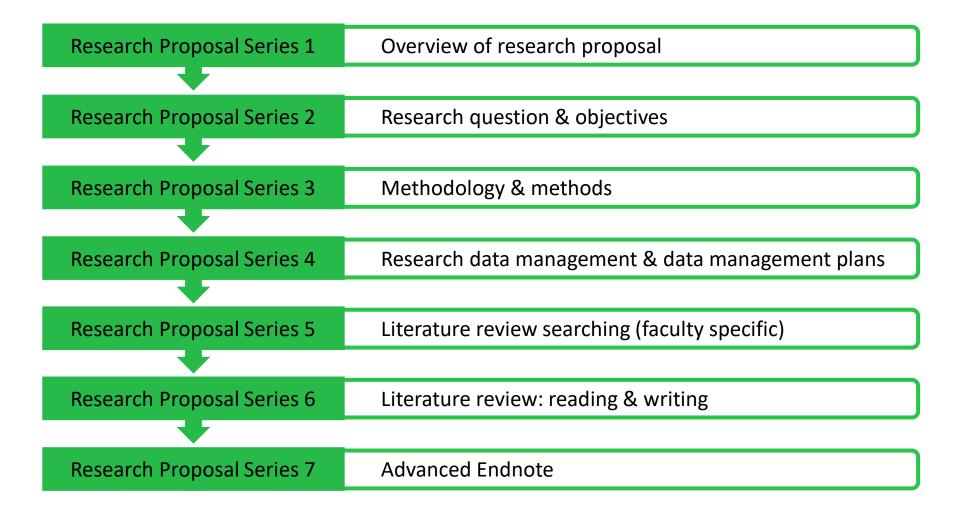


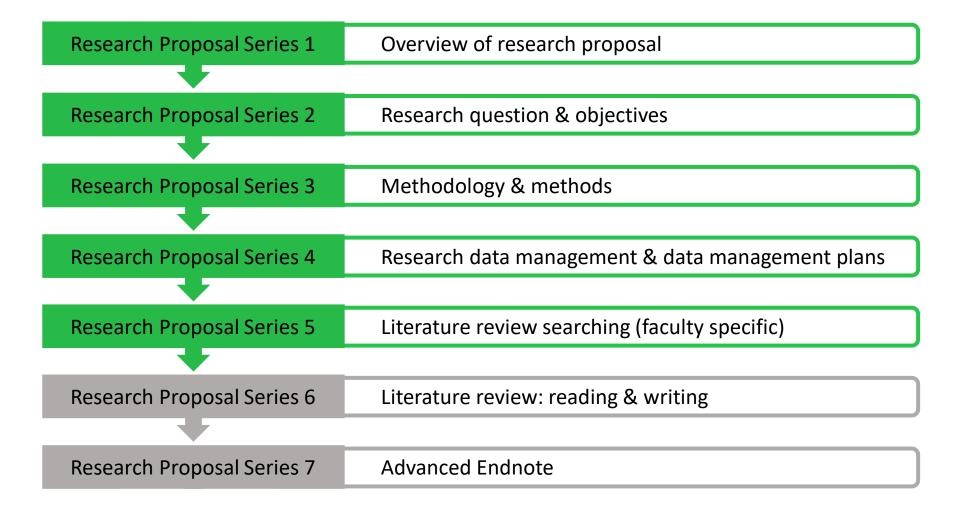
Graduate Research Advanced Skills Program (GRASP)

## Research Proposal Series (Milestone 1)

## Power up your PhD

Milestone One essentials for Science and Engineering







## Power up your PhD

Literature review searching and Milestone One essentials for Science and Engineering

Online Session

<u>Jenny Copestake</u> Faculty Librarian, Science & Engineering

August 2023

I would like to acknowledge the traditional owners of the lands on which Curtin Perth is located, the Wadjuk people of the Noongar Nation, as the knowledge holders and the first researchers and teachers of this land, and express enduring respect for their connection to the land, sky and water.

#### **Research Toolkit**



Research toolkit home

Planning ▼

Searching ▼

Data ▼

Publishing ▼

Impact ▼

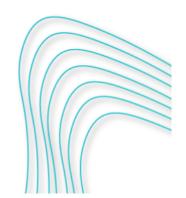
**GRASP** ▼

Milestones



Level up your research. Tools for higher degree by research students and staff.





