter specific words of the journal's title into the field "**Keyword in Title**".
2. It is important that you choose "Newspaper, Journal" as **Media Type** in addition to the title keywords.

Let's have a look at an example: You are looking for the journal "Chemistry & biology".

Enter the search terms and then select the correct media type.

OPAC  
Universitätsbibliothek  
Technische Universität München

SEARCH MY LIST ACCOUNT

Search OPAC and OPACplus

Keyword Anywhere

and  Keyword in Title  chemistry biology

and  Author / Editor (only one)

and  Subject Heading

Check-out library  
TB Stammgelände

Clear Search

Limit search

☒ Exact words ☐ Find similar terms

Year from  Year to

Media Type  Newspaper, Journal

Search preferences

Database selection

Both the printed and electronic editions of the journal are displayed:

SEARCH MY LIST ACCOUNT

Search for:  Search Advanced search

☒ New search ☐ Refine results

Your search request: Keyword in Title = chemistry biology AND Document type = Zeitung, Zeitschrift

OPAC (53) OPACplus (0)

Result(s) OPAC (53)

Select titles: Save in:  Sorting order:

all none Temporary list Save Sort

1 Chemistry & biology  
1994-December 2015 1994-[?]

2 Chemistry & biology  
1994-December 2015 anfangs  
Read online

3 Cell chemical biology  
[2016]-  
Read online

Narrow results

▼ Branch Library  
Ohne Zuordnung (30)


▼ Matter  
Ohne Zuordnung (38)  
Chemie (12)  
Biologie (3)  
Physik (2)  
Werkstoffwissenschaften (2)  
Display more ...

▼ Subject  
Zeitschrift (28)  
Online-Ressource (7)  
Chemie (6)  
Biochemie (5)  
Bioelektrochemie (2)  
Display more ...

