

Spring 2024

Literature management with Zotero

Janina Radny



Lib4RI Training series: Searching & Managing Scientific Information

- Module 1: Searching Scientific Information
- Module 2: Scientific Publishing
- Module 3: Open Access & Copyright
- Module 4: Literature Management
 - 4a: With EndNote
 - 4b: With Zotero
- Module 5: Getting started with LaTeX
- Module 6: Work on Your Own Project
- Module 7: Research Data Management The Basics



Searching & Managing Scientific Information

Training series

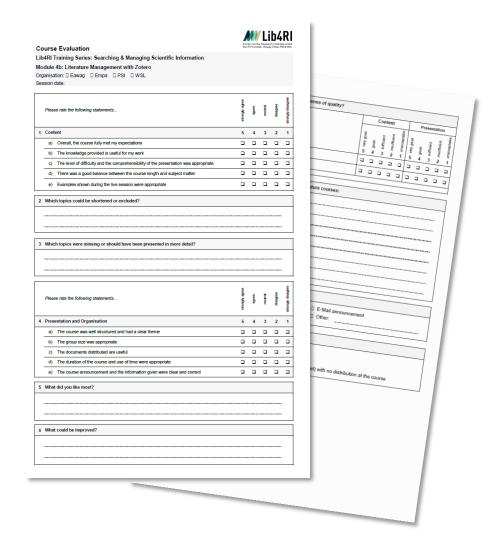
Spring 2024





Your feedback is appreciated!

- Help us improve our training by returning the feedback form enclosed in your documentation!
- The course slides and supplementary material are available online on our website at www.lib4ri.ch > Learn> Trainings







Outline

9:00 – 9:15 Introduction to literature management

9:15 – 10:45 Hands-On Zotero I

10:45 – 11:00 Break

11:00 – 12:30 Hands-On Zotero II



Where are you in your PhD journey?

Collecting information

Put your research in context

Colleting stuff is easy finding it again can be difficult...

Adobe Firefly: "an unsorted pile of research papers on a messy table"





Literature management software helps to:

Organize

- Gather and import information
- Read, mark and annotate
- Group and connect resources

Cite

- Compile a consistent bibliography
- Adapt citations to the journal style

Collaborate

Share references with your co-authors

Open source





Commercial







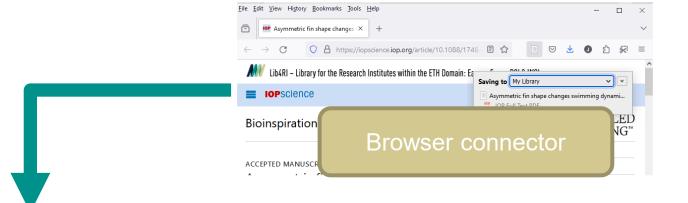
and many more...

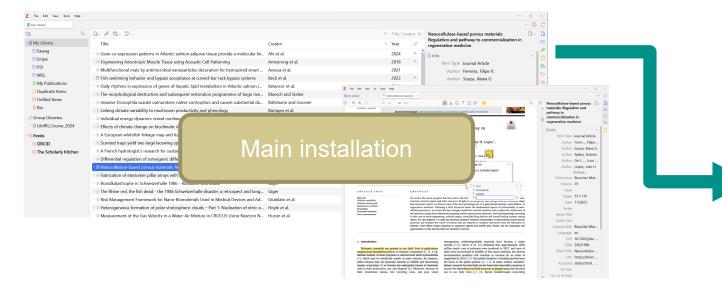


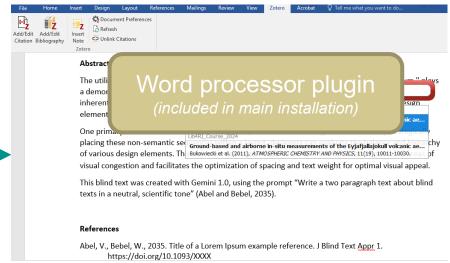


Zotero

- Free and open source
- Well-structured interface and integrated reader (Zotero 6)
- Import with one click
- Cite-while-you-write











System requirements

Main installation

- Windows 7 or later, macOS 10.11 or later, Linux
- Not tested: iOS, Android (Beta Version)

Browser connector

O Chrome 55 or later, Firefox 60 or later, Safari on macOS Big Sur or later

Word processor / Writing

- MS Word 2010-2021, Office 365
- Word for Mac 2016-2021 or Office 365
- Not tested: Libre Office 5.2 or later

Used for this lecture:

- Zotero 6
- Firefox 126
- MS Office Professional Plus 2016

Other options

- Google docs
- LaTeX, Overleaf (premium account or import *.bib)
- Not tested: Jupyterlab (plugin required), Quarto



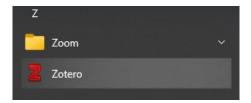
Check your installation



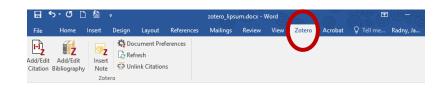
You should see:

Desktop shortcut and/or menu entry to start main installation

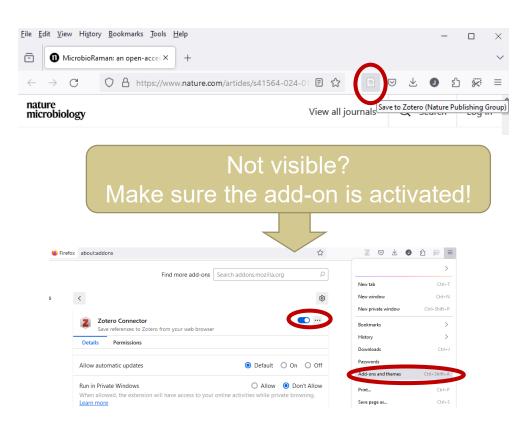




Zotero tab in you text editor



Symbol in your browser (varies with item type)







Hands-on literature management



Five-step workflow in literature management*

- Step 1: Get literature
- Step 2: Organize your library
- Step 3: Read, annotate, connect
- Step 4: Cite-while-you-write
- Step 5: Sync and collaborate