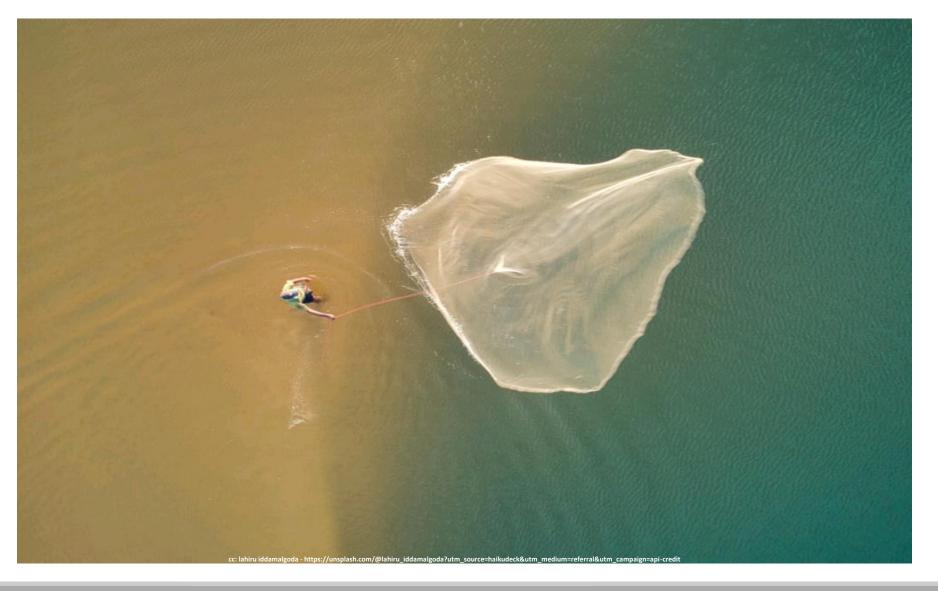
## Milestone One requirements

- Research proposal
  - Literature review demonstrate your knowledge of the relevant literature
    - "make adequate and intelligent reference to other works"
    - "sufficient knowledge of the literature"
  - Methods and methodology
    - "methodology and methods suitable for the proposed study"
- Milestone One application
  - ORCID
  - Completion of a <u>Data Management Plan</u>
    - Outline of specific data collection and management methods

#### **Session Outline**

- 1. Fill your literature review with quality references
- 2. Track research in your discipline
- 3. Thesis by Compilation or Hybrid Thesis? Tips to get your research published
- 4. ORCIDs, DOI's and ways to promote your research
- 5. Where to get help

### 1. Your literature review



#### **Literature Review chapter – purpose?**

"It is the purpose of the literature review to show the reader, in a systematic way, what is already known about the research topic as a whole, and to outline the key ideas and theories that help us to understand this. As well as being systematic, the review should be evaluative and critical of the studies or ideas which are relevant to the current work."

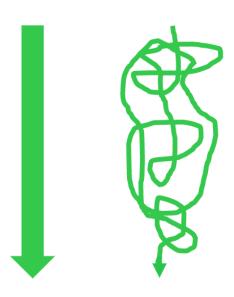
Adapted from http://www.phrasebank.manchester.ac.uk/referring-to-sources/



https://researchtoolkit.library.curtin.edu.au/searching/systematic-literature-reviews/introduction/

#### **Literature Review chapter**

- 1. Search
- 2. Select
- 3. Read & Analyse
- 4. Write



## Searching for your literature review

- Create a search strategy
- Cast your net wide don't rely on one or two sources
- Harness the power of Curtin's databases - citation searching
- GRASP candidacy series, research writing series

- Be confident with referencing take a class
- Manage what you find EndNote
- Make use of clever add-ons Google Scholar settings, EndNote Click, Scite
- You can request items Curtin
   Library does not hold Document
   delivery, Recommend an item.

#### So where do YOU start?

# Google Google Scholar

Search the Library Catalogue

SEARCH











https://researchdirect.westernsydney.edu.au > uws:56640 •

#### Climate change significantly alters future wildfire mitigation ...

by G Di Virgilio · 2020 · Cited by 7 — Di Virgilio, G., Evans, J. P., Clarke, H., Sharples, J., Hirsch, A. L., & Hart, M. A. (2020). Climate change significantly alters future wildfire mitigation ...

https://scholars.uow.edu.au > publication144952 •

#### Climate Change Significantly Alters Future Wildfire Mitigation ...

Abstract. ©2020. American Geophysical Union. All Rights Reserved. Prescribed burning is used globally to mitigate the risks of wildfires, ...

