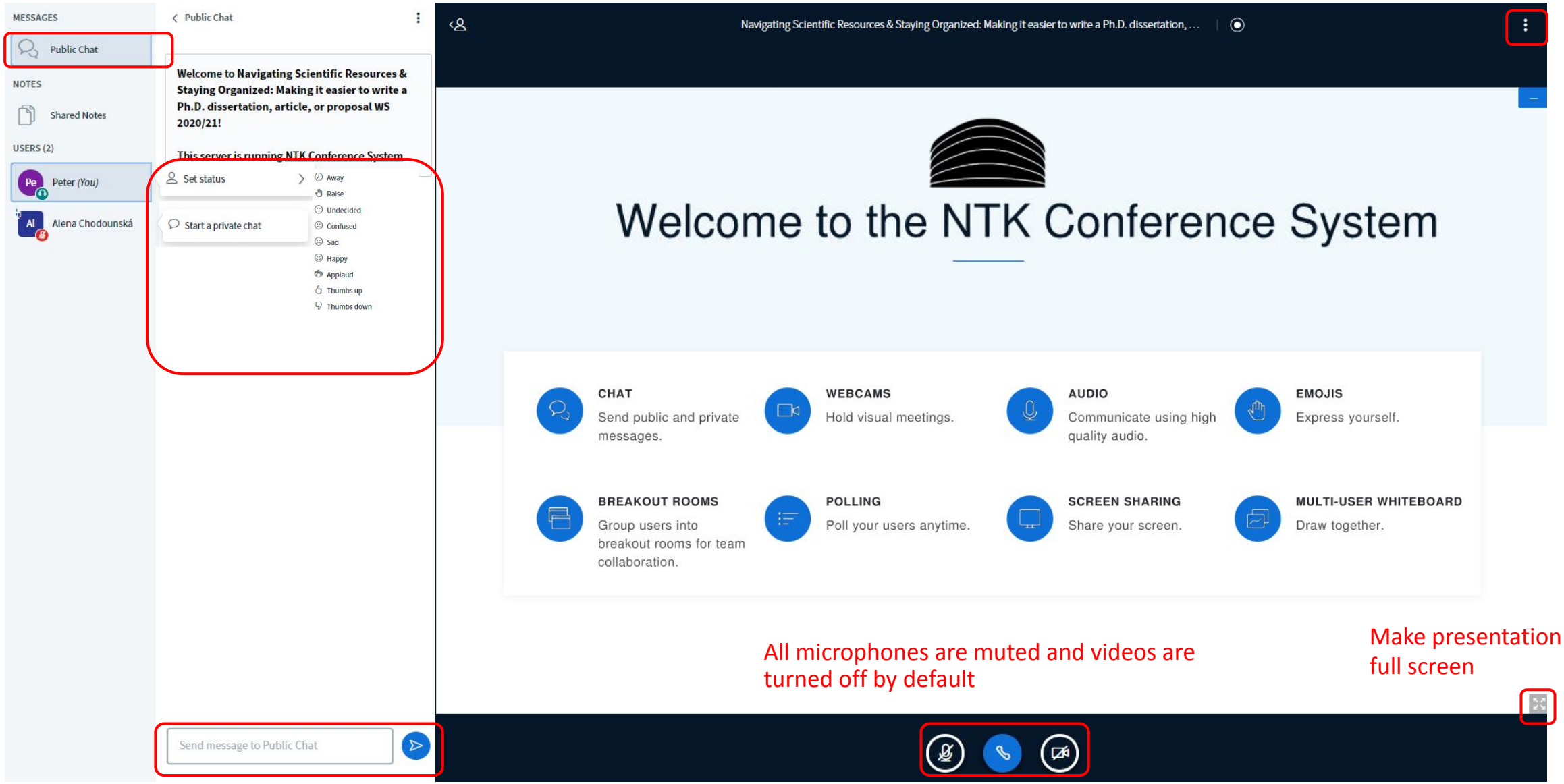
Navigating Scientific Resources & Staying Organized



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Národní technická knihovna
National Library of Technology

Navigating Scientific Resources & Staying Organized

Making It Easier to Write a Ph.D. Dissertation, Article, or Proposal

April 2021

Naděžda Firsová, Tomáš Razím

Agenda

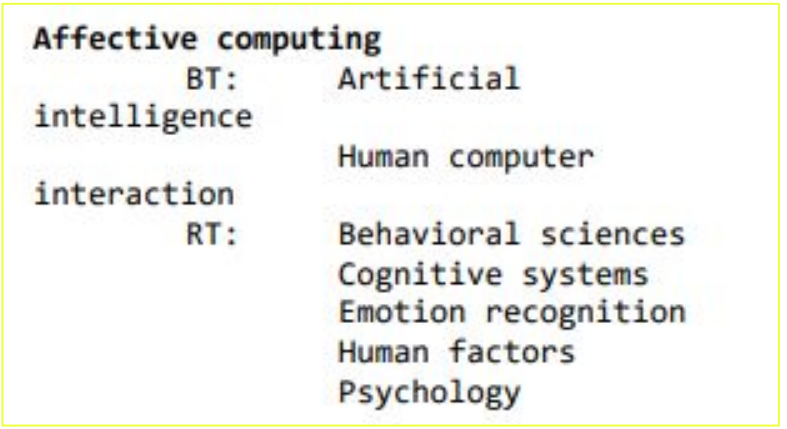
1. Searching: Introduction
2. Google Scholar
3. Library Resources & Full Text Access
4. Types of Resources
5. Reading & Organizing Resources
6. Publishing and Presenting of the Outputs

1. SEARCHING: INTRODUCTION

Keywords (for Searching)

- Which keywords in your subject area are used by other authors?

- Is there a thesaurus/dictionary for your field?
  - MeSH (Medical Subject Headings)
  - IEEE Thesaurus and Taxonomy
  - Mathematics Subject Classification
  - The Transportation Research Thesaurus
  - INSPEC Thesaurus (after login)



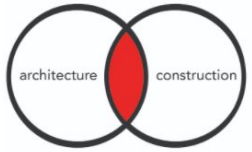
- Other useful tools:
  - Wikipedia (translation of terms, fact checking,...)
  - Google Scholar

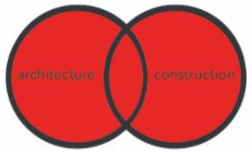
Which of These Techniques Do You Use Most Often when Searching?

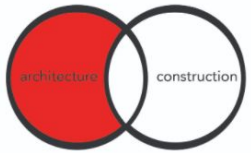
A. AND, OR, NOT/-
B. Phrase searching (“”)
C. Truncation (*/?/…)
D. Advanced search & filters (search engine tools)
E. None of the above

Database Search Tips

- AND, OR, NOT/-







- Phrase searching “”
- Truncation *
- Filters
- Advanced search
  - (author, title, abstract, full text, other)

➔ More database tips

Where Do You Go First when Searching for Information Related to Your Writing?

A. Google
B. Google Scholar
C. University Library Searching Tool (“Discovery”)
D. Web of Science or Scopus search
E. Article databases (Elsevier, Nature, EBSCO, Springer, IEEE, ScienceDirect, and others provided by libraries) or open access full-text and pre-print collections (such as arXiv, PubMed, ResearchGate, repositories)

Searching Tools for Scientific Resources

- **Search engines**
  - → Google Scholar
  - → Library discovery tool (NTK, chemTK, CTU)

    ...searching through multiple databases and collections mentioned below

- **Article/book databases**
  - → Paid databases (eg. IEEE, ScienceDirect, see library subscribed databases)
  - → Open databases and journals (eg. DOAJ, PubMed Central and others)

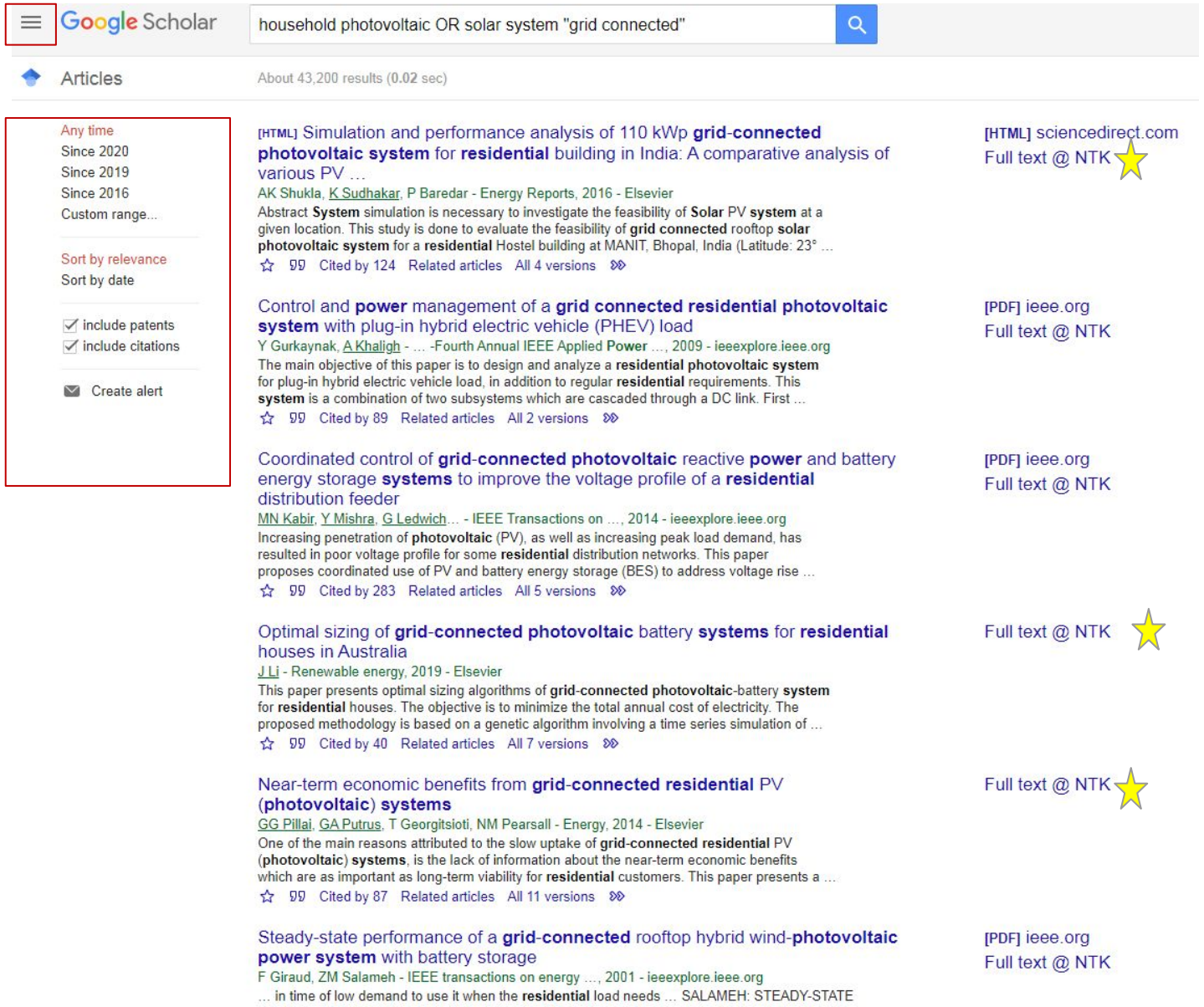
- **Preprint collections** on servers as arXiv, ResearchGate, Academia.edu or institutional repositories