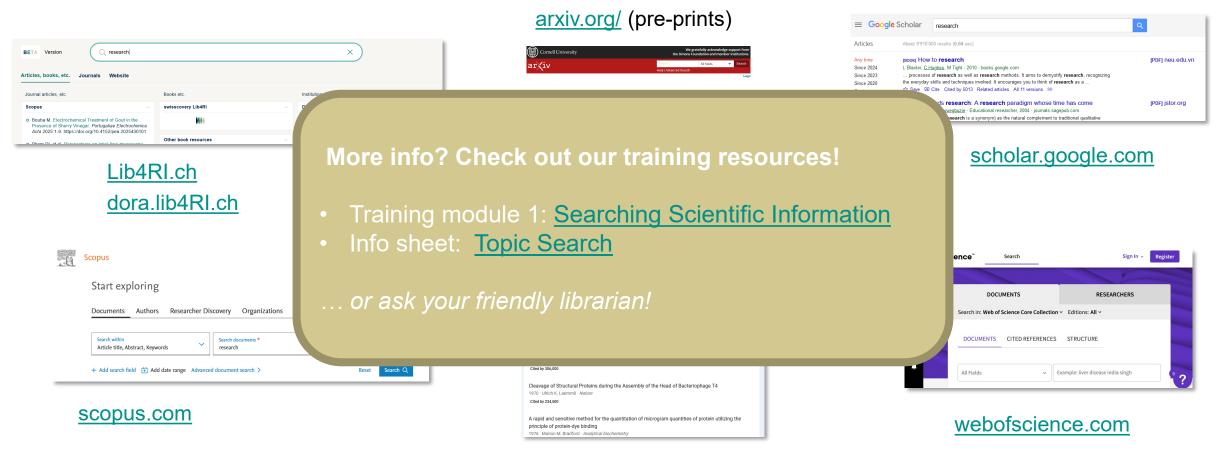
^{*}My personal workflow



Step 1: Get literature



Fantastic publications and where to find them

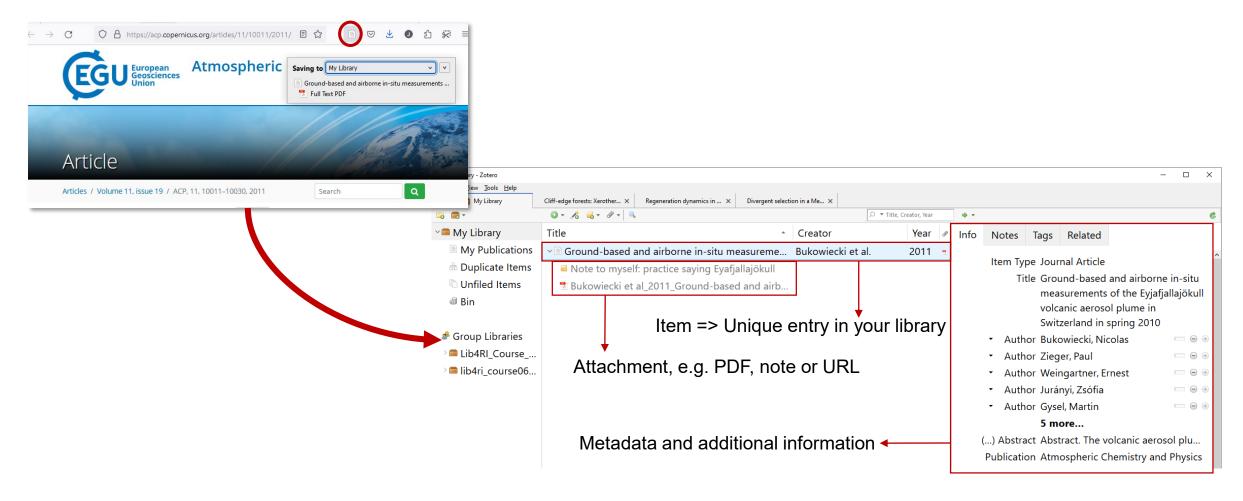


openalex.org





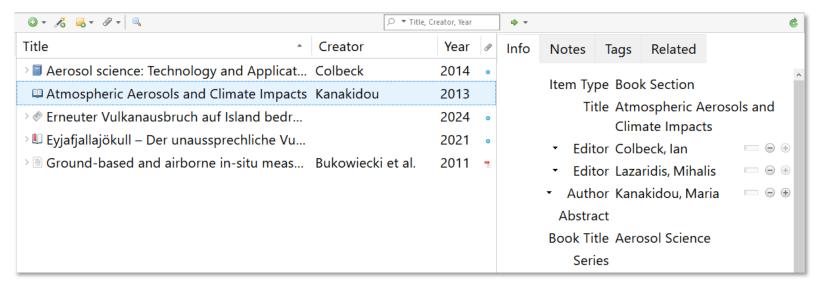
Import via browser connector

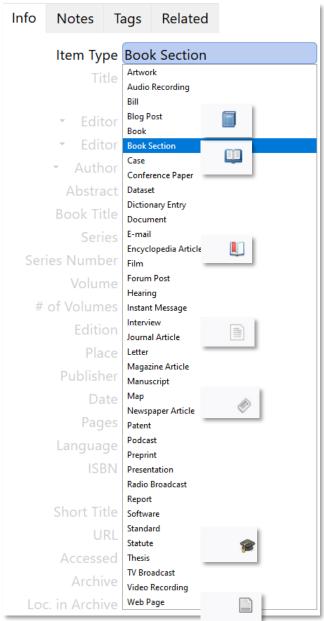




Item types

- Depending on the item type, different metadata is included, e.g.
 - Publication (journal name) for articles
 - Edition number for books
 - Access date for web resources
 - 0

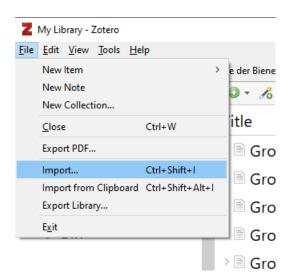


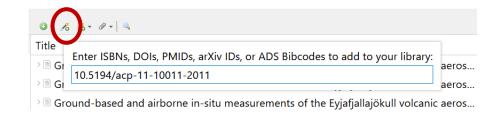


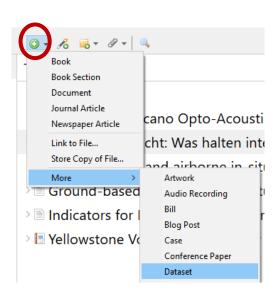


Other import options I

- File > Import for collections, e.g. other reference managers (*.bib, *.ris)
- Import wizard for DOI, arXiv IDs etc
- Add by hand











Other import options II

- Drag & Drop PDFs metadata is added from OCR or embedded information
- Does not work for all documents missing information can be added manually

CHAPTER 5 In Support of Data-Intensive Science at the University of Washington

Jenny Muilenburg

Introduction

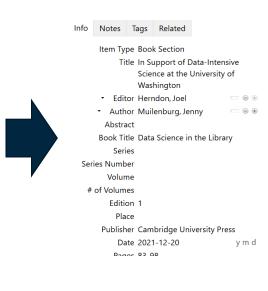
The University of Washington has been active in data-intensive science efforts for over a decade, both through the establishment of the eScience Institute (http://escience.washington.edu) as well as the University's participation in the Moore-Sloan Data Science Environment grant (http://msdes.org). These efforts have impacted the university environment in the areas of research, education and support services such as libraries. This chapter will explore the University of Washington Libraries in particular, considering the changes to services, strategies and infrastructure required to support students, staff and faculty pursuing data-intensive work.

There are three major takeaways:

- Networking and collaboration are essential to provide support for data
- 2 Support for data science can be provided with a variety of staffing, expertise and funding models as long as there is administrative support as well as a culture of networking and collaboration.
- 3 The evolution in library services and interdepartmental relationships will continue, making agility and responsiveness essential to the continued relevance and success of libraries.