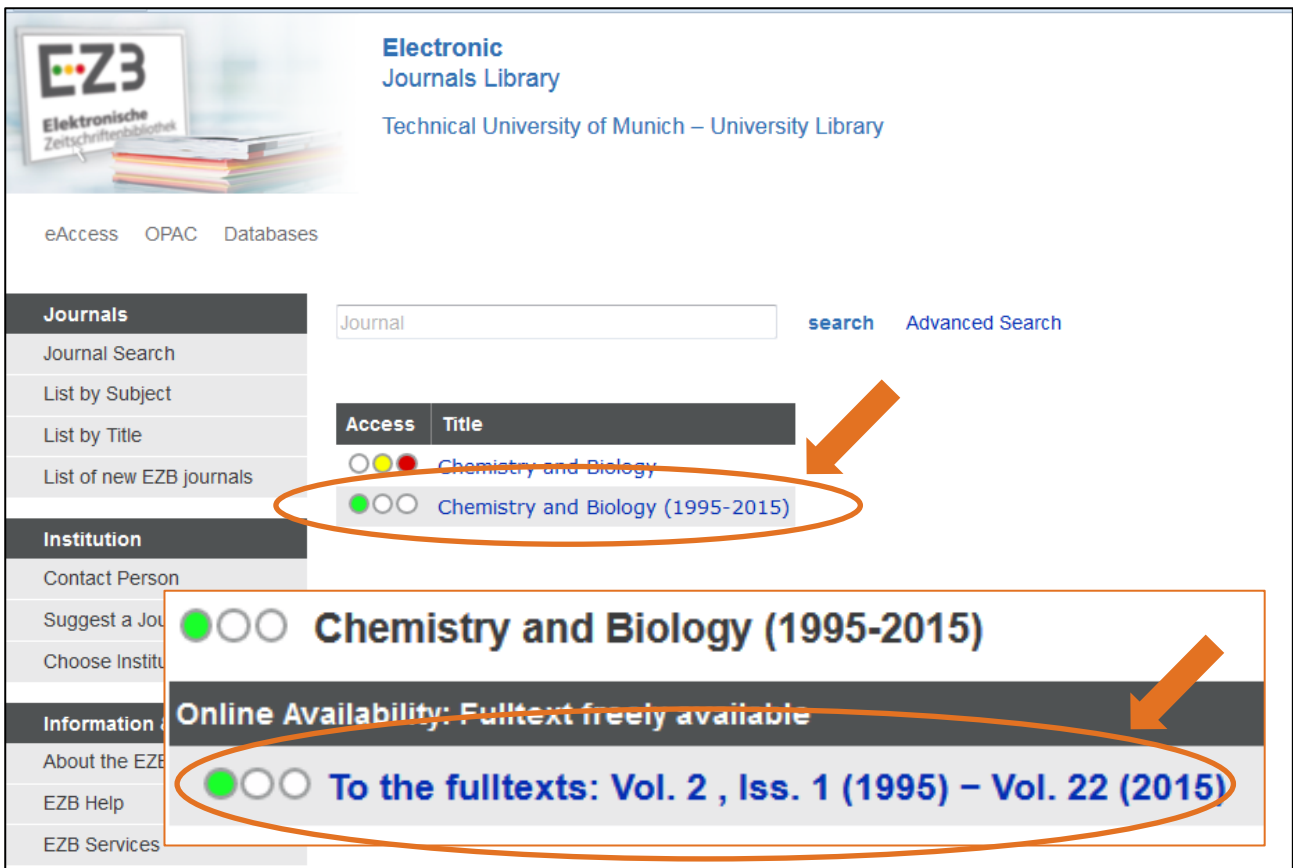
## 5.2 Electronic Journals

You can search for electronic journals (e-journals) available at the TUM University Library in the OPAC or in the Electronic Journals Library (Elektronische Zeitschriftenbibliothek, **EZB**).

**Please note:** The University Library's electronic media collections are mostly access-protected due to license regulations. As a TUM member (student or staff) you must log in with your TUM ID via eAccess to use full texts free of charge.

In OPAC you can recognize e-journals by the icon  and the button [Read online](#)

After clicking on this button, you will be redirected to the EZB. Select the desired title and then click on [To the fulltexts:](#) You will then be forwarded directly to the publisher's online edition of the journal.



The screenshot displays the EZB (Elektronische Zeitschriftenbibliothek) interface. At the top, it identifies the 'Electronic Journals Library' at the 'Technical University of Munich – University Library'. Navigation links for 'eAccess', 'OPAC', and 'Databases' are present. A sidebar on the left offers options like 'Journals', 'Journal Search', 'List by Subject', 'List by Title', 'List of new EZB journals', 'Institution', 'Contact Person', 'Suggest a Journal', 'Choose Institution', 'Information', 'About the EZB', 'EZB Help', and 'EZB Services'. The main content area features a search bar and a list of journals. One journal, 'Chemistry and Biology (1995-2015)', is highlighted with an orange circle and an arrow. Below this, a detailed view of the journal is shown, also circled in orange. It indicates 'Online Availability: Fulltext freely available' and provides a link to 'To the fulltexts: Vol. 2, Iss. 1 (1995) – Vol. 22 (2015)', which is also highlighted with an orange circle and an arrow.

The EZB is an index of scientific, electronic full text journals; it is freely accessible online.

A traffic light system (see figure on the right) informs you about the availability of a journal.

The **green** traffic light symbol in front of the title “chemistry and biology” indicates that the full text of the journal is freely accessible.

The **yellow** traffic light symbol means that only TUM members can read the magazine.

No access is possible if the traffic light symbol is **red**.

If the **yellow** and **red** traffic light symbols are combined, this means that you can only access part of the published volumes.

**Please note:** As in the OPAC, you can search in the EZB only for journals, but not for articles that have appeared in journals.

**Tip:** If you are interested only in e-journals, it is better to search directly in the EZB. You can find the EZB on our homepage under the tab **E-Journals**.