https://newsroom.unsw.edu.au > news > science-tech > c... ▼

#### Climate change will make fire storms more likely in ...

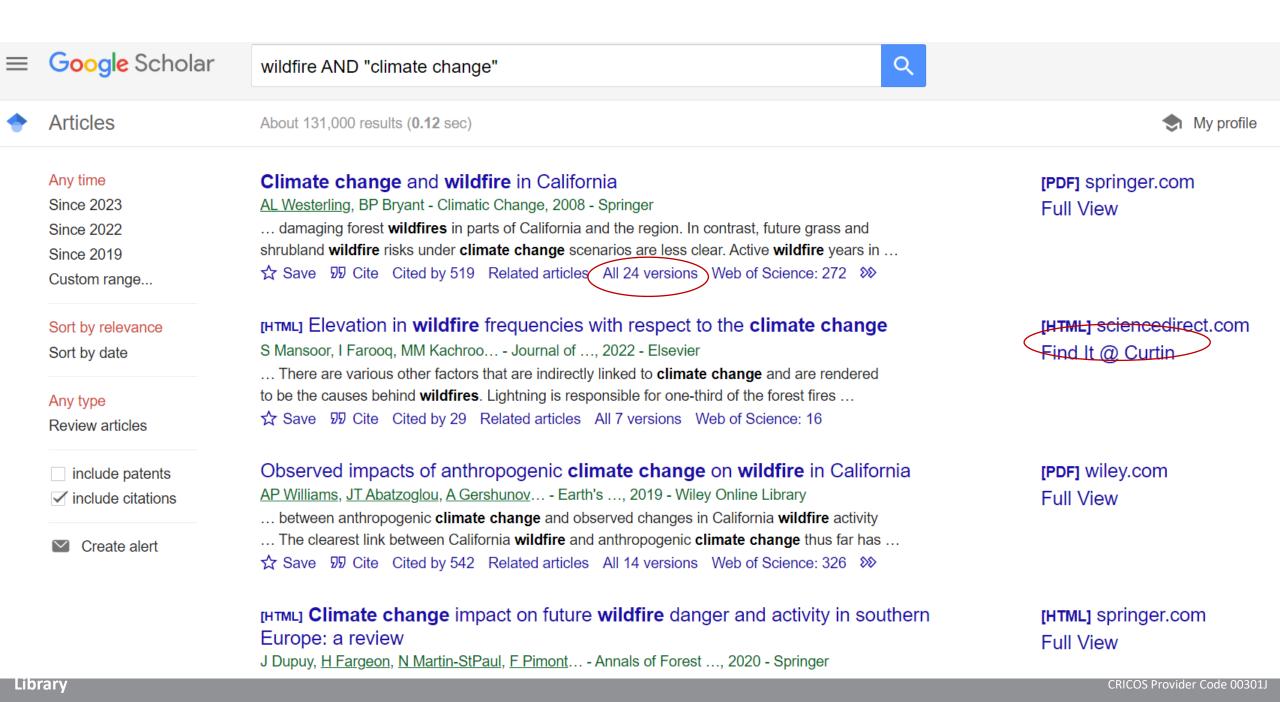
21 Nov 2019 — Pyrocumulonimbus events begin with the intense heat of a very big and fastburning wildfire, which causes a large and rapidly rising smoke ...

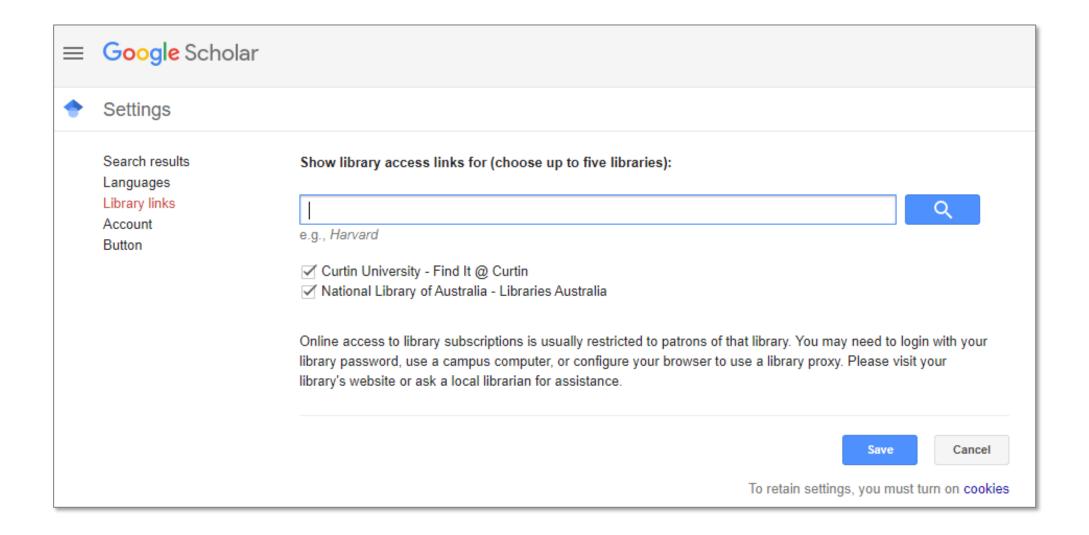
https://researchers.mq.edu.au > files ▼ PDF

#### CLIMATE CHANGE AND THE SOUTH AUSTRALIA ...

In South, Australia a wildfire in 2007 burned a reservoir catchment that supplied water to

Adalaida manativaly affecting the quality of the water (Conith at al

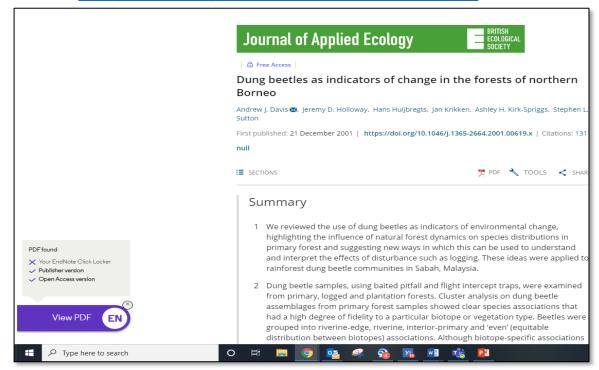




## **EndNote**<sup>™</sup>Click

Formerly Kopernio

#### https://kopernio.com/endnote



## Research Topic

Quantifying the impact of climate change on wild fires

## Research Topic

Quantifying the impact of climate change on wild fires

## What do you call this?



## **Concept Grid for alternative terms**

Wild fire	Climate change
Bush fire or bushfire	Global warming
Wild fire or wildfire	Greenhouse effect
Forest fire	
Prescribed burn	

## **Research Tip - Truncation**

\* The truncation symbol

Useful for finding alternative endings of a word

forest

forested

forester

forest\*

#### Research Tip - Phrase Searching

Quotation marks can ensure that the exact phrase is retrieved.