- **Citation databases** Web of Science and Scopus (no full text, but links to full text)

& **P2P servers** as Sci-Hub, LibGen, Ulož.to

2. GOOGLE SCHOLAR

Library Links



Google Scholar

&

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- CTU is currently not fully integrated with Google Scholar

Library Links Setting

Google Scholar & NTK
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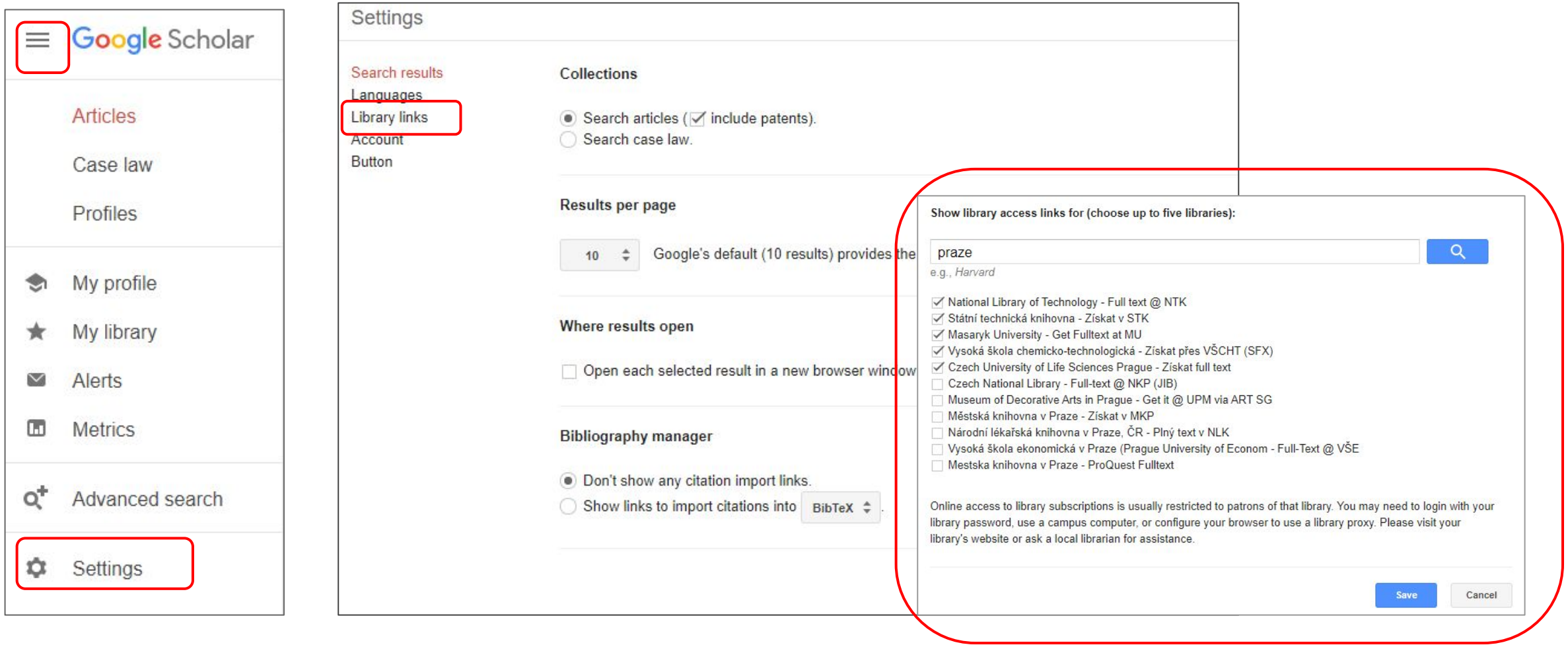
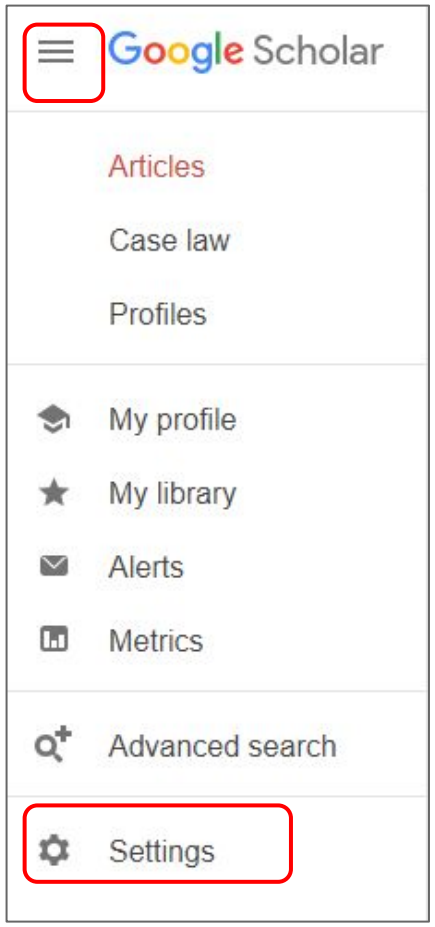
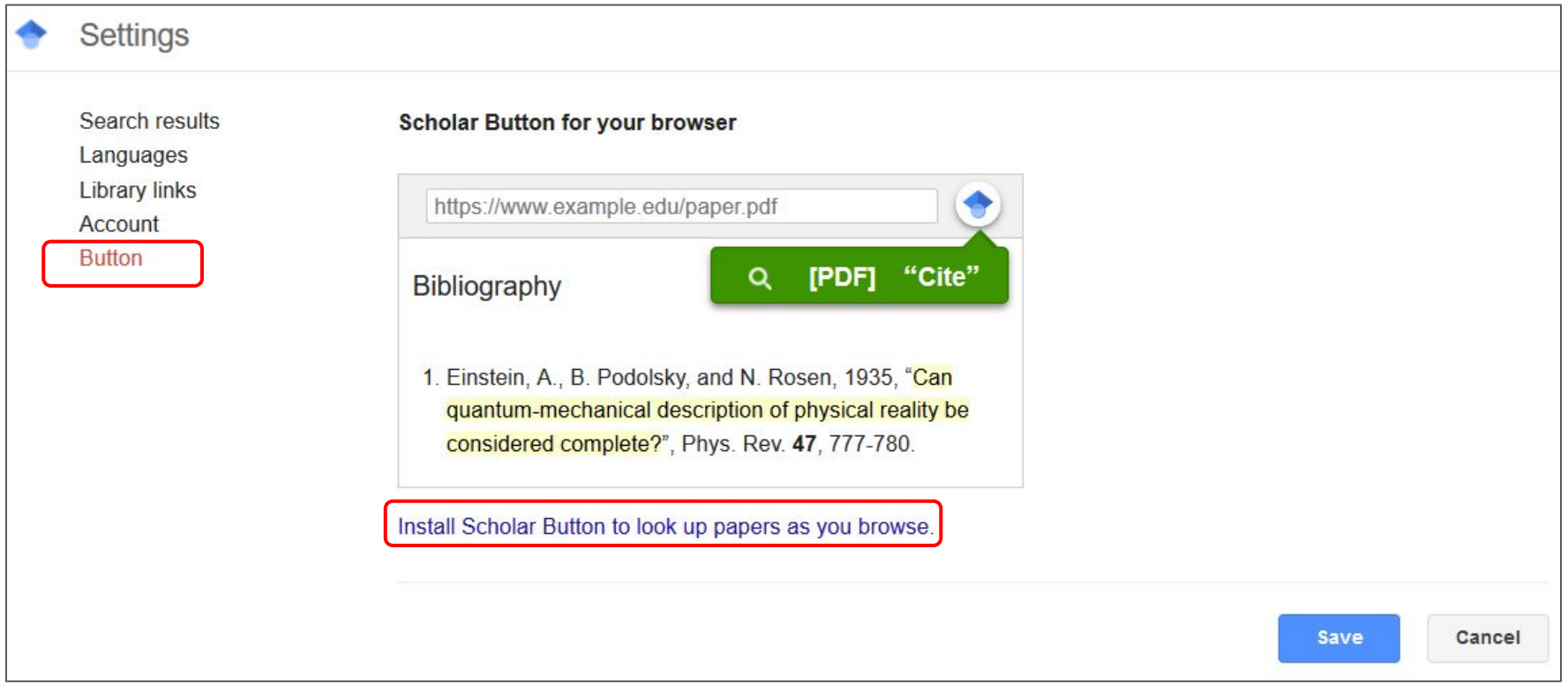