Background

The University of Washington (UW) is well known for its computer science and engineering programs (www.usnews.com/best-graduate-schools/top-science-schools/computer-science-rankings) and is regularly ranked as one of the US's premier research-intensive universities (www.cs.washington.edu/







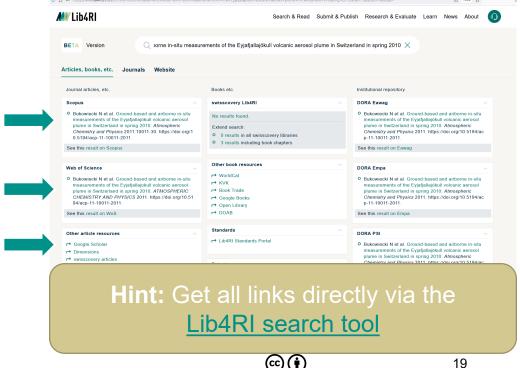


Hands-On: Add literature

N. Bukowiecki et al., Ground-based and airborne in-situ measurements of the Eyjafjallajökull volcanic aerosol plume in Switzerland in spring 2010, Atmospheric Chemistry and Physics, vol. 11, no. 19, pp. 10011–10030, Oct. 2011, doi: 10.5194/acp-11-10011-2011.

Task: Import to your Zotero library from

- Web of Science
- Scopus
- Google Scholar (directly, not following the link)
- Zotero import wizard using the DOI number
- Can you detect any differences?





Metadata may differ between sources

- Google Scholar did not retrieve an abstract, but provides author full names
- Web of Science includes keywords (more: <u>support.clarivate.com</u>), publication name is all caps
- Scopus provides citation count as note
- DOI import (via Crossref) provides rights information (more: <u>lib4ri.ch/copyright-cc-licences</u>)

Keep in mind:

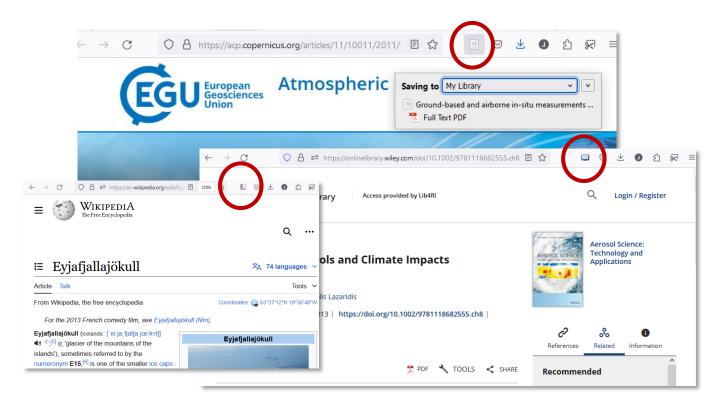
- Metadata can be incomplete
- Errors may happen, especially with third party sources
- Encoding or typesetting can be different (special characters, all caps...)

Good news: In general a minor problem and if necessary cleaning metadata is easy



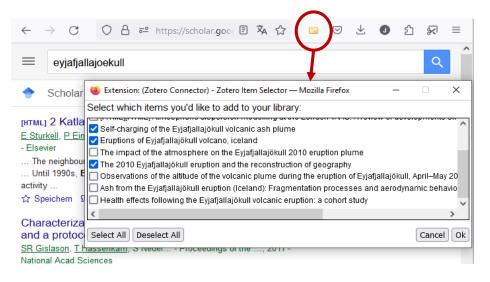
Single import

- Only one item with metadata is available
- Various item types with different metadata entries



Bulk import

- Several items with metadata are available
- Select the desired items



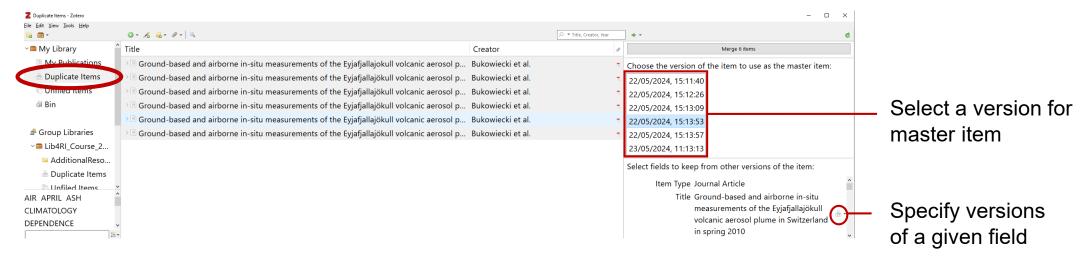




Step 2: Organize your library



Hands-On: Organize literature



Task: Merge duplicate items

- Select a master version
 - Master version defines all field entries
- Specify field versions to include:
- > Author full names

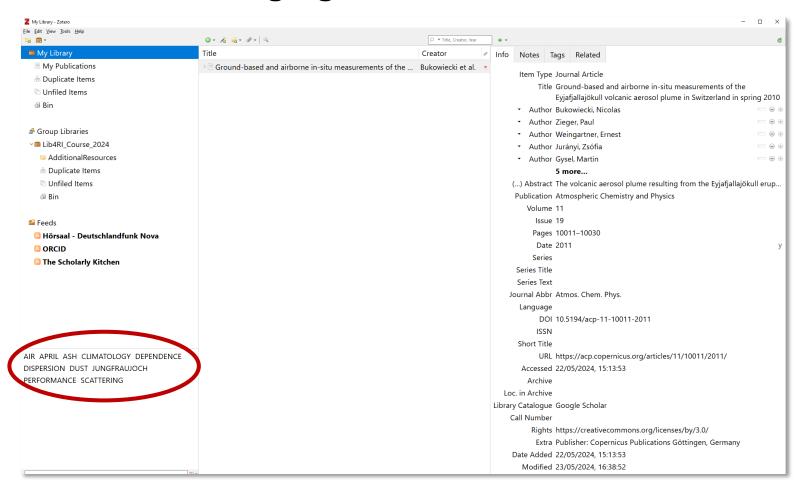
- > Rights information
- > Journal title is **not** all caps
- Abstract (with umlaut)

> Journal abbreviation

> DOI



After merging:



Note:

- Sometimes items are not recognized as duplicates
 - Case-sensitive, typos...
- Select items to be merged and right-click to enforce merging
- All items of the same type can be merged, e.g. journal article with journal article, but not book section

Additional data remains in the item after merging:

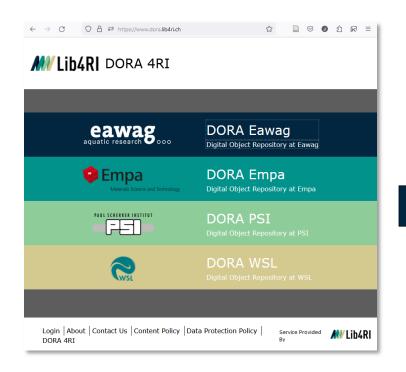
- Keywords and tags
- Notes
- Annotations