— The full texts of the journals are

<input checked="" type="checkbox"/>		freely available
<input checked="" type="checkbox"/>		free for the staff and students of the TUM; for access conditions see <a href="#">i</a>
		only in part accessible as fulltext
<input checked="" type="checkbox"/>		no licence, not available

[Terms of use](#)

## 5.3 Print Journals

In the OPAC you can recognize printed journals by this symbol:

If you click on the title of the journal, you will be taken to the full view. The full view of a print journal contains information about which branch library / libraries hold the journal and which publication years / volumes (of the journal) are found in this / each branch.

Parent title, see volumes  
**Chemistry & biology**

Place of Publication, Publisher, Year of Publication: Cambridge, Massachusetts, Cell Press, 1994-December 2015  
Subject Heading: [Biochemie / Zeitschrift](#)  
ISSN: 1074-5521  
[Display volumes](#)

Shelfmark	Local collection	Remarks
0301/ZB 6485	1.1994 - 21.2014	

[Location guide](#)

**Holdings** | [Get document](#) | [More title information](#)

Title: Chemistry & biology  
Place of Publication: Cambridge, Massachusetts  
Publisher: Cell Press  
Year of Publication: 1994-December 2015  
Place of Publication: San Francisco, Calif. [u.a.]  
Publisher: Current Biology Ltd  
Year of Publication: 1994-  
Published: 1.1994-volume 22, number 12 (December 17, 2015)  
Abbrev. title: Chem Biol  
\_Publication: Cambridge, Massachusetts : Cell Press, [2016]-  
Later title: Fortgesetzt durch  
\_Title: Cell chemical biology  
Other edition entry: Erscheint auch als  
\_Title: Chemistry & biology  
\_Publication: Amsterdam [u.a.] : Cell Press, 1994-December 2015  
\_Physical description: Online-Ressource  
\_Note: Online-Ausgabe  
ISSN: 1074-5521  
ZDB-ID: 917827-2 015047202  
\*\*\*HOLDING: 1.1994 - 21.2014  
Location: 0301  
Location shelfmark: 0301/ZB 6485  
Subject Heading: [Biochemie](#) ; [Zeitschrift](#)  
Content/media type note: Zeitschrift.  
IS relation: 2844952-8  
B3Kat-Nr: 01010192937

**Check-out**

Teilbibliothek Stammgelände

[Change check-out library](#)

**Full text access to e-media**

Authentication: **successful**  
You are authenticated via eAccess or via an IP address within the TUM-LAN.  
Your IP address: 129.187.254.48

**Toolbox**

- [Subject based search via TUM Classification](#)
- [Find location with the Location Mark List](#)

**\*\*\*HOLDING: 1.1994 - 21.2014**

Location: 0301

Location shelfmark: 0301/ZB 6485

The label 0301/ZB 6485 denotes the location, e.g. a specific branch library. If you want to know which branch library the abbreviation 0301 stands for, look in the location mark list. The code 0301 itself, for example, signifies that the branch library Chemistry (Magazine) holds this journal.

The specification \*\*\*HOLDING: 1.1994 - 21.2014 means, that you have access to this journal for the years 1994 to 2014. If there is no year indicated after the dash (e.g. 1.1994 -), you can access also the current issue.

The number before the year (1.1994) stands for the volume of the journal. 21.2014 means that 2014 this journal appears in the 21st year.

**Please note:** Open-Access journals are not available for loan; they can only be read in the respective branch library. Closed-Access journals (from the magazine stock for example) can be borrowed for two weeks; a renewal is not possible.

## 6. How to search for information on the Internet

You can also find relevant literature by searching the Internet using search engines such as Google or Yahoo.

For scientific information search, however, search engines specialized in scientific document search are particularly suitable. They usually search document servers on which freely accessible scientific papers are stored.