"wild fire"

## Search strategy

"bush fire" OR bushfire OR "wild fire" OR wildfire OR "forest fire" OR "prescribed burn"

#### AND

"Climate change" OR "global warming" OR "greenhouse effect"







Create account

#### Start exploring

Discover the most reliable, relevant, up-to-date research. All in one place.



(TITLE-ABS-KEY ("bush fire" OR "wild fire" OR "wild fire" OR "forest fire" OR "prescribed burn") AND TITLE-ABS-KEY ("Climate change" OR "global warming" OR "greenhouse effect")) Ø Edit □ Save □ Set alert Secondary documents Documents **Patents** View Mendeley Data (3709) Search within results... Olo Analyze search results Show all abstracts Sort on: Cited by (highest) Refine results □ All ∨ CSV export ∨ Download View citation overview View cited by Save to list ••• **Open Access** Document title Authors Year Source  $\checkmark$ Cited by Year  $\wedge$ A global overview of drought and heat-induced tree Allen, C.D., Macalady, A.K., 2010 Forest Ecology and Management 4824 mortality reveals emerging climate change risks for Chenchouni, H., (...), Semerci, A., 259(4), pp. 660-684 2024 (1) > forests Cobb, N. Open Access 2023 (226) > 2022 Related documents (909) >View abstract ∨ 2021 (762) > Westerling, A.L., Hidalgo, H.G., 2006 Science **2** Warming and earlier spring increase Western U.S. forest 3689 2020 (628) > wildfire activity Cayan, D.R., Swetnam, T.W. 313(5789), pp. 940-943 View more Related documents View abstract ∨ find it Author name  $\wedge$ On underestimation of global vulnerability to tree Allen, C.D., Breshears, D.D., 2015 Ecosphere 1424 Bergeron, Y. (62) > mortality and forest die-off from hotter drought in the McDowell, N.G. 6(8),129 Anthropocene Flannigan, M.D. (48) > Open Access Hurteau, M.D. (41) > Related documents Abatzoglou, J.T. (36) > View abstract ∨ find it Girardin, M.P. (31) > Mountain pine beetle and forest carbon feedback to Kurz, W.A., Dymond, C.C., 1362 2008 Nature View more Stinson, G., (...), Ebata, T., climate change 452(7190), pp. 987-990 Safranyik, L. Subject area  $\vee$ Related documents View abstract ∨ Publication stage  $\vee$ 

Keyword	^
Climate Change	(4,120) >
Wildfire	(2,247) >
Fires	(1,740) >
Forest Fire	(1,105) >
United States	(960) >
Fire	(868) >
Deforestation	(786) >
Forestry	(722) >
Article	(658) >
Drought	(617) >
View less	View all
1	





#### Need more info?

For a more detailed explanation of search strategies and syntax check out our study guide:

Systematic approaches to literature review searching

#### Introduction

Systematic approaches to literature review searching

Developing the research question

Planning your search

Searching the literature

Systematic approaches to literature review searching

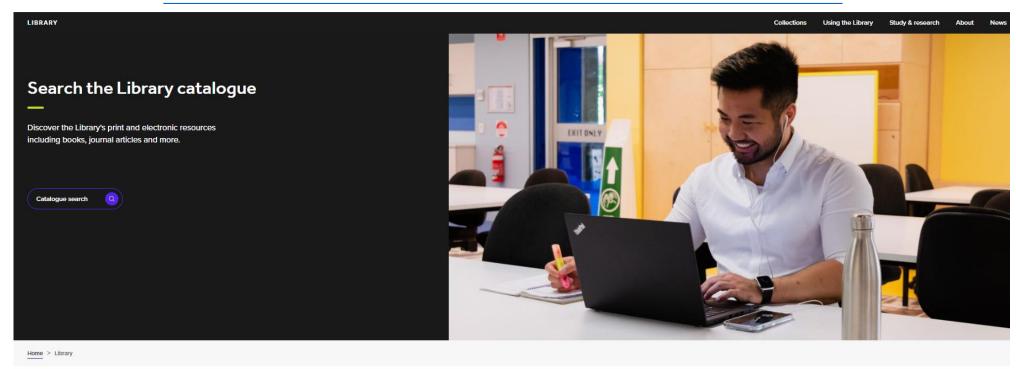
This guide is primarily for those undertaking a literature review. It outlines how to approach the searching phase systematically in order to identify relevant literature on a research question.

Why be systematic? This approach can:

- Provide a robust overview of the available literature on your topic
- · Ensure relevant literature is identified and key publications are not overlooked
- Reduce irrelevant search results through search planning
- Help you to create a reproducible search strategy.

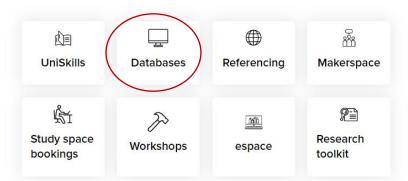


#### Where to find databases?









#### Databases

Databases are collections of online resources, providing access to journal articles, ebooks, reports, videos and more.