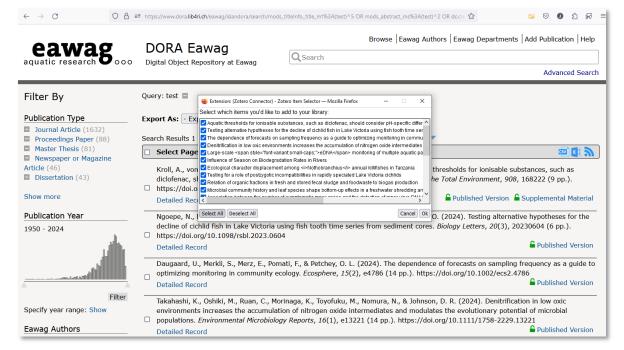


Hands-on: Bulk import from DORA

- In <u>DORA</u>, search for a topic of your choice
- Bulk import the first page of results



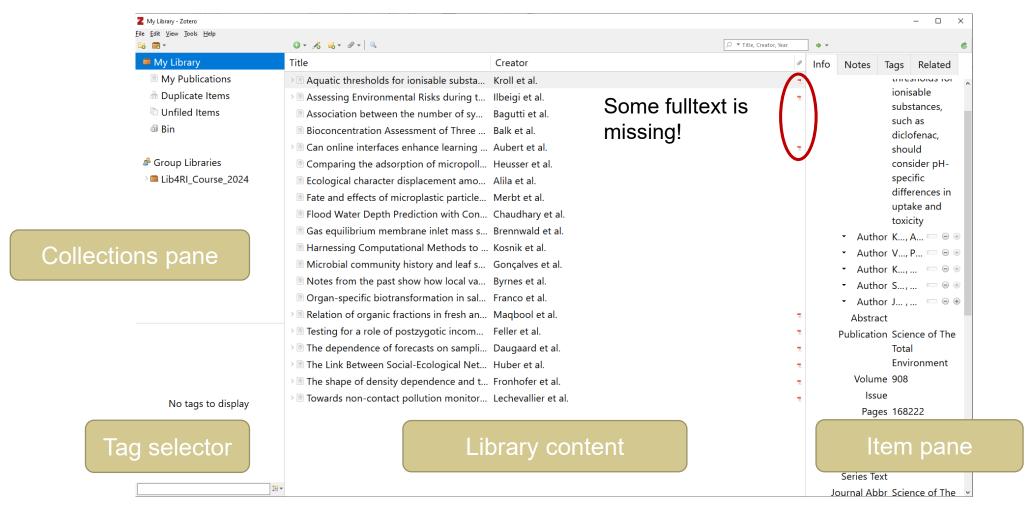








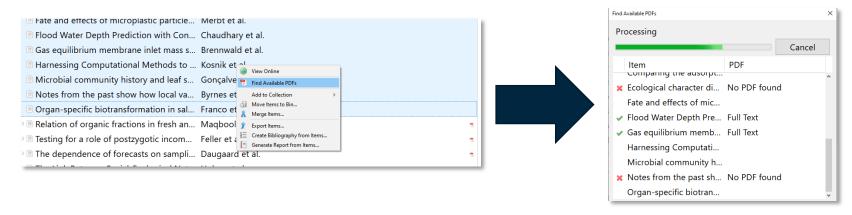
Example library:



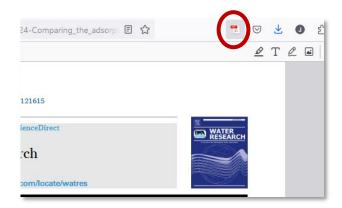


Hands-on: Retrieve missing full text

Solution I: Right-click for context menu -> Find available PDFs



- Solution II: Retrieve from source via browser connector
 - Double-click item to go to the linked source
 - Import the PDF via Browser Connector or download and attach the file to the item via drag & drop
- Solution III: No chance to retrieve the PDF?
 Get in touch with the <u>Lib4RI document delivery service!</u>

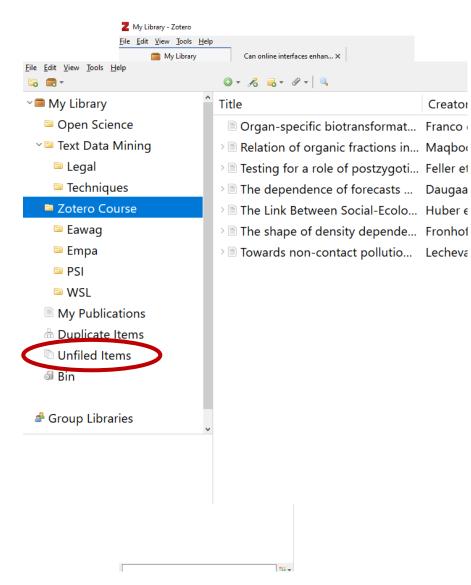






Organizing your library

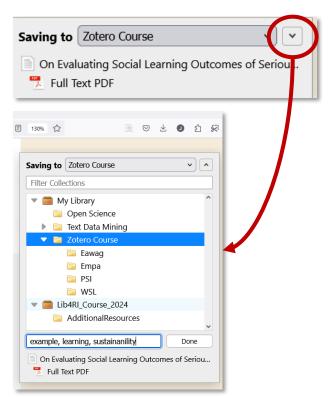
- Main and default: My Library
 - Cannot be deleted or renamed
 - All items are visible here -> hard to keep overview
- Solution: Organize items in collections
 - Projects or topics could be a collection
 - Can be refined with sub-collections
 - Drag & drop items to copy into any collection
 - Hold Shift (Win/Linux) or Cmd (Mac) to move items from one collection to another
- Unfiled items are not part of any collection





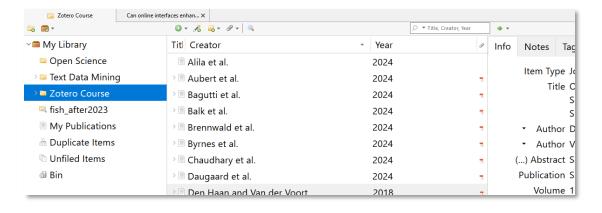
Hands-on: Importing to collections

- Create a new collection (File > New Collection or Right-click in Collections pane)
- Import an item (publication, website, Wikipedia...) directly into the new collection



Hint:

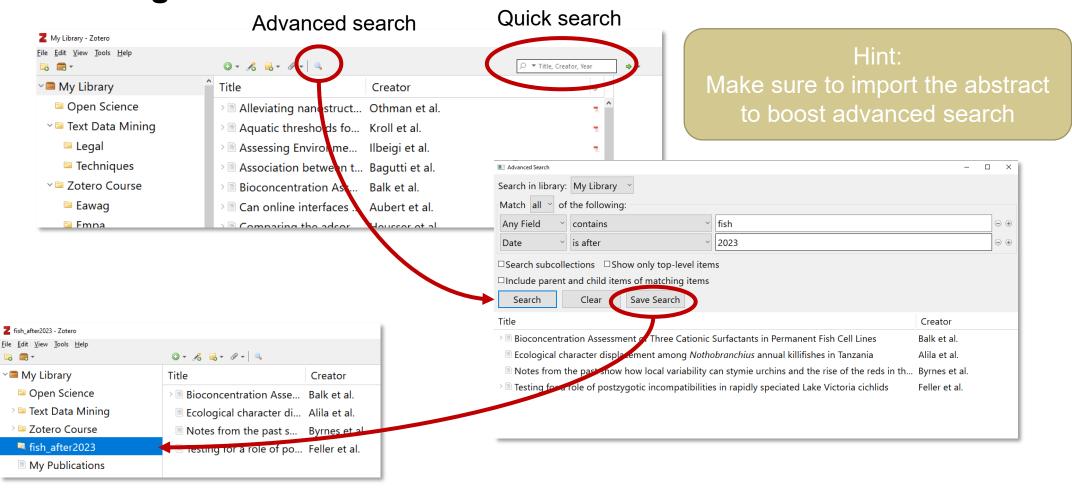
Pop-up gone too fast? Zotero will always save items to the collection selected in the main installation







Finding items



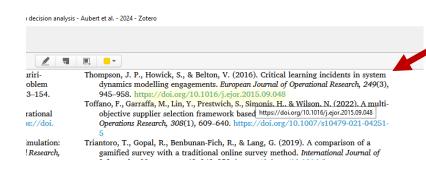


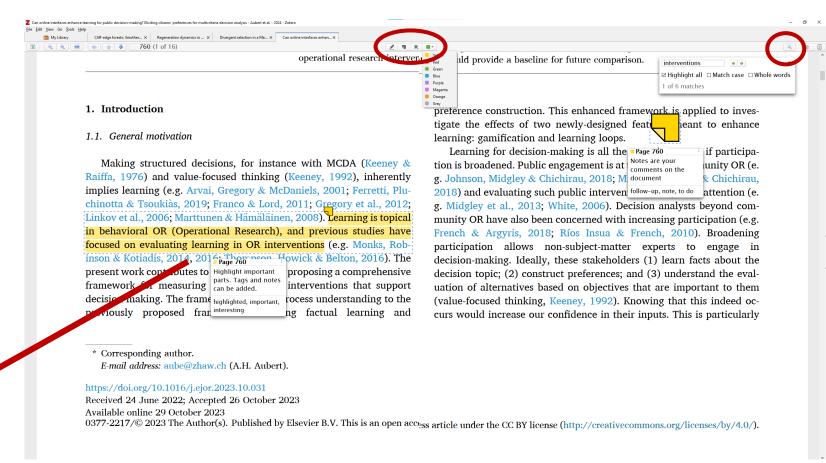
Step 3: Read, annotate, connect



Document reader

- Cross-references (citations, tables, figures...)
- Partially outgoing links
- Search in text
- Highlight sections
- Add notes to document or highlighted parts



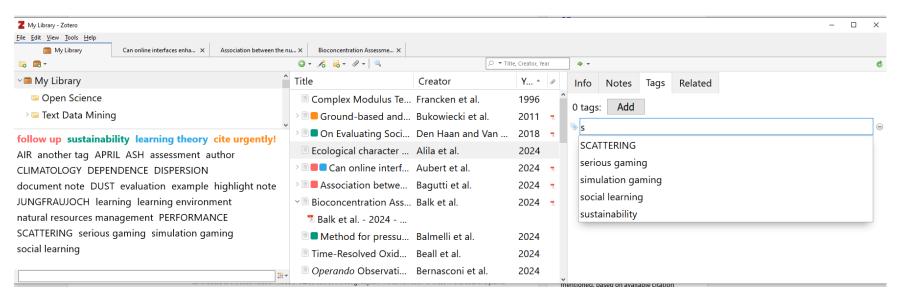






Using tags

- Notes, highlights and entire items can be tagged
- Library can be filtered for tags
- Important tags can be assigned with a colour (right-click on tag)
 - Only tags on items are visible with colour in the library
 - Filtering applies to all tags (including tags in notes and highlights)

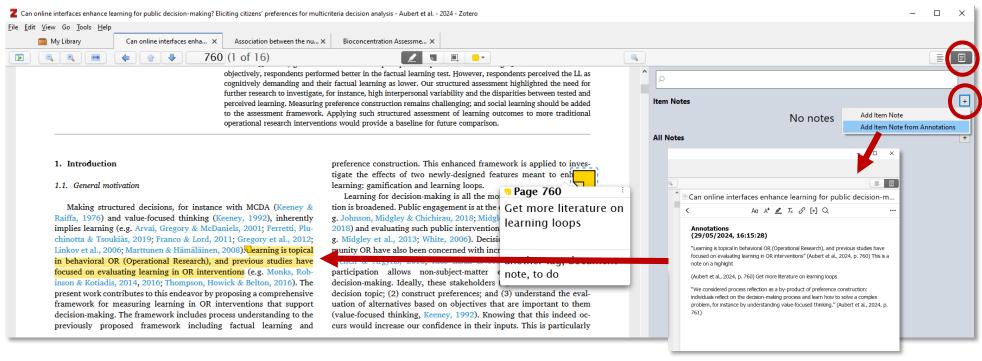




Hands-on: Annotations and item notes (requires Zotero 6)

- Annotations are highlights or sticky notes in the item text
- Item notes are assigned to the item as a whole, e.g. your own thoughts

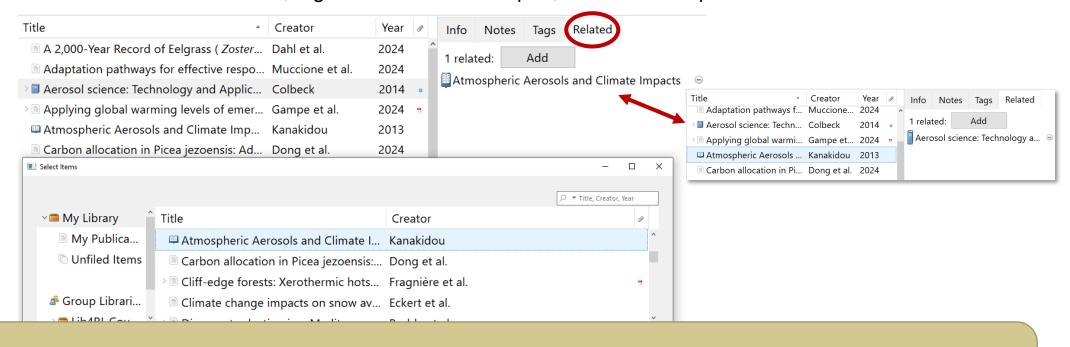
Task: Make some annotations and create an item note from that





Relating items

Make relations between items, e.g. book and book chapter, comments on publications...