The best-known scientific search engines include *Google Scholar*, *Base* (Bielefeld Academic Search Engine), *1findr*, *Core* (Open Access), *Microsoft Academic Search*, *Scilit* and *World-wideScience*. An extensive collection of science search engines and helpful links offers *Scientific Search Engine*. The Bielefeld University Library also offers a good overview.

**Please note:** Even scientific search engines do not find all of the scientifically relevant information. They cannot access the content of licensed databases that are part of the **Deep Web**<sup>\*</sup>. They can enrich, but not replace, the search in library catalogues and professional databases.

### 6.1 Deep Web – the invisible side of the Internet

The Deep Web includes all web pages and sources accessible via the Internet that are not indexed and/or cannot be found by conventional search engines. In addition to content from library catalogues and databases, this includes

- pages that are not indexed by search engines and are therefore not contained in the databases of search engines,
- pages which are not linked and which do not link to any pages,

- pages that forbid Google to record them,
- pages that Google does not want to display,
- content which is represented only in pictures or diagrams,
- content that appears at a lower level of a page,
- content you have to pay for or involve data entry,
- content that is prohibited by law in a country.

## 6.2 Evaluating Internet sources

If you have found a document that you want to use, you should definitely check in advance how serious and scientifically sound the information presented there is. The answers to the following questions may help you to separate usable from not usable sources:

- **Who** created the document? Who authored the page? Does he/she belong to a renowned institution? Has he/she already published on the subject? If so, where? Who links to the site?
- **Where** does the source come from? Is there a contact address or URL of an institution the author is working on? Is there an imprint? What is the website domain?
- **How** is the content presented? Is the structure of the page reasonable? Is the spelling correct? Is the citation correct? Is there a reference list? How detailed is the information? Can it be verified? Are there further links? Are e-mail addresses correctly linked? To which pages do the hyperlinks lead? Do windows open independently in the foreground and/or background?
- **When** was the page created? Is the date of the initial release mentioned? When was the last update of the page? How old are the references? Do the links still work?
- **Why** was the page created? Is it used exclusively for scientific purposes? Are there any indications that it is a private homepage or the website of an organization, a company or a party?

## 6.3 Google Search

On the Google homepage, you will find the settings function at the bottom right. If you click on it, you will be taken to the "Advanced Search" function. On this page, you can specify your search query or narrow down the search results using predefined criteria (search fields).

**Tip: Google search operators** are also a good help. These are symbols or words that can be used to narrow search results by placing a colon without space in front of the search term. Some of the most important are

- **Translate** (provides translations with which you can then search further)
- **Define** (provides definitions)
- **Filetype** (searches only the files you specified, e.g. .ppt)

- **Intitle** (searches for documents in which the words you specified are part of the title)
- **Site** (searches for certain domains, e.g. edu).

## 6.4 Google Scholar


See *course* Literature Research 2.

## 6.5 Image search

### Google and other image search engines

Google does not only find websites, but also images.

There are two ways to search images:

1. **Search with text:** Call up Google and enter one or more search terms in the central search slot; then click on "Images" in the menu bar below the search slot.
2. **Search with images:** Go to Google Images and click the camera icon  in the central search slot; then insert an image URL or upload an image and view pages that use that or similar images.

You can also filter your search results afterwards, for example by color or size. Click on the term "Tools" in the menu bar and then select one or more of the displayed filters. Type and number of filter categories depend on the type of search (whether with text or image).

In addition to Google, numerous other image search engines offer their services on the Internet. Among the best known are *Bing* (Microsoft) and *Picsearch*, the only specialized image search service at present.

A distinction must be made between the large image search engines and the smaller image portals (with their own stock of images), which are particularly suitable for searching for photos that can be reused free of charge. The best known are *flickr*, *Wikimedia* and *Pixabay*. *CC-Search* is particularly suitable for searching for CC-licensed content (see below Creative Commons).