Google Scholar Button

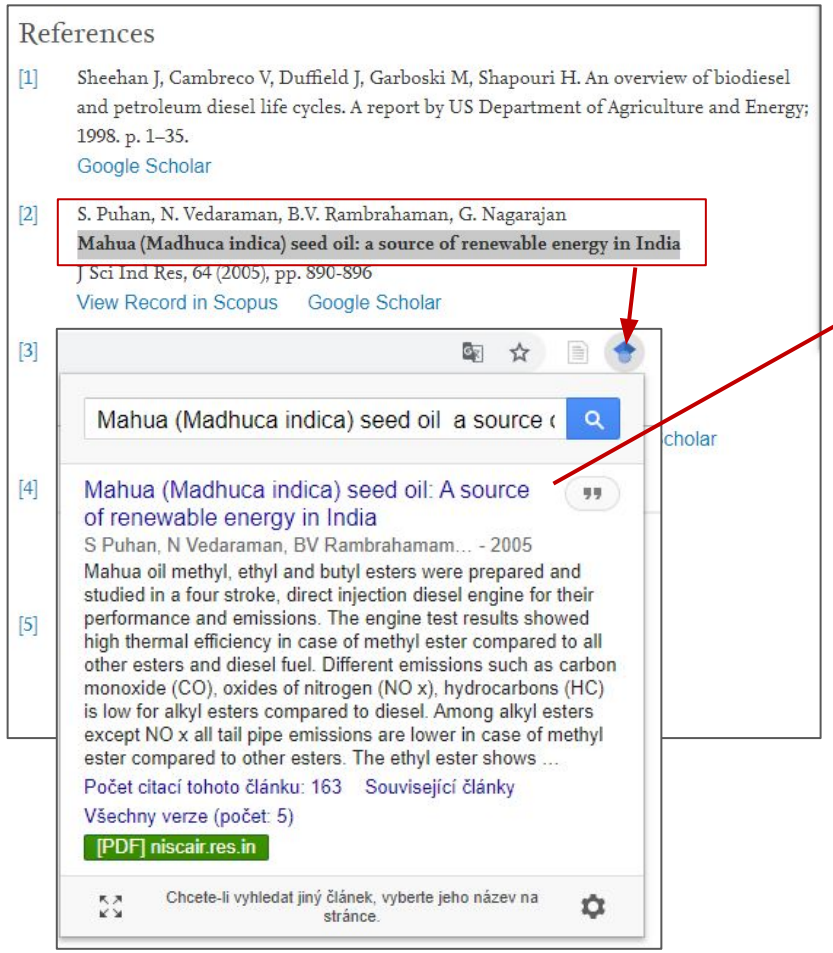
- Browser extension (Chrome, Firefox, Opera)

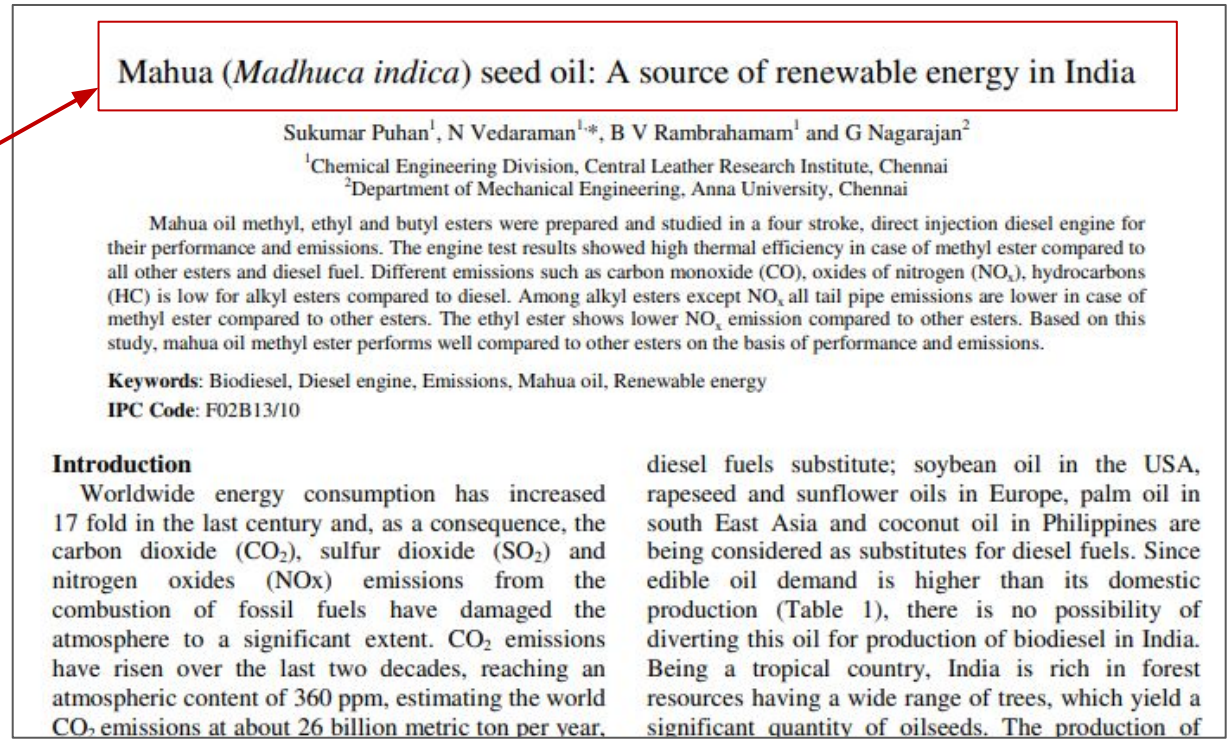




Google Scholar Button

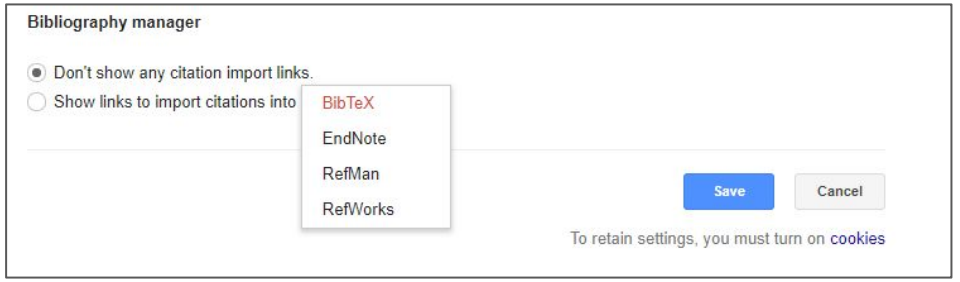
- Quick access to **full text** & citations download

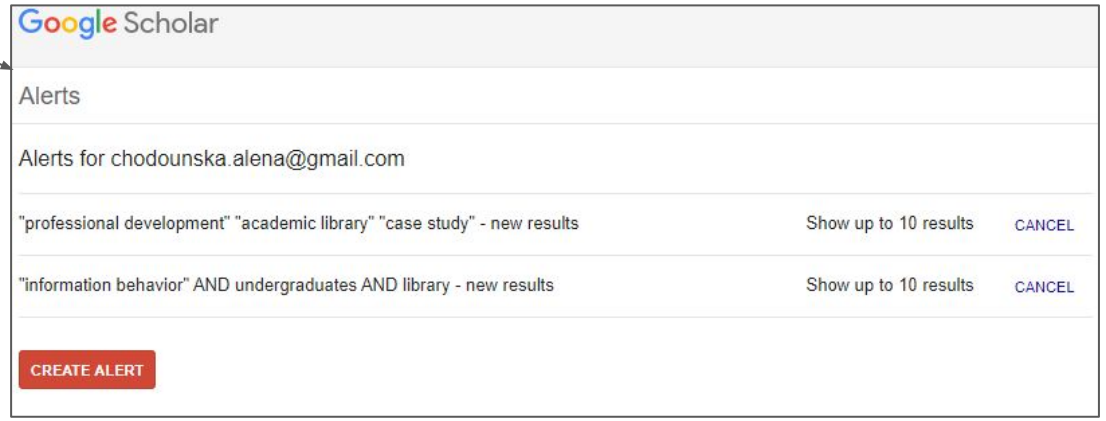




Google Scholar Tips & Tricks

- Library links
- Citation management tools
- Google Scholar Button
- Google Scholar Alerts
- Google Scholar Account
  - GS author profile
  - My library

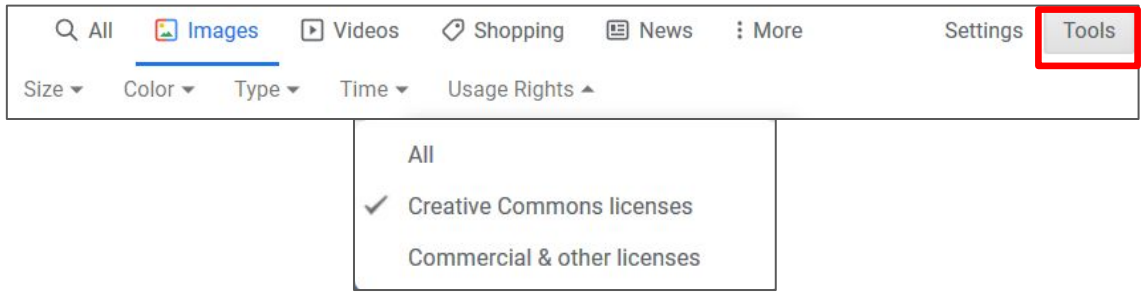




Google Tips & Tricks

- Find the **name of the person** you are citing (especially when you are writing in Czech)

- Find pictures under **open licence**



site:cvut.cz dissertation (all pages with keyword “dissertation“ on domain “cvut.cz”)

➔ More Tips & Tricks on Google

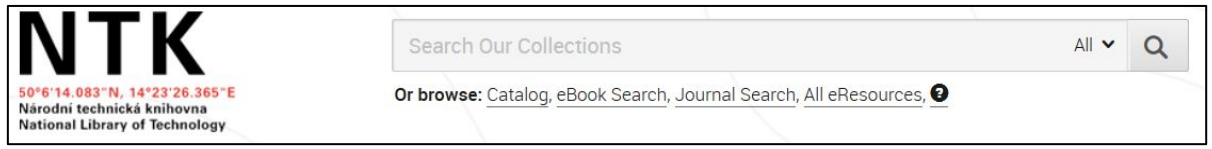
3. LIBRARY RESOURCES & FULL-TEXT ACCESS

Searching @ NTK

- NTK discovery tool
- Browse/find eBooks and eJournals
- Specific databases and electronic collections
- Access to full text
- Document delivery / interlibrary loan

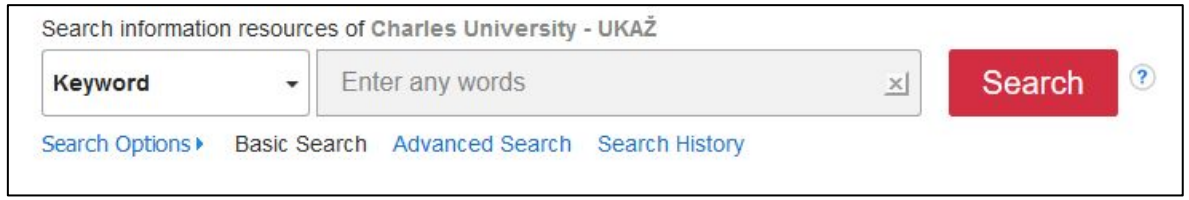
Electronic resources accessible from home