#### Recommended databases

The Library recommends the following databases as a starting point for all research areas, due to their broad subject coverage and powerful search interfaces:

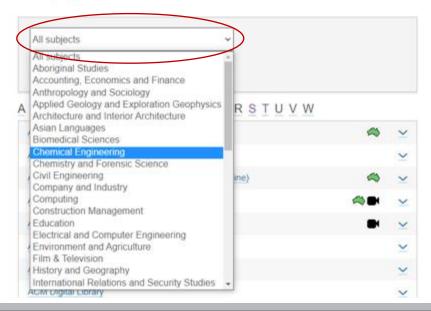
- ProQuest
- · Scopus
- · Web of Science

#### Looking for a specific format

If you are trying to locate information formats including standards, statistics, legal information, creative works and more, please see our <u>How to Find</u> guide for recommended database sources.

#### Subject specific databases

Use the dropdown menu below for database recommendations or browse alphabetically. Key databases listed for subject areas will focus on databases which contain academic content, like journal articles.



#### HOW TO FIND

A guide for when you're trying to find sources other than journal articles

#### FINDING JOURNAL ARTICLES

A guide for when you want to know more about searching



#### Database use

The library's online resources such as databases, e-books and e-journals are covered by licences which specify the conditions under which the licensed material can be used. Library resources are provided to support academic research and study. They may not be used for commercial purposes, or for paid or unpaid work on behalf of



## Which database?









- CAB Abstracts
- AGRICOLA
- Biological Abstracts





Web of Science



















## Databases about "things"....

## **\$SAGE** researchmethods

ProQuest Dissertations & Theses Global





#### Citation databases...

Scopus

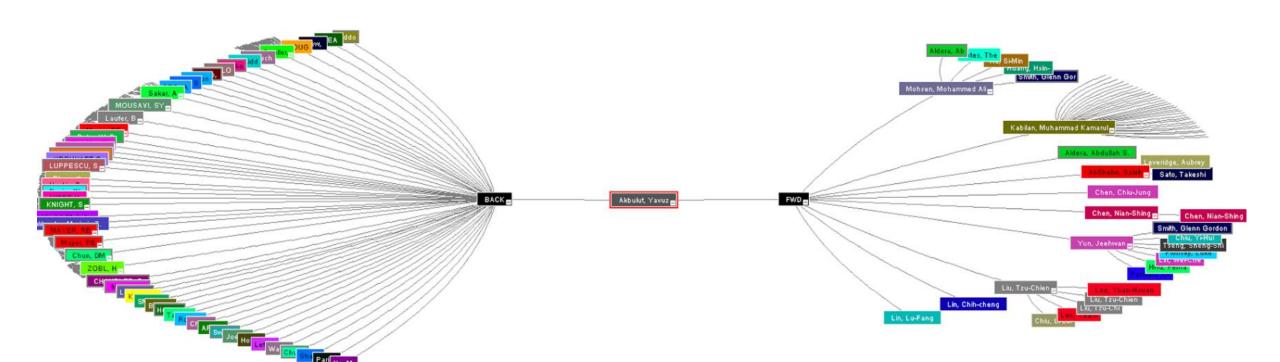
Web of Science







#### Citation databases...



Source: Web of Science<sup>188</sup>, http://thomsonreuters.com/scholarly-scientific-research/

#### Standards databases...



#### Engineering Workbench





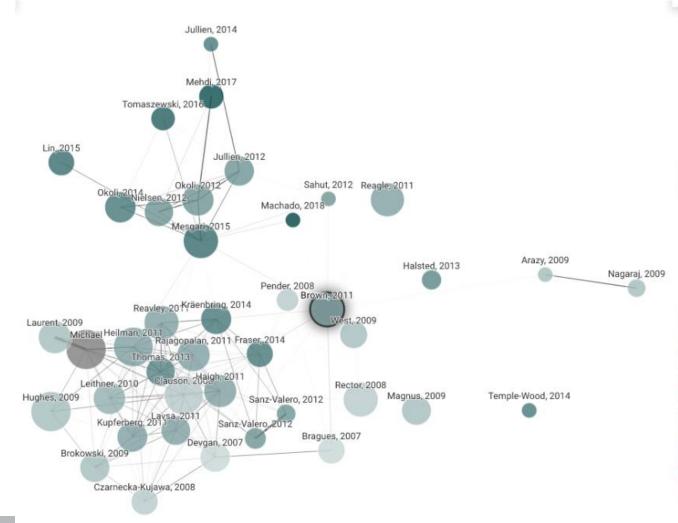


# Literature mapping tools

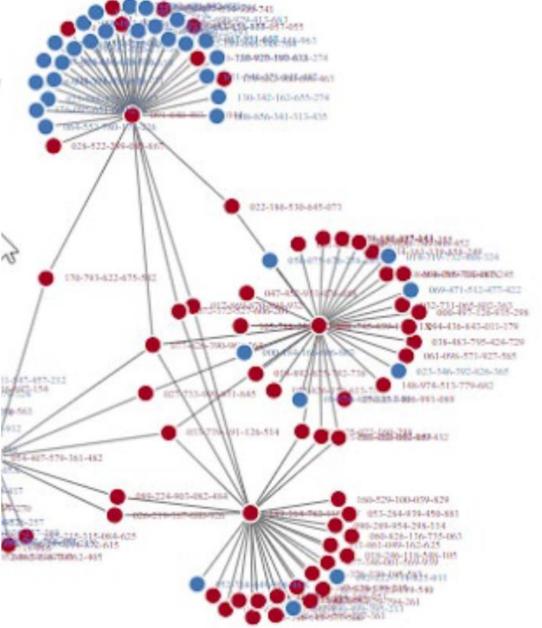
These tools ... generally accept one or more relevant seed papers and use various techniques (mostly citation based) to recommend new ones that are similar (Tay, 2021).