Hint:

- To identify clusters in topics, citations or collaborations, use <u>bibliometric analysis</u>
- Tools like <u>VOSviewer</u> or <u>ResearchRabbit</u> can help you to visualize relations between publications

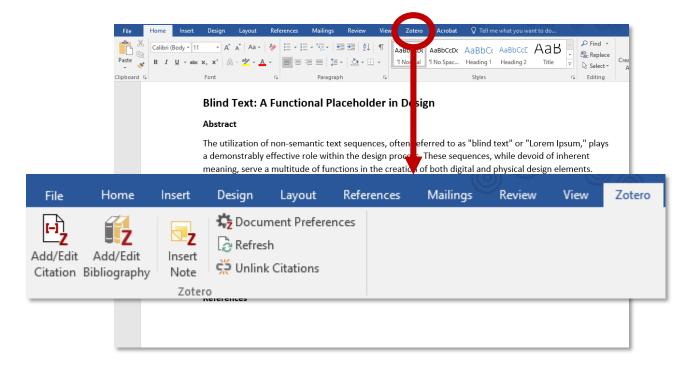


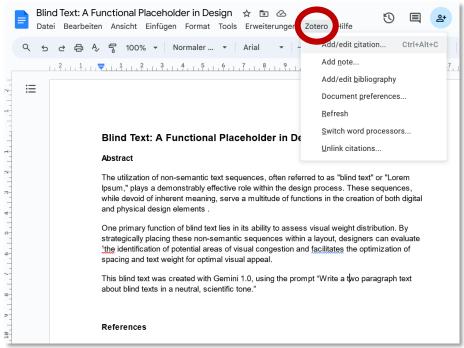
Step 4: Cite-while-you-write



Hands-on: Cite-while-you-write

Task: Create a document with a few sentences of text* or use the template







^{*}Get blindtext e.g. from <u>blindtextgenerator.org</u> or generative LLMs



Document preferences

- Citation style is defined in the document preferences
- Styles can be changed according to your needs at any time

of various design elements. This objective assessment allows for the identification of potential areas of visual congestion and facilitates the optimization of spacing and text weight for optimal visual appeal.

This blind text was created with ser ini 1.0, using the prompt "Write a two paragraph text about blind texts in a neutral, scientific to $e^{r/t}$.

References

1. Abel, V. & Bebel, W. Title of a Lorem Ipsum example reference. J Blind Text Appr 1, (2035).

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This blind text was created with Godini 1.0, using the groupt "Write a two paragraph text about blind texts in a neutral, scientific ton ((Abel and Bebel, 2035).)

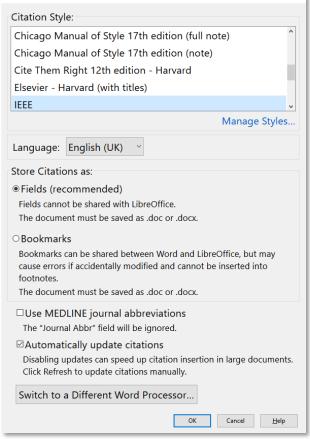
References

Abel, V., Bebel, W., 2035. Title of a Lorem Ipsum example reference. J Blind Text Appr 1. https://doi.org/10.1093/XXXX **Nature**

VS.

Elsevier - Harvard



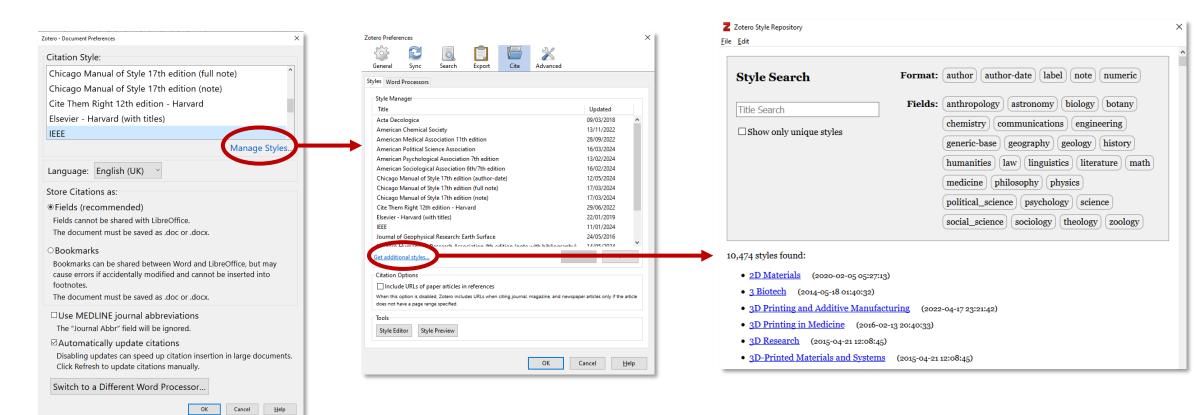






Document preferences

Add more styles to your list and get even more styles online

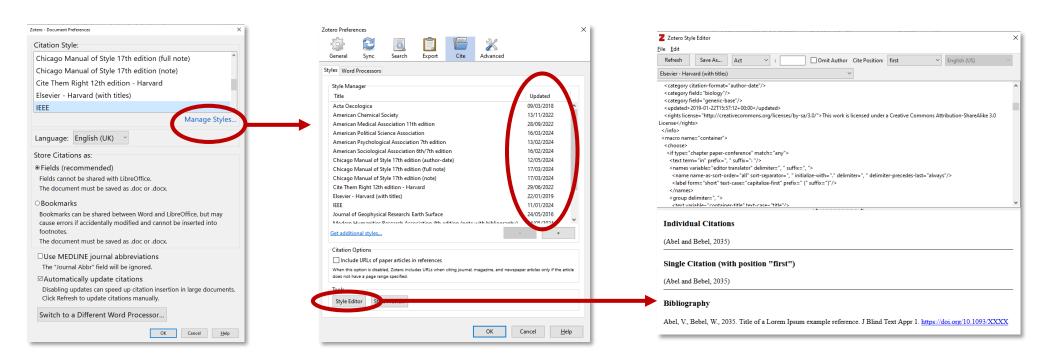






Document preferences

- Older styles may be outdated
- Always cross-check whether a style fits journal demands!
- If necessary, adapt an existing style in the style editor