Library Discovery Tools

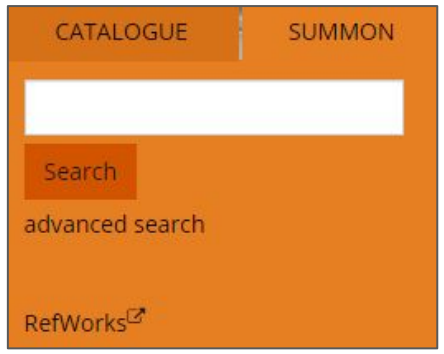


https://www.techlib.cz/en/

https://www.chemtk.cz/en/



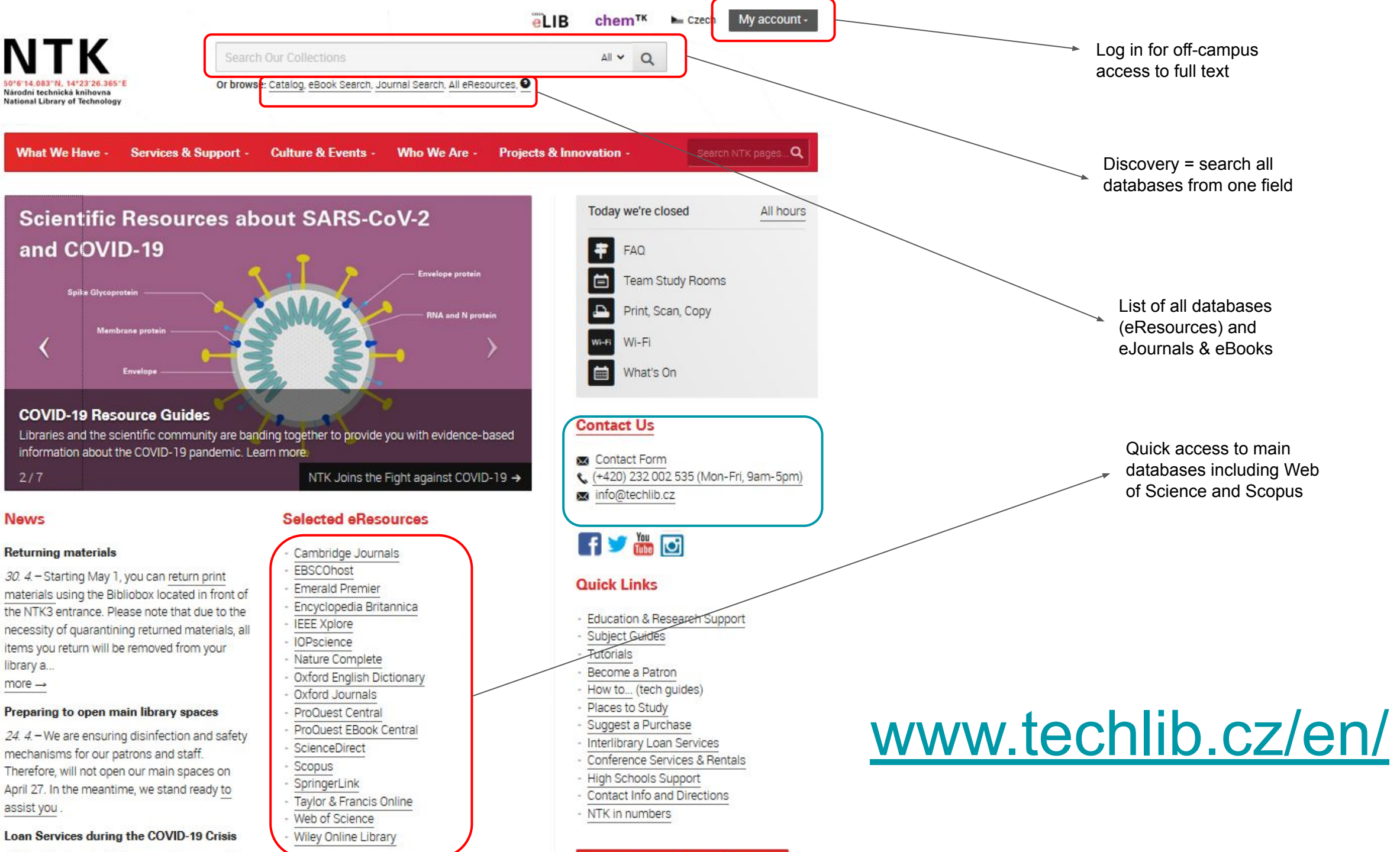
https://discovery.cuni.cz



http://knihovna.cvut.cz/en/#summon

- **One box** for searching across **all journals** and **books** (both electronic and print) provided by the library (items from databases like IEEE, ScienceDirect, EBSCO, ProQuest, and more)

- Advanced searching options
- Advanced filtering
- Library print collection included



Log in for off-campus access to full text

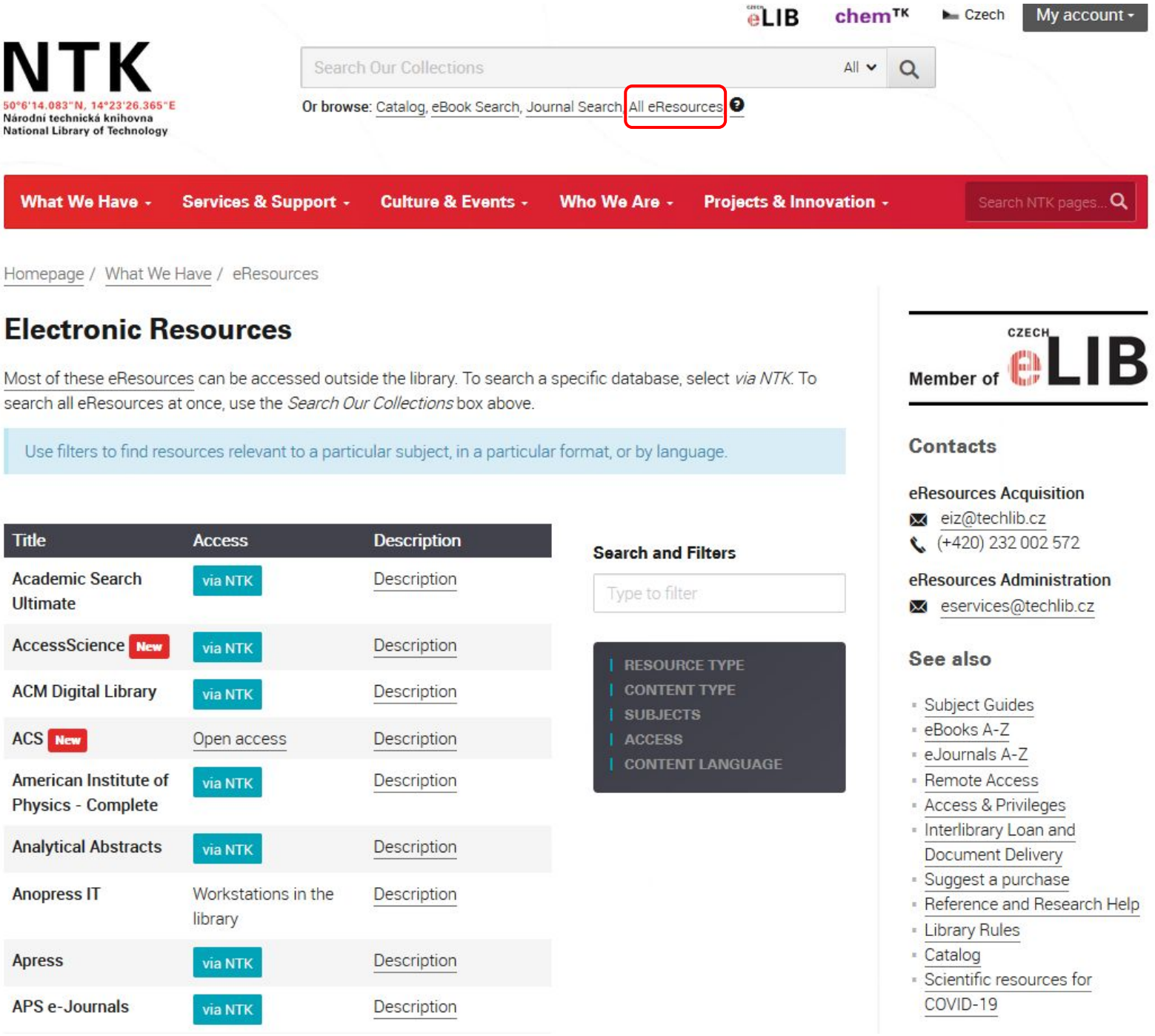
Discovery = search all databases from one field

List of all databases (eResources) and eJournals & eBooks

Quick access to main databases including Web of Science and Scopus

www.techlib.cz/en/

Direct Access to Databases and Collections Provided by NTK



eLIB chemTK Czech My account

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National Library of Technology

Search Our Collections All

Or browse: Catalog, eBook Search, Journal Search, All eResources

What We Have | Services & Support | Culture & Events | Who We Are | Projects & Innovation | Search NTK pages...

Homepage / What We Have / eResources

Electronic Resources

Most of these eResources can be accessed outside the library. To search a specific database, select *via NTK*. To search all eResources at once, use the *Search Our Collections* box above.

Use filters to find resources relevant to a particular subject, in a particular format, or by language.