- Connected Papers
- Citation Gecko
- Paper Graph
- ResearchRabbit

Literature mapping tools



Next page



## **Generative Al and Research**

Advise caution and discussion with your supervisor until a clear Curtin position is developed.

#### Universities are developing guides:

Curtin University: Coursework focussed but still plenty of useful information. Research Guide planned for 2024 and a 23 Things module. https://uniskills.library.curtin.edu.au/digital/gen-ai/

Flinders University: Using Al tools in research <a href="https://library.flinders.edu.au/researchers/ai-tools-in-research">https://library.flinders.edu.au/researchers/ai-tools-in-research</a>

Otago University: Generative AI: For Researchers

https://otago.libguides.com/Generative\_AI/Researchers

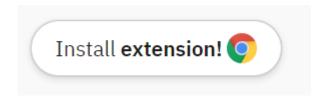
#### **Readings:**

De Silva, D. & El-Ayoubi, M. (2023). *Three ways to leverage ChatGPT and other generative AI in research*. <a href="https://www.timeshighereducation.com/campus/three-ways-leverage-chatgpt-and-other-generative-ai-research">https://www.timeshighereducation.com/campus/three-ways-leverage-chatgpt-and-other-generative-ai-research</a>.

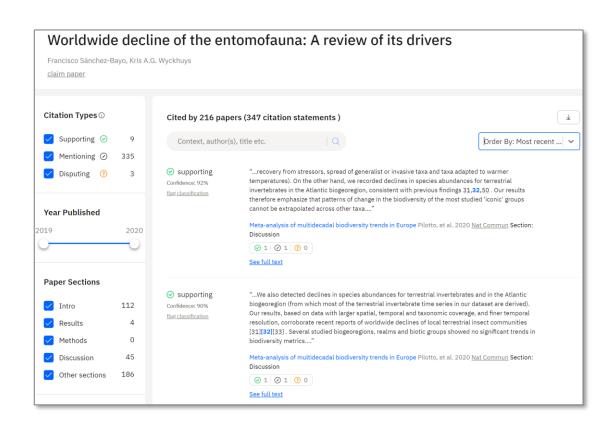
The AI search engines wrangling papers

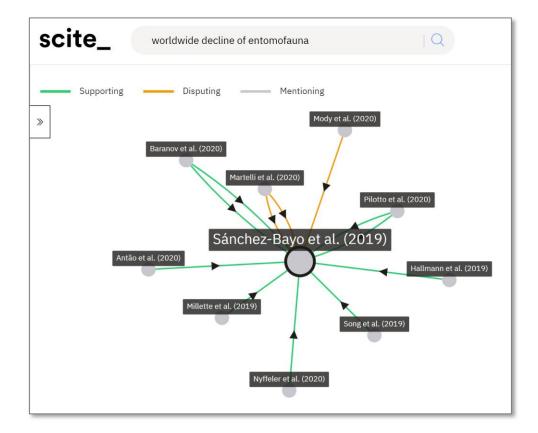
Nature | 8 min read

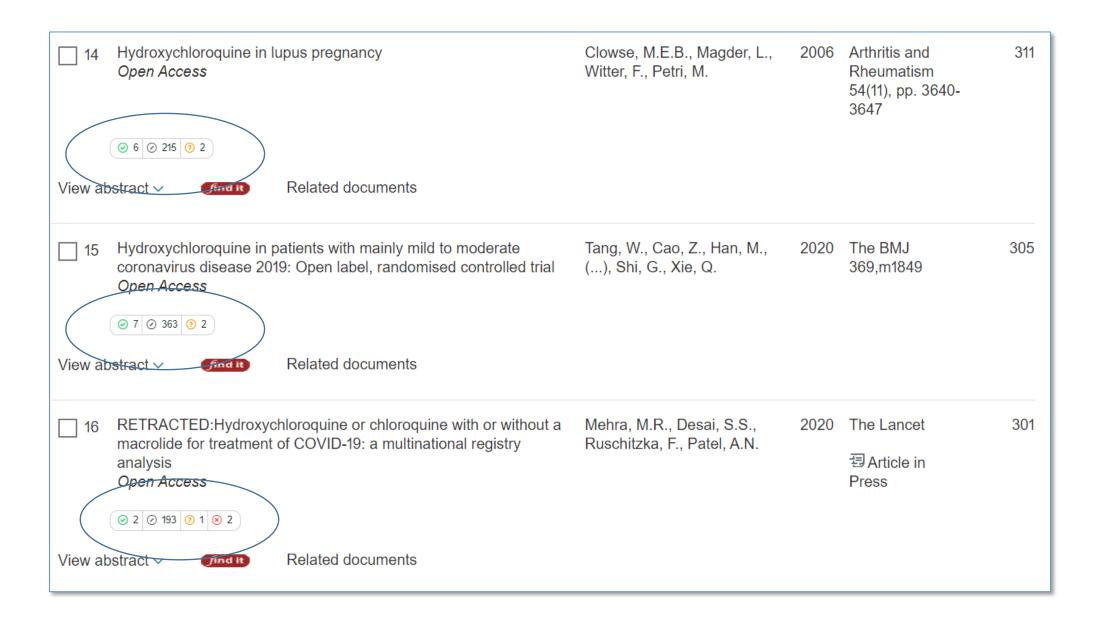




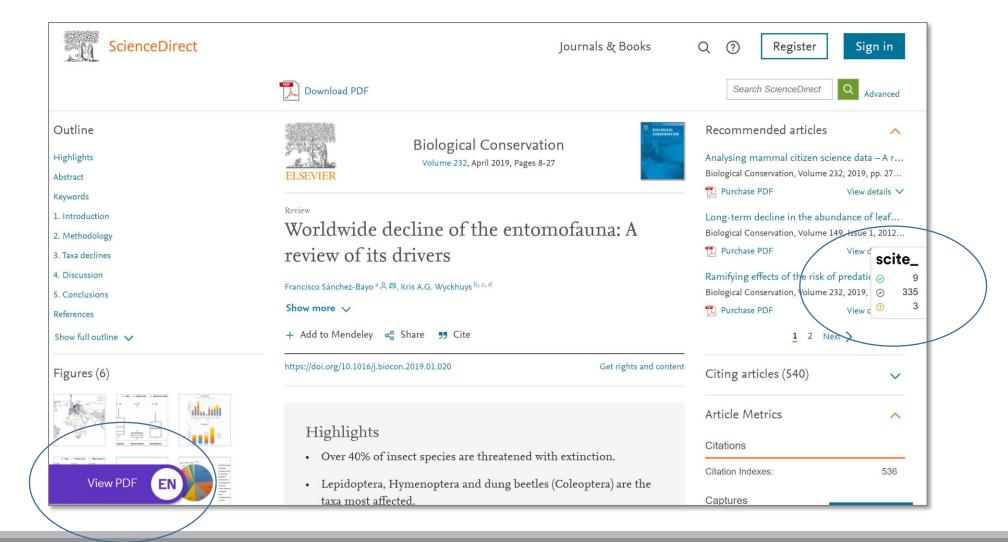
### https://scite.ai/home







# **EndNote Click and Scite working together...**



# 2. Selecting

How do you select a source to be included?

- Articles which provide an overview of the current state of debate