### Copyright law

**Please note:** Images are copyrighted works, which may only be changed according to valid citation right (see TUM Citation Guide), if permission has been obtained. In addition to the author, other persons (publishers, architects, artists, depicted persons, etc.) may also have rights to an image. Before using an image, you should therefore always check whether and if so under what conditions use is permitted.

**Tip:** Learn more about this topic in our course "Cite It Right" and in the tutorial "Citing Images" (only in german).

On image portals like *flickr* (<https://www.flickr.com/>) you can search directly for free images. Click on the magnifying glass at the beginning of the search field and then on "Any license". The drop-down menu offers different license options. For example, you can limit your search to images with a Creative Commons license.

**Creative Commons** (CC) is a non-profit organization that supports authors in releasing legally protected content in the form of standardized license agreements. CC licenses give image users additional freedom, i.e. they can do more with CC-licensed images than is permitted by copyright law. The extent of these freedoms depends on which of the CC license agreements is involved.

### CC licenses – the symbols and their meaning

(<http://www.flickr.com/creativecommons>)



Attribution

You may use and change the image commercially, provided that you name the author.



No Derivative Works

You may copy and distribute the image, but you may not edit it.



Noncommercial

You may copy and distribute the image as long as you do not use it for commercial purposes.



Share Alike

You may edit the image, but you must distribute the edited image under the same license as the original image.



Public Domain Dedication (CC0)

You may do what you want with the image; the author has given up all rights.

## 6.6 Search for news

Actual articles about daily news you can find on *paperball* or *Google News*. If you are only interested in science news have a look at *(e)Science News* and *techmeme*.

**Please note.** News search engines like *paperball* or *Google News* only cover a limited period of time and index only a short summary of the reports. For further search use the database information system **DBIS\*** (access on the homepage of the TUM library via the tab "Databases").



## 6.7 Dictionary search

To search for dictionaries, encyclopedias and reference books it is best to use DBIS. Of course, you can also carry out a free search in the OPAC; in addition to your search term(s), enter the desired publication type (e.g. lexicon, dictionary) in the search field.

### Wikipedia

Wikipedia offers you a quick introduction to and usually a good overview of a topic, too.

The **advantages** of Wikipedia:

- Quick access to information on many topics
- Very current
- Links and bibliographical references → (citable) primary sources are quite easy to find

The **disadvantages** of Wikipedia:

- Dynamic content (can change anytime) → no citations possible
- Insufficient quality control (anyone can write)
- Difficult to detect: manipulation of information and malicious attacks on content (e.g. targeted errors or integration of illegal content)

**Please note:** Wikipedia is a good starting point on a topic, but you should confirm with further research. Carefully check Wikipedia information before use, as there is no automatic check mechanism. Use Wikipedia only as a treasure chest for citable literature, but **do not under any circumstances cite** Wikipedia texts.

### Duden

Are you interested in a dictionary from the Duden family? Click on the tab "Databases" on the homepage of the TUM library and enter the term "Duden" in the search slot. Afterwards you may choose between two offers:

- **Duden Online:** a freely accessible online dictionary listing spelling, meaning, synonyms, pronunciation and origin of about 135,000 German words. You will also find information on grammar and the correct use of terms. The content is based on the well-known Duden dictionaries.
- **Duden / Das große Wörterbuch der deutschen Sprache** (Duden / The big dictionary of the German language): Here you can search in numerous partial works from the Duden publishing house at the same time.