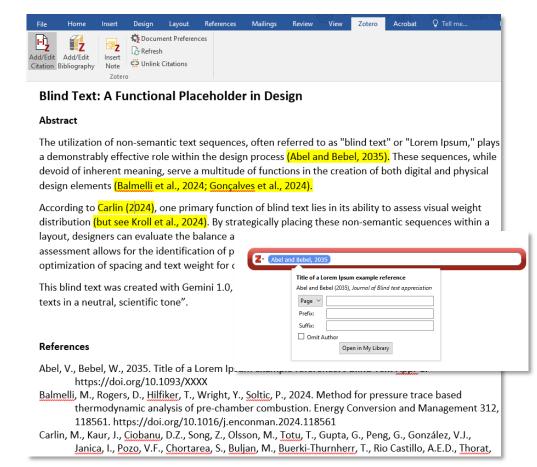




Hands-on: Adding references

Task: Add and edit references

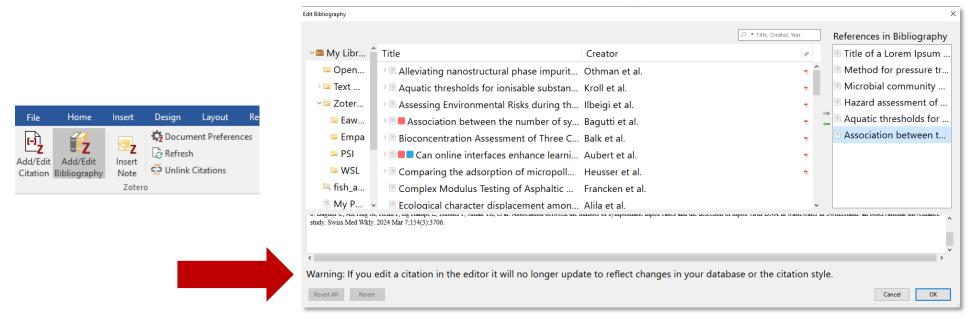
- Add some random citations in your document
- Add the bibliography at the end of your document
- Edit some citations by placing your cursor into the citation and click Add/Edit Citation:
 - Add another reference into a citation
 - Add the prefix "but see"
 - 3. Change a citation from parenthetical to narrative: (Author, Year) -> Author (Year)
 - Click the reference in the format window
 - Check «omit author» and write their name by hand
- > Try three different citation styles in document preferences





Editing the bibliography

- Generally, the bibliography is automatically updated if new references are added to the text (click refresh if changes are made in the item metadata)
- References can be added to, or removed from, the bibliography manually
- O Carries the risk of incorrect bibliographies!

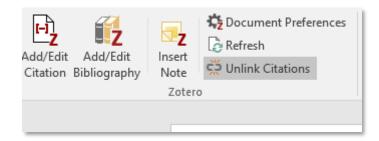






Unlinking citations

- Unlink citations if you need to submit a flat file without field code
- Caution! Unlinking cannot be reversed* and there is no auto-update anymore!
- Zotero recommends to unlink citations only in a copy of your work file



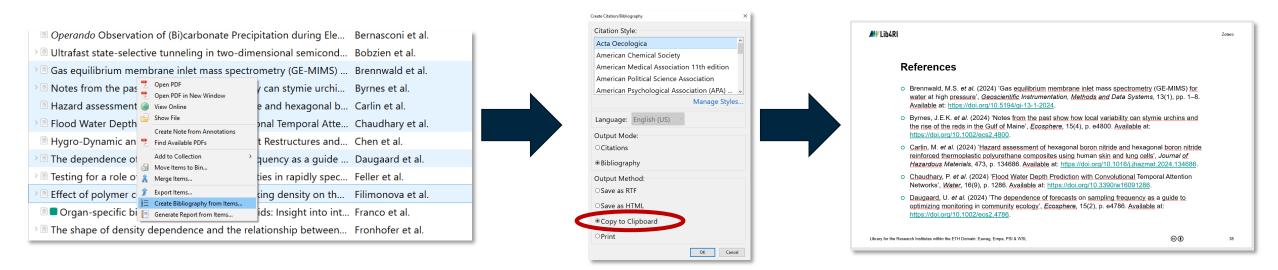


^{*}Clicked by accident and ignored the warning? Unless the document was closed and re-opened, Crtl+Z (Win/Linux) or Cmd+Z (Mac) will help.



Beyond Word: Powerpoint

- Plugin for Powerpoint is not available (yet)
- Workaround: Create a bibliography from selected items
 - Either select the entries directly or copy them to a sub-collection (e.g. talk@conference_year)
- Paste from clipboard into your presentation
- In-text citation is not possible -> reference list is not automatically updated!







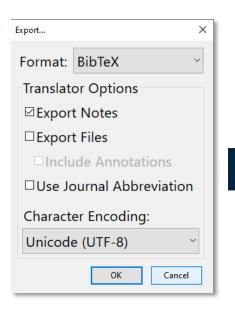
Beyond Word: LaTeX

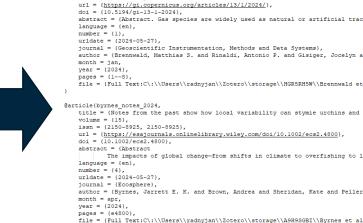
- Export your library, collection or selected references as *.bib and add it you to TeX workspace
- Make sure the file name has no whitespaces!

@article{brennwald gas 2024,

 $issn = \{2193-0864\},$

volume = {13},





copyright = {https://creativecommons.org/licenses/by/4.0/}

title = {Gas equilibrium membrane inlet mass spectrometry ({GE}-{MIMS}) for wat



How to add citations and a bibliography in LaTeXdocuments

You can simply use a .bib file containing your BibTeX entries, created with Zotero. To use it in Overleaf, upload the .bib file to your project.

Use \citep{} for parenthetical citations: (Abel and Bebel, 2035), or \citet{} for narrative in-text citations: Abel and Bebel (2035). To use these, the package natbib is required.

Remember to specify a bibliography style, as well as the filename of the .bib.

References

Abel, V. and Bebel, W. (2035). Title of a Lorem Ipsum example reference. Journal of Blind text appreciation, 1.

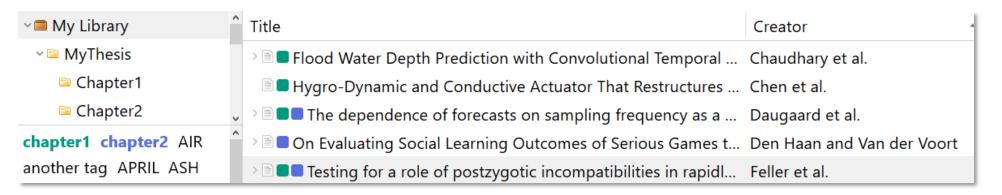
Text snippet based on Overleaf's "Example Project"





Beyond a paper: When multiple bibliographies are needed

- Zotero cannot handle two bibliographies in one document
- Solution I: Write each chapter into a separate file
- Solution II: Add citations like normal, but paste the bibliography from the clipboard
 - Keep in mind the bibliography will not be auto-updated then!
 - Make sure to include all citation you used:
 - Add them into (sub-)collections or
 - Use according tags