- Articles which are directly relevant to your research
- Articles which support your central claim
- Articles which disagree with, diverge from or contradict your claims;
   these are necessary for your critical evaluation of the literature
- Articles which are stand-alone literature reviews of the topic/field
- ✓ Tip: Write down some "boundaries" or definitions

(Daniel & Harland, 2018, p.36 – after Grix, 2002)

# 2. Track research in your discipline

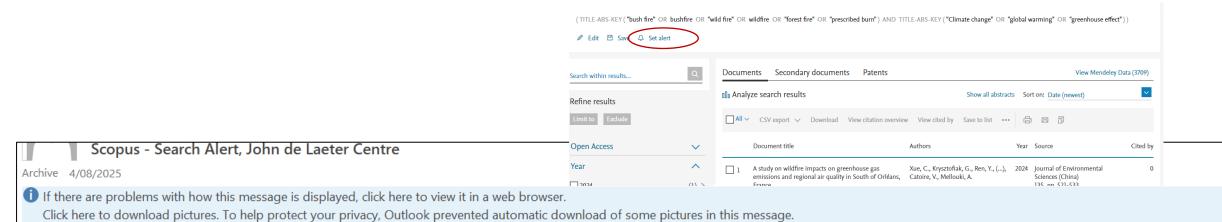
## Research Tip - Alerts

Use Alerts to keep current on your research topic

- References to articles on a topic or subject search
- Contents pages of recent journal issues
- Citations to specific articles or authors
- Google Scholar/web alerts

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cc: deballow - https://www.ficir.com/photos/30016834gN0



## Scopus

### Search Alert: John de Laeter Centre

Your search alert called "John de Laeter Centre" has found 14 new results.

Row Number	Document Title	Authors	Year	Source
1.	Eocene arc magmatism and related Cu-Au (Mo) mineralization in the Shangalon-Kyungalon district, Wuntho-Popa Arc, northern Myanmar	Ye Htut, T., Qin, K., Li, G., Sein, K., Evans, N.J.	2020	Ore Geology Reviews, 125, art. no. 103678.
2.	Structural evolution of the eastern segment of the Irtysh Shear Zone: Implications for the collision between the East Junggar Terrane and the Chinese Altai Orogen (northwestern China)	Hu, W., Li, P., Rosenbaum, G., (), Yuan, C., Sun, M.	2020	Journal of Structural Geology, 139, art. no.