Title	Access	Description
Academic Search Ultimate	via NTK	Description
AccessScience New	via NTK	Description
ACM Digital Library	via NTK	Description
ACS New	Open access	Description
American Institute of Physics - Complete	via NTK	Description
Analytical Abstracts	via NTK	Description
Anopress IT	Workstations in the library	Description
Apress	via NTK	Description
APS e-Journals	via NTK	Description

Search and Filters

Type to filter

RESOURCE TYPE
CONTENT TYPE
SUBJECTS
ACCESS
CONTENT LANGUAGE

Member of CZECH eLIB

Contacts

eResources Acquisition
eiz@techlib.cz
(+420) 232 002 572

eResources Administration
eservices@techlib.cz

See also

- Subject Guides
- eBooks A-Z
- eJournals A-Z
- Remote Access
- Access & Privileges
- Interlibrary Loan and Document Delivery
- Suggest a purchase
- Reference and Research Help
- Library Rules
- Catalog
- Scientific resources for COVID-19

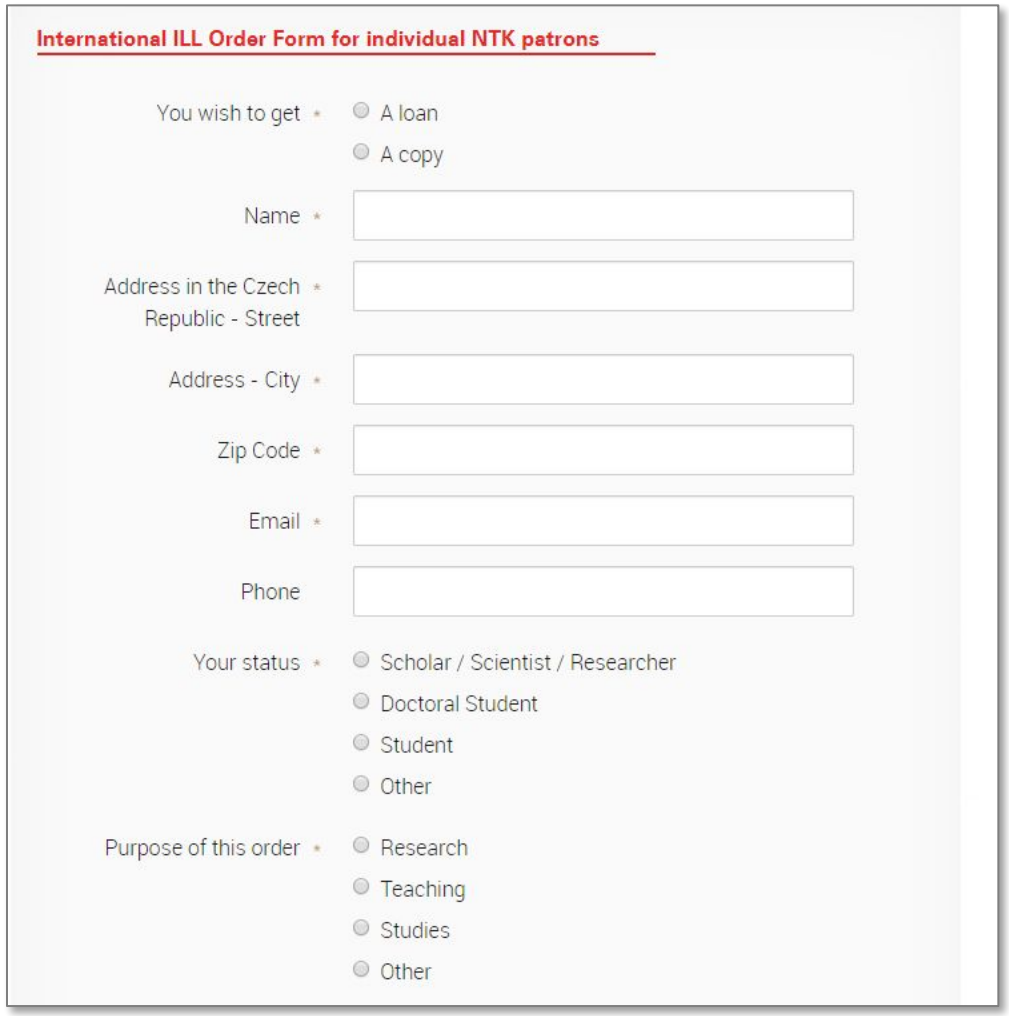
https://www.techlib.cz/en/2883-eresources

Getting Full Text (when Sci-Hub is down) ;-)

1. Always make sure you are logged onto the library website for **off-campus access**
2. Activate Library links on Google Scholar
3. Use tools on library web page

eJournals	eArticles	eBooks
Journal Search ● Search for journal title or ISSN	Discovery tool ● “Phrase search” of article title ● Supplement with name of one author for better accuracy	Discovery tool ● “Phrase search” of book title ● Supplement with name of one author for better accuracy eBook Search ● Search for book title, ISBN, or author

Getting Full Text: Other Options



International ILL Order Form for individual NTK patrons

You wish to get *
- A loan
- A copy

Name *

Address in the Czech Republic - Street *

Address - City *

Zip Code *

Email *

Phone

Your status *
- Scholar / Scientist / Researcher
- Doctoral Student
- Student
- Other

Purpose of this order *
- Research
- Teaching
- Studies
- Other

https://www.techlib.cz/en/83429-international-ill-order-form

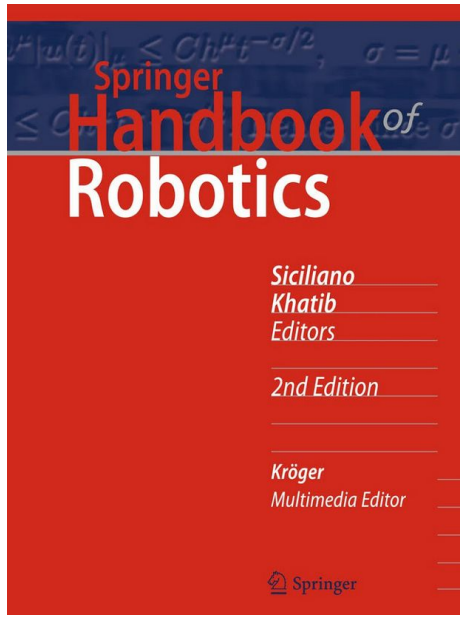
For materials that are not available online:

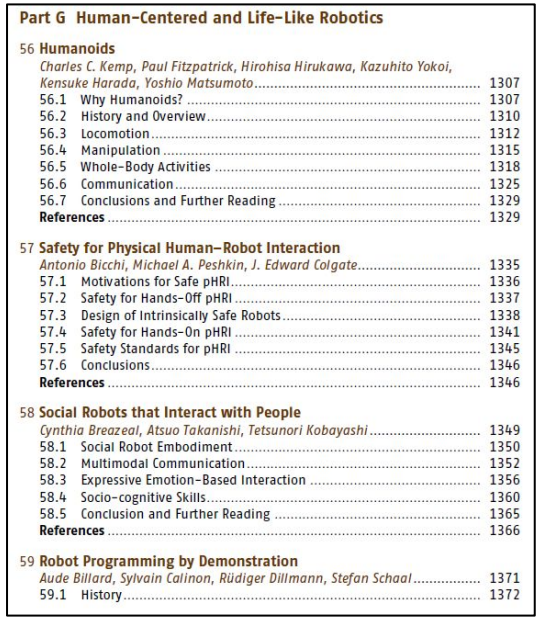
- Use ILL form (Interlibrary Loan)
- Ask for assistance: info@techlib.cz

4. TYPES OF RESOURCES

Handbooks, Textbooks, & Encyclopedias

- To get familiar with **terminology** and **context** for a new project





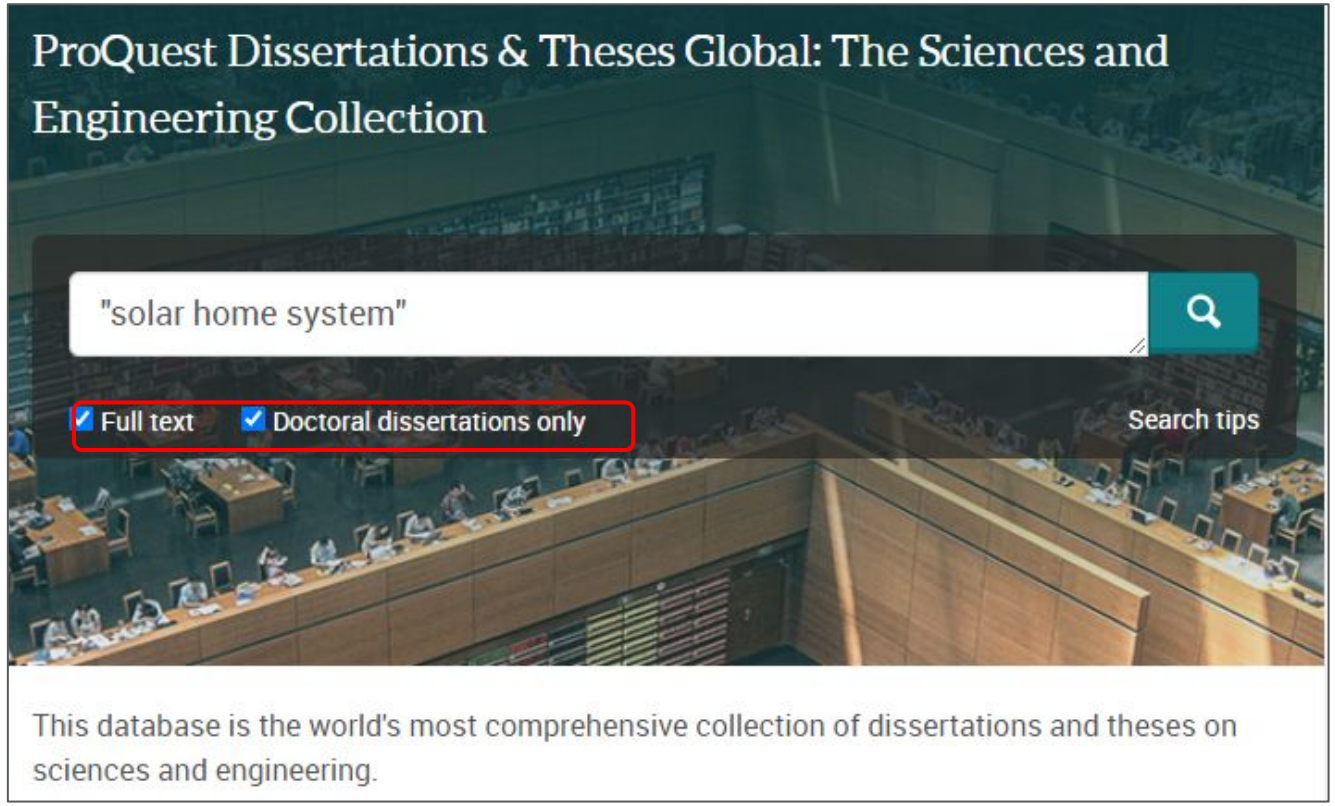
Part G Human-Centered and Life-Like Robotics

SICILIANO, Bruno a Oussama KHATIB, ed. *Springer Handbook of Robotics*. 2nd. Berlin: Springer, 2016. ISBN 9783319325507.