## Glossary

Closed stack	“Store” for library media; only accessible for library members; books from the stack can be ordered via the online catalogue
Course reserve collection	Media compiled by a lecturer for a specific course for reference use; therefore not lendable
DBIS	Database information system; provides access to many scientific databases in all subjects that are available at the TUM library.
Deep Web	Internet sources that are not found by ordinary search engines; e.g. contents of literature databases and library catalogues
Document delivery service	Delivers, among other things, journal articles; example: dokumenTUM, subito (delivery service with costs)
dokumenTUM	TUM-internal document delivery service: for articles that are available only in print at TUM; free of charge for TUM members
Document type	Media type of a publication, e.g. magazine, book, CD, journal article, etc.
eAccess	Login service which allows TUM members to access e-media from outside the campus; log in using your TUM ID
EZB	<b>Elektronische ZeitschriftenBibliothek</b> (= Electronic Journals Library) A search interface for academic e-journals; provides access to full texts, if the journal is freely accessible or TUM has subscribed to it
E-Medium	Medium available electronically; freely accessible within the library, from home only via eAccess
Gateway Bayern	Union Catalogue of the Bavarian Library Network (BVB); lists the inventory of more than 150 academic libraries in Bavaria, Berlin and Brandenburg
Google Scholar	Search engine; searches only for documents from academic sources
Inter-branch loan service	Delivery service between the TUM branch libraries
Interlibrary loans	Order service for books that are not locally available
ISBN	International Standard Book Number; number for identifying books; globally unique
ISSN	International Standard Serial Number; number for identifying journals; globally unique
Keyword	Word from the title and/or subtitle of an item; does not necessarily describe the content of the item

KVK	Karlsruher Virtueller Katalog; meta catalogue, facilitates global search in multiple library catalogues and bookseller's catalogues at the same time
Lending collection	Loan copy of a book; can be found either in the textbook collection or in the reading room; recognisable (at TUM) by its white signature label without additional coloured labels
Library card	For students: Student Card (automatically activated for library use after acceptance of the library regulations in TUMonline), for employees: Personal Card, for external library users: regular library card
mediaTUM	Media and publications repository of the TUM; supports the publication of digital documents and research data as well as the use of multimedia content in research and teaching.
Media type	See Document type
Monograph	A special type of book written on a single subject, often but not always by a single author
Notation	Special code that allows you to relate books to their topics
OPAC	Online Public Access Catalogue; an electronic library catalogue; contains all books and journals, available at the TUM library:
OPACplus	An electronic library catalogue; including scientific materials of all kinds, especially articles from journals, newspapers and conference proceedings; particularly suitable for searching for media that are available as electronic full texts at the TUM Library
Open access holdings	Free access media, shelved in the reading rooms
Overdue fines	To be paid when a book is not returned in time
Reading room	Public "work space" of a library, where all users can access the services of the library; learning place
Recommendations	Book that should be bought according to a user's wish; request form can be found at <a href="https://www.ub.tum.de/wunschbuch">https://www.ub.tum.de/wunschbuch</a>
Reference copy	Non-lendable medium; recognisable by its yellow label (at the TUM)
Reservation	Placing a reservation on a loan item
Restricted-loan collection	Only borrowable for TUM employees; other library users may take out for a short loan; recognisable by the blue label
SFX	Services, Interlibrary loan, eXtras; button in library catalogues and literature databases; facilitates quick access to full texts or further research offers, interlibrary loan and document delivery services
Shelfmark	Unique code for each library item; shelfmarks can be found on the book (sticker on the spine) and in the Online Catalogue.
Short loan	Loan beginning 2 hours before closing of the library, return until 2 hours after reopening the next morning

Student Card	See Library card
Subject Heading	Describes the content of a document using standardized terms
Subito	A fee-based document delivery service from academic libraries in Germany, Austria, Switzerland and China (China Direct).
Textbook collection	Place, where frequently used core study literature on various subjects (recognizable by the "L" in the shelfmark) in multiple copies (at least 5 copies) is shelved; textbook collections are available in the branch libraries "Main campus", "Medicine", "Chemistry", Weihenstephan and Straubing
Truncation	A searching technique used in library catalogues and databases in which a word ending or letters in the middle of a word are replaced by a symbol. Frequently used truncation symbols include the asterisk (*), a question mark (?) or a dollar sign (\$) (refer to the manual/help of the database you are using); Example: laugh* will search for results containing laugh, laughter, laughing etc.
TUM Classification	TUM's own system for describing books according to their content