# Strategic publishing



#### Getting started

Publishing strategically

A balanced publishing strategy

Journals

Books

Non-traditional research outputs (NTROs)

Theses

Conference publications

Predatory publishing

Open Access (OA) publishing

**Preprints** 

ISBNs, DOIs and Legal Deposit

Maximising visibility and publishing impact

Videos of publishing workshops

Need publishing help?

#### **Publishing strategically**

Strategic publishing involves taking a systematic approach to ensure you publish in the most effective place and maximise success in your publishing endeavours. Your publishing record will have a crucial impact on your career if you pursue academia or research and can be a valuable addition to your CV if you choose to work in industry or government.

Planning your publishing strategy will help you to:

- · plan your project and its outcomes how many papers are you aiming to write and in what time frame?
- · set realistic expectations and define the boundaries of what is possible and desirable to achieve
- identify the right journal for your paper and determine your target audience
- · amplify the impact of your research
- · meet your employer's/funder's requirements
- put a focus on your career by determining where your career path is headed.

#### Read:

Tress Academy Why you need a publishing strategy

Anne-Wil Harzing The four P's of Publishing

Anne-Wil Harzing The four C's of getting Cited

#### A balanced publishing strategy

Scholarly publishing

ERA
Journal articles...Book chapters

Impact

ERA EI Blogs...Social media...The

https://researchtoolkit.library.curtin.edu.au/publishing/strategic-publishing/getting-started/

# Top publishing tips

- Journal articles need to balance <u>finding a quality publisher</u> with the need for timely turnaround
- Check if the journal title(s) have open access fees covered by Curtin Library's agreements
- Read the journal's authors' guidelines and follow them word counts, referencing style, keywords, copyright, spelling Eng/USA
- Read articles in the journal or works published by the publisher ensure your research is a good fit
- Predatory publishers if it's too good to be true, it will not be true

Learn more here

# **Predatory Publishers**

"Predatory journals and publishers are entities that prioritize self-interest at the expense of scholarship and are characterized by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices." Nature, 11 December 2019

- Payment required, quick turnaround time
- Damage to the reputation of the researcher & institution
- Loss of research, and publisher retains copyright can't re-publish
- Send unsolicited emails to get you to submit your research

Learn more here

## **Copyright and Researchers**

## **Copyright and HDR students training module**

- Check a journal's author guidelines for any advice on re-use of copyright materials such as figures, images, graphs, diagrams and more.
- Rightslink, Permissions request template must declare in thesis

## Thesis by compliation

- Publisher agreements look for the <u>version that can be shared</u> and any embargo period
- Ensure author attribution statements are included for co-authors



## Milestone One - ORCID ID

An ORCID ID is a persistent digital identifier unique to you that distinguishes your research output from other researchers and links your name to your research to ensure a consistent, reliable attribution of your work

Register for your ORCID

Other researcher identifiers can be linked to your ORCID

## **More Researcher Identifiers**

Scopus author ID

ResearcherID

Google Scholar Profile

These identifiers connect authors with their publications in that database

Take a look at the Research Identifiers Checklist

# More research promotion tips

• DOI for all your outputs – papers, datasets, code

 Preprint servers- Get advice from the research community on your work eg Chemistry and Astronomy

Promote your research in the media and social media

Learn more here

# 5. Where to get help

# **Document Delivery**

If you find that perfect article, book, thesis, Standard... but we don't have it at Curtin...

Request document delivery

Journal articles
Standards
Theses

Recommend a new item

(Scroll to the bottom of the page)

Books Databases New journal titles

## **GRASP – Graduate Research Advanced Skills Program**



#### Dear HDR student

This is the second of six newsletters you will receive this year about the <u>Library's GRASP (Graduate Research Advanced Skills)</u> program. There is a lot of information, but there is a TL;DR - *too long; didn't read* section at the beginning with the main points.

#### TL;DR (too long; didn't read) summary

- Djeran Thesis Boot Camp 12-14 April. Sign up here, deadline: 16th of March.
- Shut Up & Write sessions start 21 March. Sign up here.
- Reminder: GRASP Research Methods Pick & Mix Sessions. Sign up here.
- Reminder: Academic writing consultations. Sign up here.
- GRASP Reading lists now available.
- Fun bit at the end: Lego Grad student.
- Get in touch with <u>LibraryResearchSupport@curtin.edu.au</u> with questions.

- Research proposal series
- Research writing series
- Shut up and write sessions
- Thesis boot camps

Online versions of previous sessions

# **Skills and Software training**

- Endnote
- Referencing
- Writing essentials
- Time management
- Qualtrics, Nvivo, Statistics, SPSS, Excel

https://bookings.library.curtin.edu.au/calendar/workshops



# Win a \$50 Coles Myer voucher & have your say!

We'd love to hear your thoughts on TL Robertson Library & how you use it.

Participate in our online survey for your chance to win one of ten \$50 Coles Group & Myer gift vouchers.

Enter at bit.ly/curtin-lib-survey



Terms and conditions apply

# What you should do now...

## **GRASP** webpage

https://researchtoolkit.library.curtin.edu.au/grasp/about-grasp/

## Questions

LibraryResearchSupport@curtin.edu.au

## Feedback/Networking

https://docs.google.com/spreadsheets/d/1t7roPInys2xK\_0zY69ivY9s09ZNs2iY\_byLVdCSKD7M/edit?usp=sharing