➔ *robotic AND (handbook OR text book OR encyclopedias OR dictionary)*

Dissertations

- Get inspired by the approaches of others to similar dissertation topics and the formatting they used for structuring their theses
- Follow their lists of resources
- Make sure that your mentor would approve your choice of the sample theses and avoid plagiarism



➔ *Czech institutional repositories* (CTU, UCT, CU, Grey literature)
➔ *ProQuest Thesis* and *other international repositories*

Review Articles

- Type of scholarly articles that provide summary and analysis of previous research on the specific topic/problem/question
- Review, Systematic Review, Meta-Research, Meta-Analysis
- Good for learning about:
  - The state-of-the-art
  - Comprehensive lists of relevant resources
  - Previous research

➔ *"social robot" AND (review OR meta-analysis OR meta-research)*

CE

Social Robots for Depression in Older Adults: A Systematic Review

Shu-Chuan Chen, MS, RN[1,2], Cindy Jones, PhD, BA(Psych), BB(HRM), GCertHigherEdu, GDipPsych[3], & Wendy Moyle, PhD, MHSc, BN, RN[4]

1 PhD Candidate, Griffith University, School of Nursing and Midwifery, Queensland, Australia
2 Lecturer, National Tainan Junior College of Nursing, Tainan, Taiwan
3 Research Fellow, Griffith University, Menzies Health Institute Queensland and Lecturer, School of Nursing and Midwifery, Griffith University, Queensland, Australia
4 Program Director, Griffith University, Menzies Health Institute Queensland and Professor, School of Nursing and Midwifery, Griffith University, Queensland, Australia

Key words
Depression, older adults, social robot

Correspondence
Shu-Chuan Chen, School of Nursing and Midwifery, 170 Kessels Road, Nathan, Queensland 4111, Australia. E-mail: shu-chuan.chen@griffithuni.edu.au

Accepted November 16, 2017

doi:10.1111/jnu.12423

Abstract

Purpose: In recent years, there has been an increase in the number of studies using social robots to improve psychological well-being. This systematic review investigates the effect of social robot interventions for depression in older adults.

Methods: The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) method was used to identify and select existing studies. Nine electronic databases were searched for relevant studies. Methodological quality was assessed using the Joanna Briggs Institute Meta-Analysis of Statistics Assessment and Review Instrument. Screening, data extraction, and synthesis were performed by three reviewers. Inclusion criteria covered original quantitative studies investigating social robots for depression in older adults.

CHEN, Shu-Chuan, Cindy JONES a Wendy MOYLE. Social Robots for Depression in Older Adults: A Systematic Review. *Journal of Nursing Scholarship* [online]. 2018, 50(6) [cit. 2018-11-13]. DOI: 10.1111/jnu.12423. ISSN 15276546. Dostupné z: http://doi.wiley.com/10.1111/jnu.12423

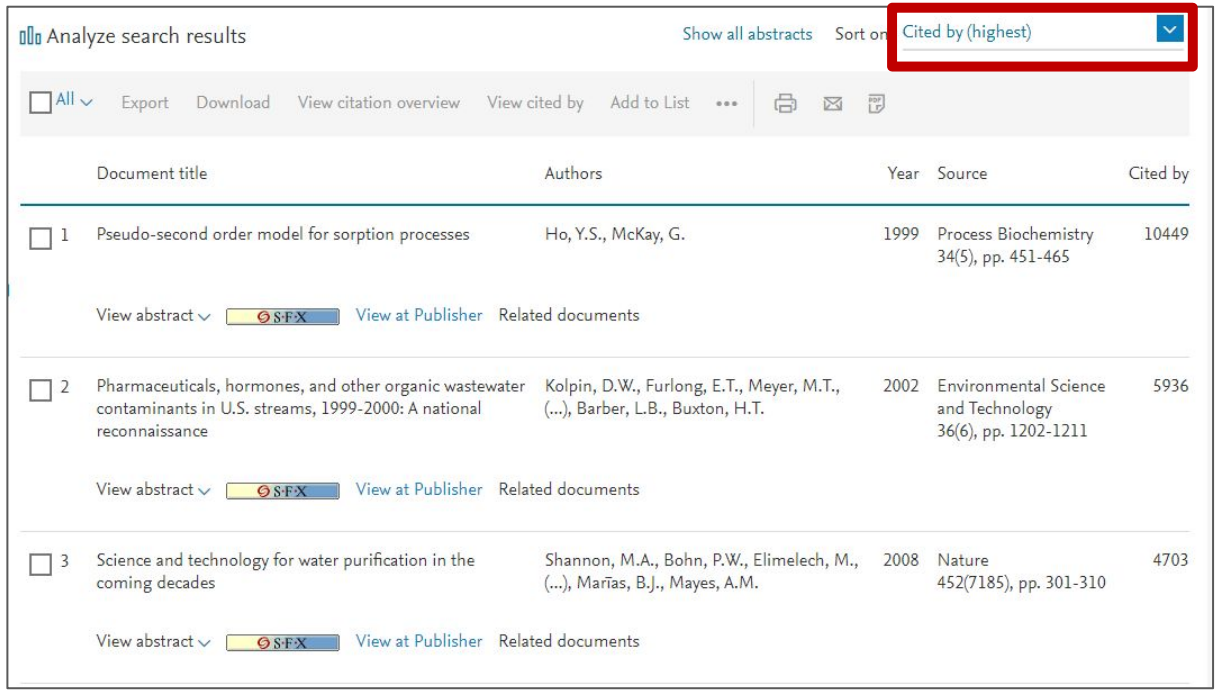
Finding Seminal Articles

- **Core articles** for specific fields
- Quick orientation for new (interdisciplinary) projects

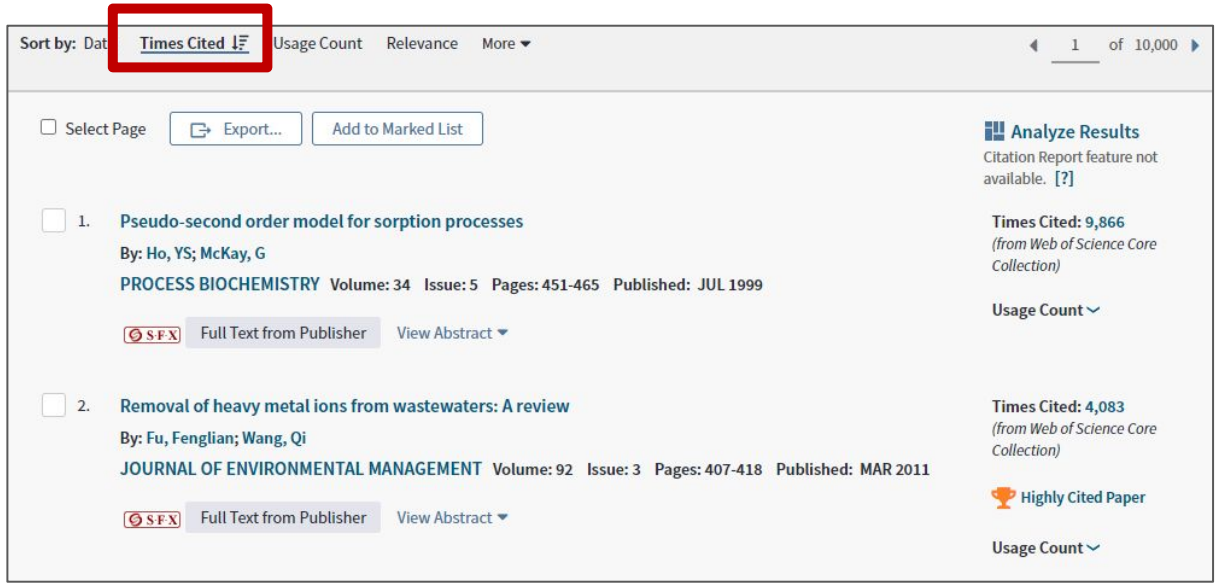
➔ *("waste water" OR "grey water") sorted via number of citations in **Web of Science** or **SCOPUS***

Chaudhuri, L. (n.d.). Seminal Works. EdD Executive Leadership
https://resources.library.lemoyne.edu/guides/EdD/Systematic-Review/Seminal-Works

Scopus

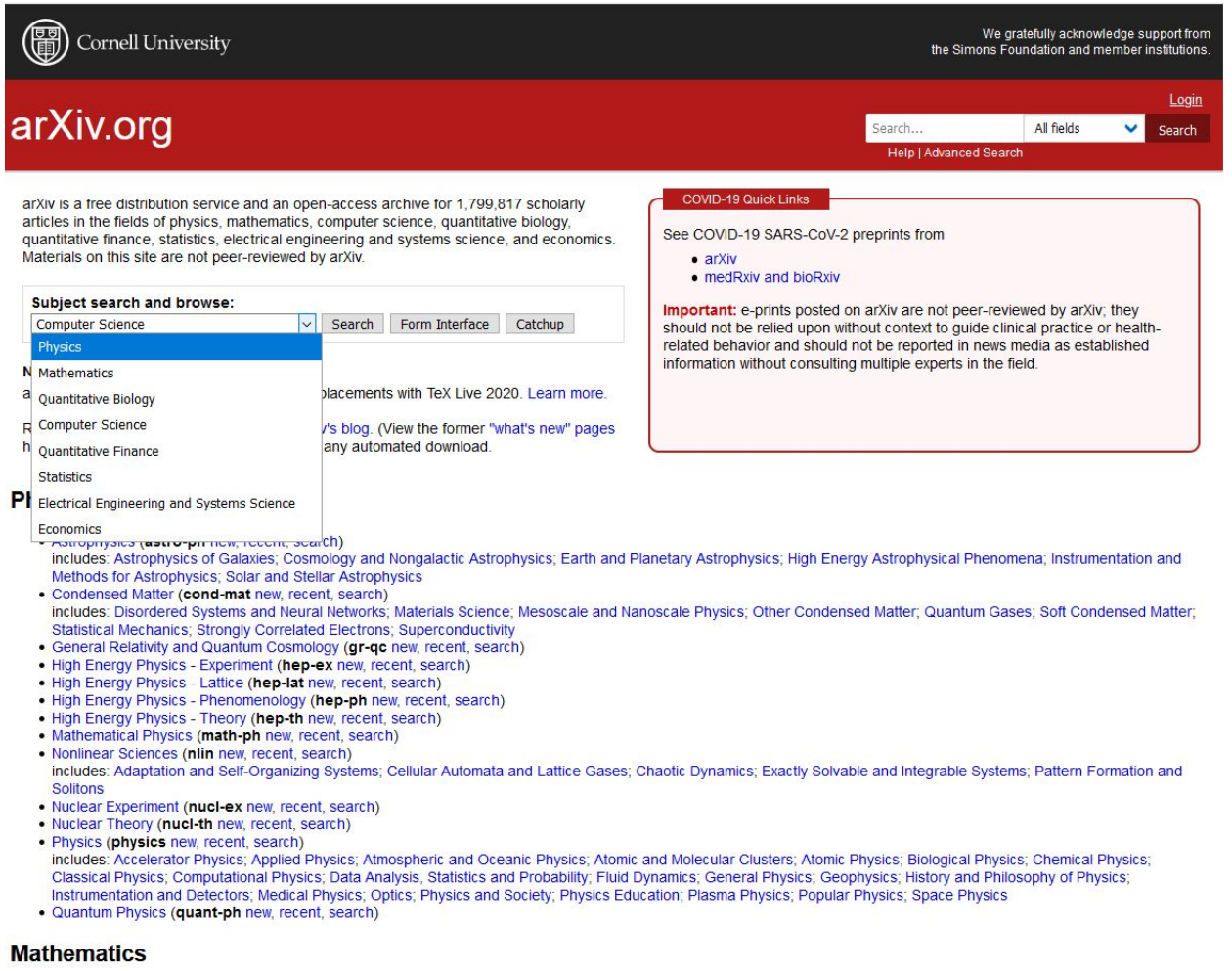


Web of Science



Most Up-to-date, State-of-the-art Search

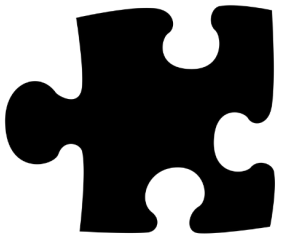
- Informal exploration of early-stage ideas: blogs, social networks, lectures.
- Follow key scholars and institutions in your research field.
- Preprint servers (arXiv, bioRxiv, others): articles published before peer review.
- Conference papers, conference proceeding books.



https://arxiv.org/

5. READING & ORGANIZING RESOURCES

Writing & Reading



- What is the current state-of-the-art in my field?
- Who are the top researchers?
- How does my work fit into the research corpus?