Step 5: Sync and collaborate



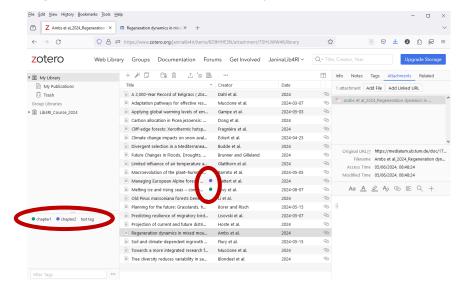
The web library

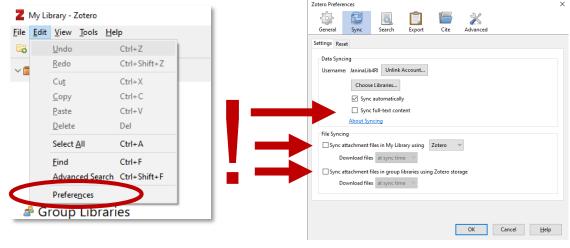
- Online mirror of your local library
- By default on Zotero server
- Caution! File sync on the Zotero server is restricted to max. 300 MB with a free account
 - Disable full-text sync and file sync

Alternatives:

- Upgrade your Zotero storage (20-120\$/yr)
- Choose your own cloud over Zotero server to sync your personal library
 - Not recommended by Zotero, risk of corrupted databases
 - Read more at zotero.org/support/sync

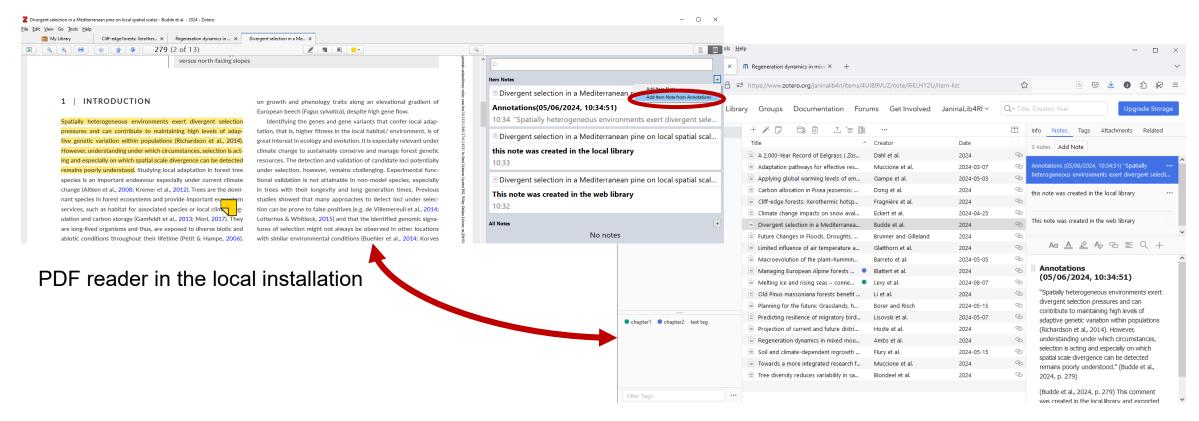
Tags and item notes are synced







Notes and tags in the web library



Web library in Firefox

BibLaTeX



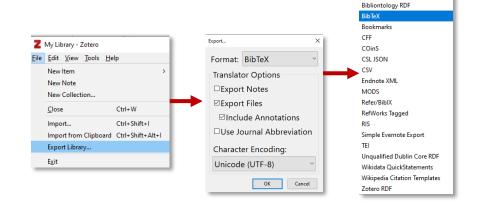
Working with colleagues

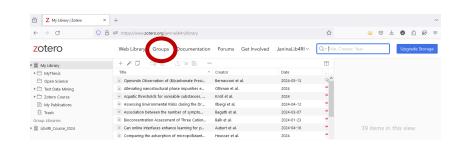
Sharing a library

- Local libraries can be shared as file via File > Export library
 - Best test results with *.bib and *.ris
- Create group libraries to work together in one library

Working together in one file

- Using the same local library is not required
- To add or edit references, Zotero must be used
- Using different literature managers can cause problems!
 - Check with your co-authors, which software to use
 - > Work-around: Insert plain text citations as comment





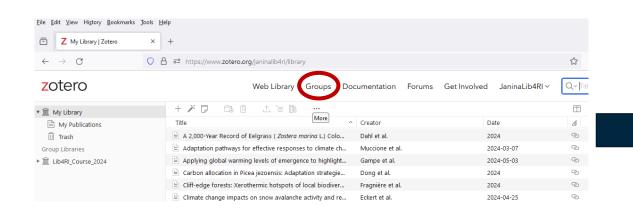


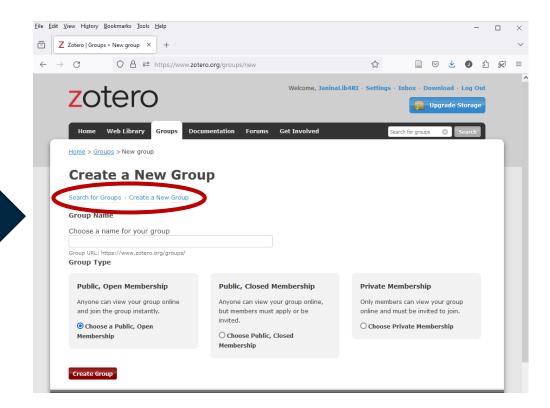




Group libraries

- Web library is only for your personal use
- Group libraries can be shared with others
- Public groups are visible for everybody



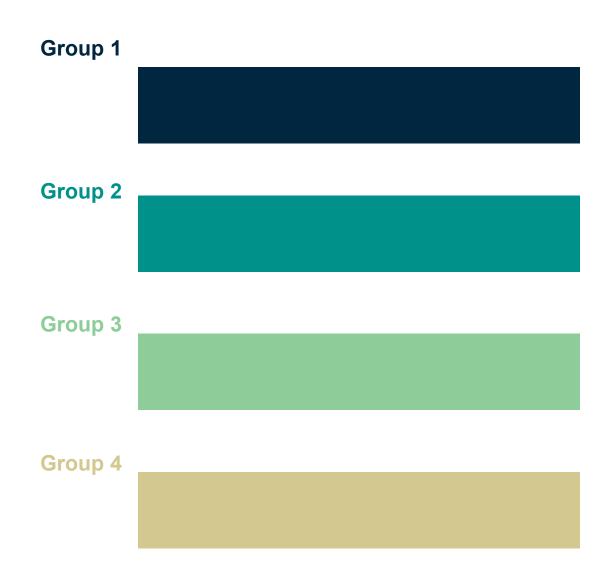






Hands-on: Group libraries

- Create a group library lib4ri_course0624_yourname
 - Privacy setting: Public, Closed membership
 - Drop one or more items to the group and sync
 - > Only groups with items are visible!
- Find & join those groups with the same colour as yours
- Approve the requests for your group
 - Requests come via mail
- Drop one item into each group, where you are a member
 - Import the items from the group library into your local library
- Bonus: Check if there are public groups on your topic of interest!





Questions left?

Reach us via e-mail to info@lib4ri.ch