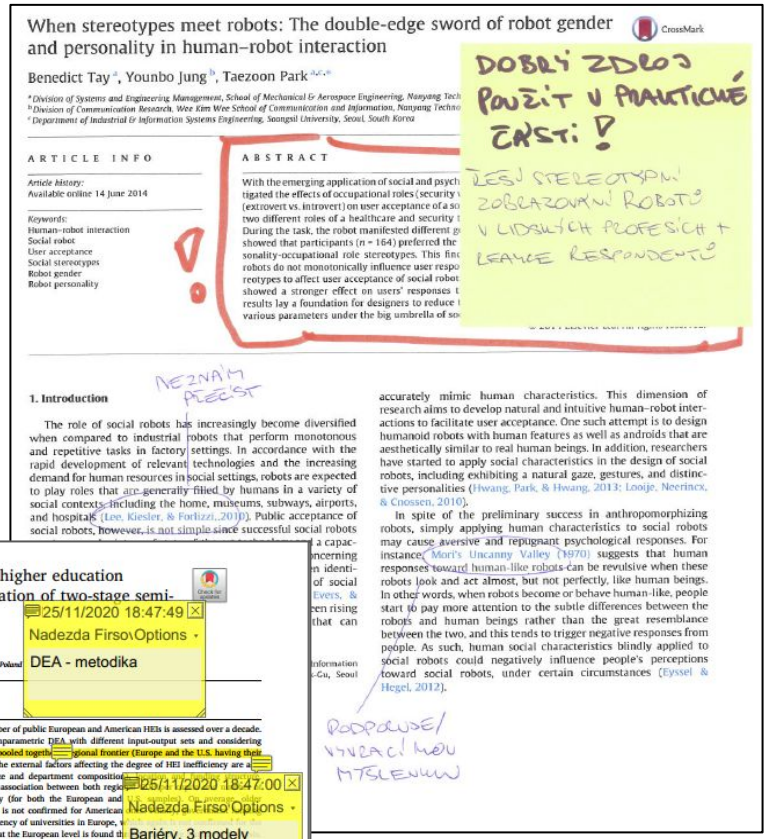
Read

Reading: Smart, Careful, Mindful

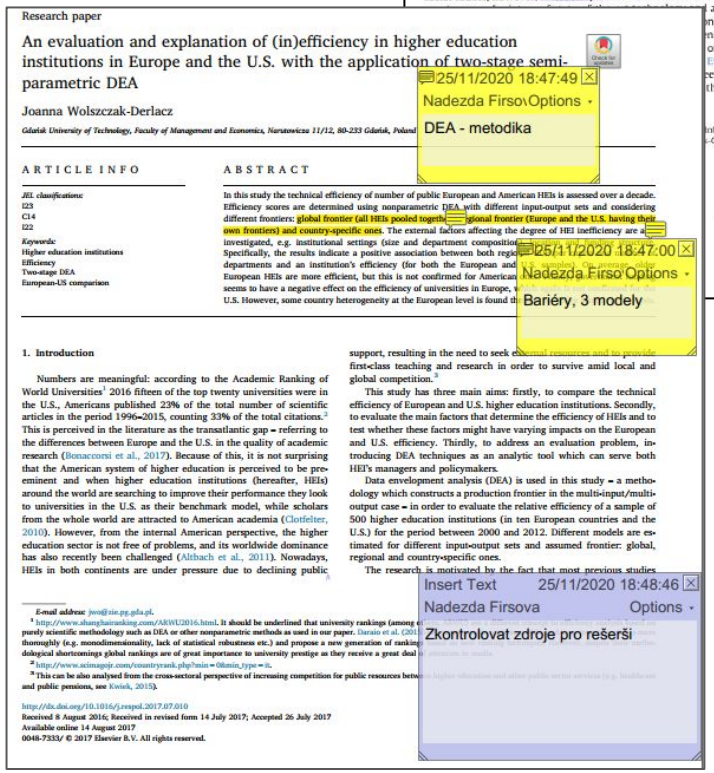
- Be smart and picky. Focus on abstract, conclusion, and specific issues (e.g., research design) before reading the whole paper
- Make notes from the very beginning; it will save your time later
- Create your own system to organize materials and thoughts
- Get familiar with writing and citing habits in your field

Managing Resources

- Be systematic: organize your resources and their citations
- Ranking system for evaluating usefulness
- Notes about the relationship with your work (methodology, contradictory or confirmatory conclusions, and so on)
- Electronic or written notes



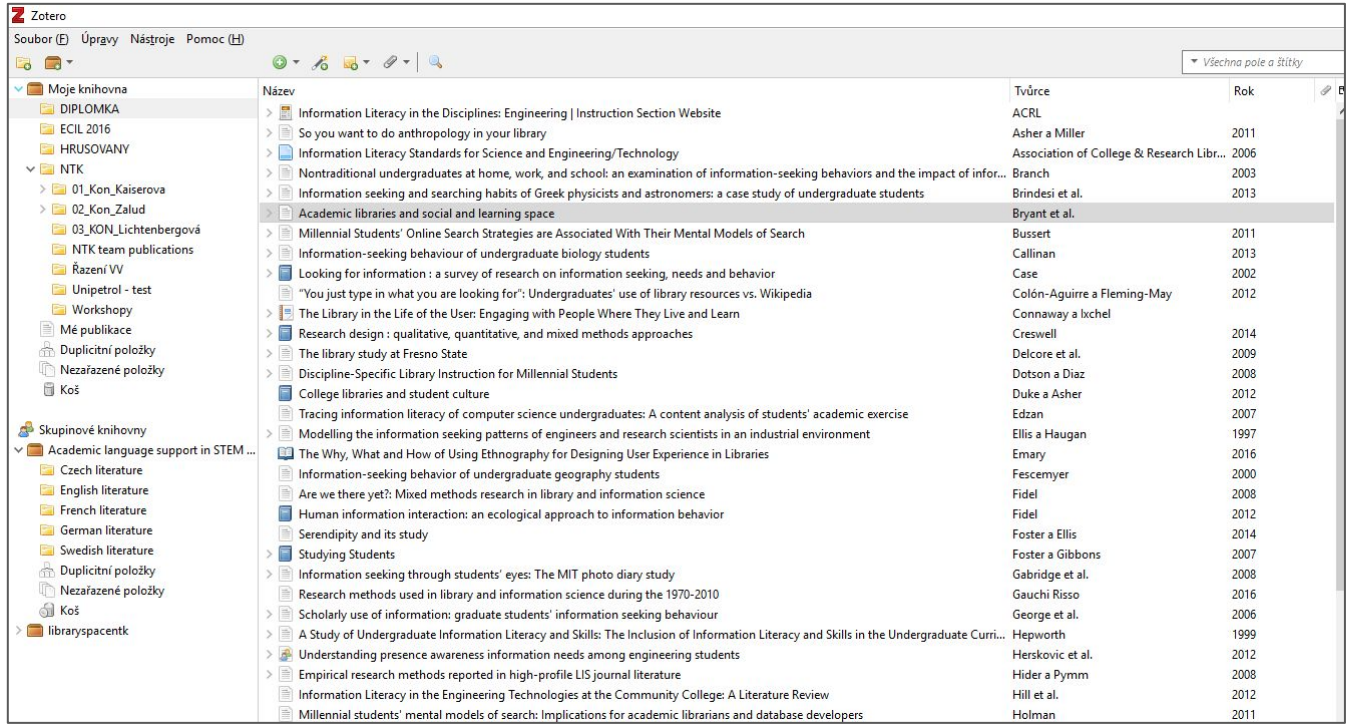
Example of written notes



Example of electronic notes

Citation Management Tools

- Download and manage citations
- Create personal library
- Tags and notes
- Collaboration
- Generation of reference list
- Integrate with word processing software tools for easy insertion of citations into documents



Zotero

CitacePRO

Mendeley

JabRef (integrated with LaTeX)

EndNote (subscription for UCT students)

Use them, but don't trust them absolutely!

Zotero (Personal Experience)

Downloads and manuals from: Zotero.org

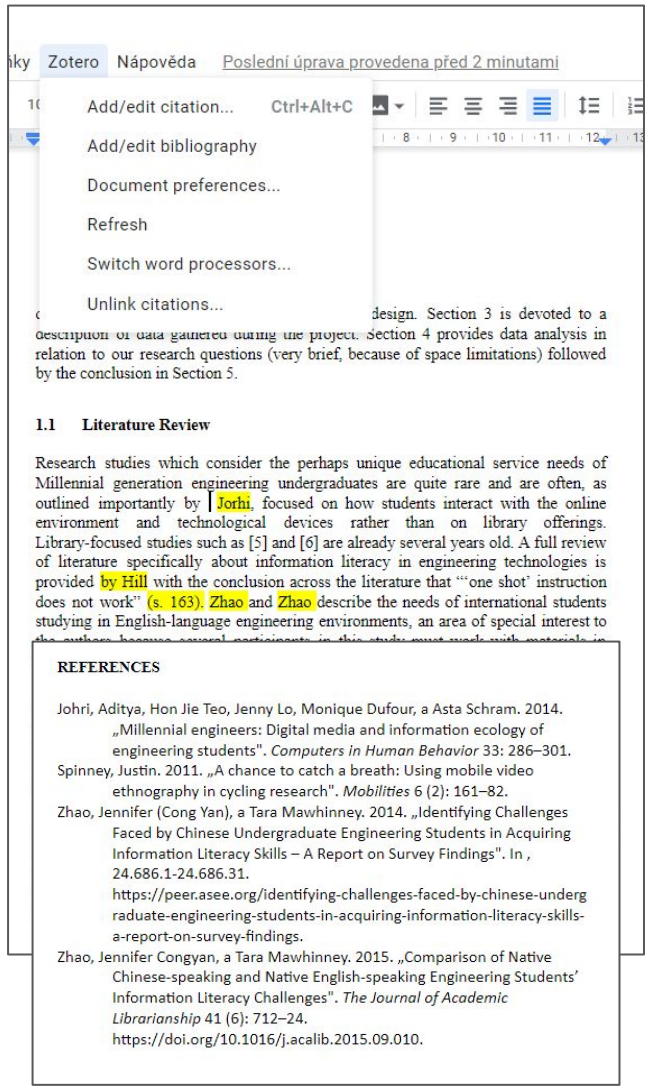
Strengths

- Quick download from databases, Google Scholar, and “regular” web pages
- Integration with Word and Google Docs allows automatic creation of reference list
- Sharing citations with team
- Good management options (including tags, groups, and de-duplication)
- Synchronization between devices and cloud

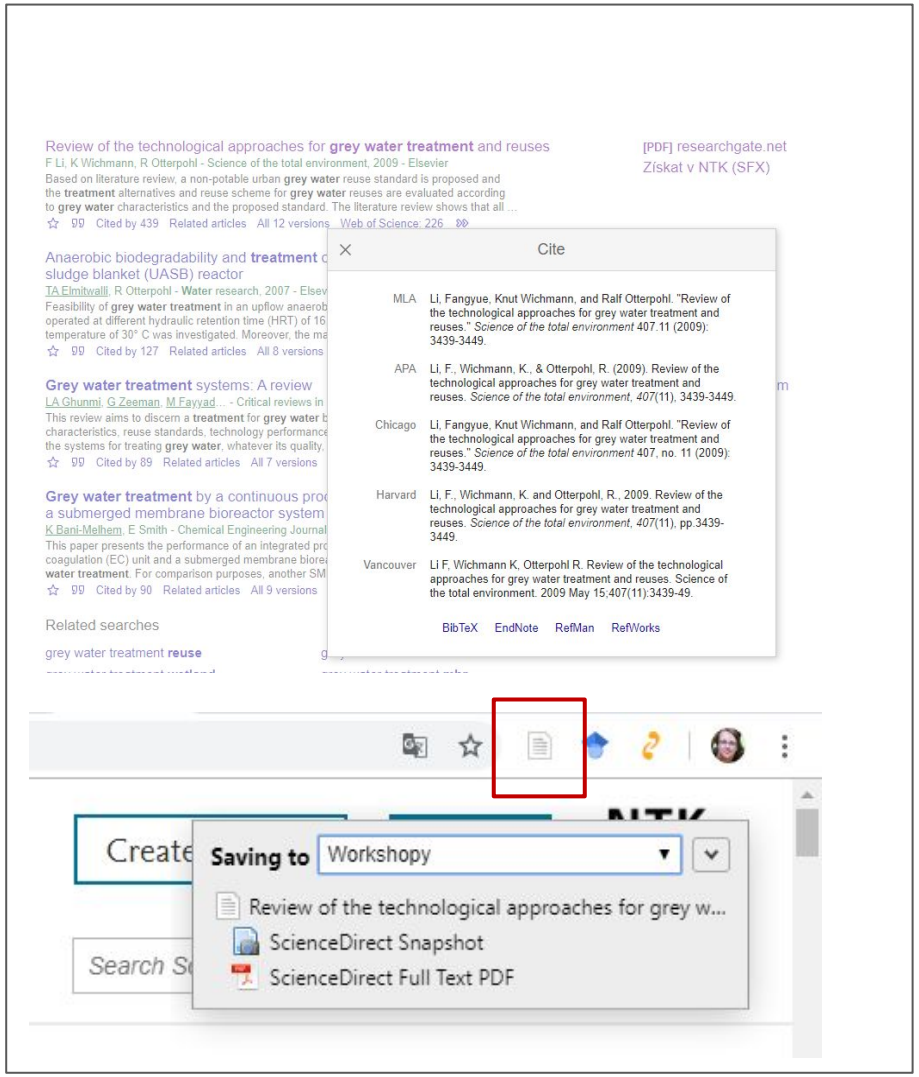
Weaknesses

- Limited storage (300 MB in free version)

Zotero (Personal Experience)



Integration with Google Docs



Automatic downloads

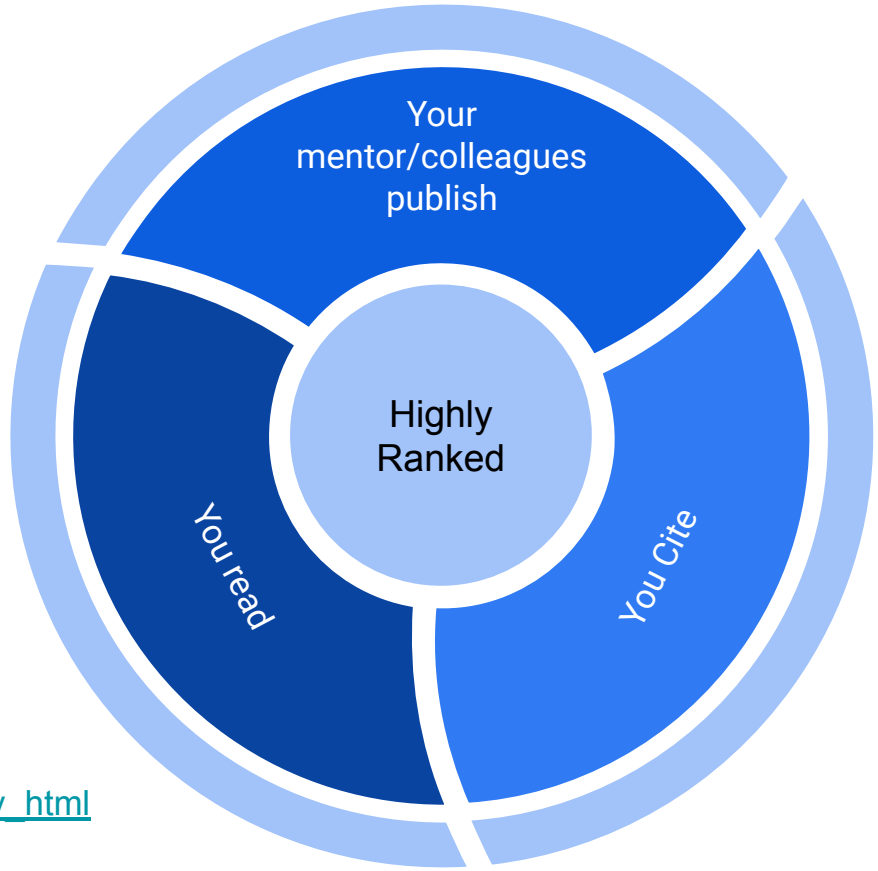
Find your own favorite:

- ➔ Comparison (Zotero, Mendeley)
- ➔ Comparison on Wikipedia (28 systems)

6. PUBLISHING AND PRESENTING RESEARCH OUTPUTS

Finding the Right Journal for Your Article

- Relevance
- Discoverability
- Quality, metrics, indexing
- Reputation
- Open Access
- Peer-review process and author service
- Audience
- Article processing charge (APC)



University of Manchester Library. (n.d.). *How to get published in academic journals.* https://www.escholar.manchester.ac.uk/learning-objects/mre/getting-published/story_html5.html

Berkeley Library. (n.d.) *Scholarly Publishing.* https://www.lib.berkeley.edu/scholarly-communication/publishing

UNC University Libraries. (2021). Measure Your Research Impact: Where to Publish. https://guides.lib.unc.edu/measure-impact/publish

How to Find Quality Conferences

- Ask your mentor or peers
- Read tips about avoiding predatory and questionable conferences
- Use the citation and analytical databases to identify reliable conferences: Web of Science, Scopus, Inspec Analytics (via NTK)
- Look for conferences organized by professional associations (e.g., IEEE conferences)
- Look for conferences for doctoral students to gain experience presenting in English (e.g., ECRF-ICSA, DOKBAT)
- Critically consider costs and benefits of attending conferences

Eaton, S.E. (2018). Avoiding predatory journals and questionable conferences: A resource guide. *University of Calgary*. https://files.eric.ed.gov/fulltext/ED579189.pdf

Palmer, J. C. (2016). Navigating your first academic conference. *Psychological Science Agenda*. https://www.apa.org/science/about/psa/2016/10/academic-conference

Author Identifiers

Features	ResearcherID (Publons)	Scopus ID	ORCID (Open Researcher & Contributor ID)
How to get author identifier?	Author profile will be created automatically with your first publication in WoS. You can then claim the profile with Publons and manage it similarly to ORCID. ResearcherID is created with a Publons account.	Author profile will be generated automatically if you have at least one publication in Scopus. Merging and changing an author profile is possible via request in your Scopus profile.	Create your profile at orcid.org. You can join all your author IDs in ORCID.
How to link your publication with your ID?	You can manually import your citations from Web of Science.	Imported automatically from Scopus.	You can import from several platforms (WoS, Scopus, arXiv) or add manually.
Supporting platforms	Web of Science	Scopus	Open non-profit initiative

- Link all papers published under different variants of your name.
- Distinguish papers written by other authors with the same name.
- Create your author profiles.

Summary

- Activate **Library links on Google Scholar**
- Always make sure you are logged into the library web for **off-campus access to full-text articles**
- Contact your librarian for materials that are hard-to-find
- Make notes and create your own system to organize materials from the very beginning of a project
- Use citation managers, but don’t trust them absolutely!
- Critically consider journals and conferences and be aware of the publishing and conference submission process.

Get Assistance

Schedule a remote consultation:

- Please don't be shy; our team includes doctoral students who know the issues you face.
- We also provide consultations about creating a comprehensive search strategy and organizing yourself as you begin a specific writing project.

Useful links:

- STEMskiller - comprehensive skills set map for early career researchers
- LaTeX support
- Bibliometric services
- Subject guides

Contacts

Naděžda Firsová
nadezda.firsova@techlib.cz

Tomáš Razím
tomas.razim@techlib.cz
tel. +420 608 349 225

Thank you

Questions?