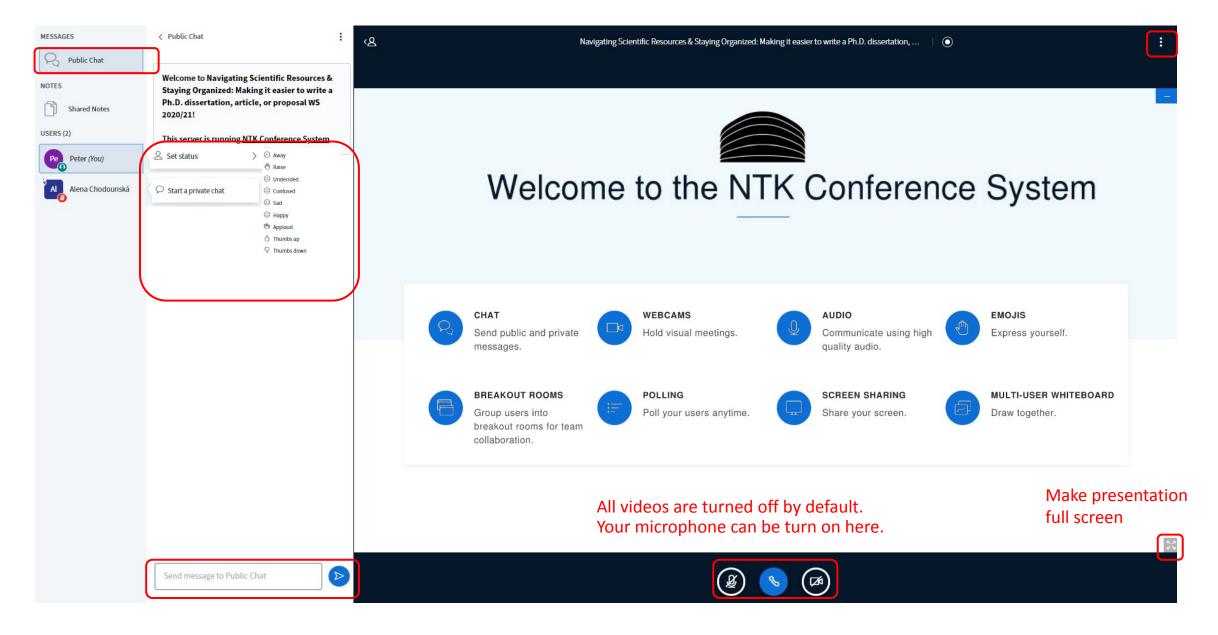
Navigating Scientific Resources & Staying Organized





Navigating Scientific Resources & Staying Organized

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

November 2021

Alena Chodounská, Tomáš Razím

Which University Do You Study?

- A. Czech Technical University in Prague
- B. University of Chemistry and Technology Prague
- C. Czech University of Life Sciences Prague
- D. Charles University
- E. Other

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
 - <u>INSPEC Thesaurus</u> (after login)
- Other useful tools:
 - Wikipedia (translation of terms, fact checking,...)
 - Google Scholar

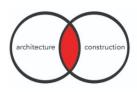
Affective computing BT: Artificial intelligence Human computer interaction RT: Behavioral sciences Cognitive systems Emotion recognition Human factors Psychology

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

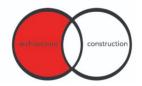
- A. AND, OR, NOT/-
- B. Phrase searching ("")
- C. Truncation (*/?/...)
- D. Advanced search & filters (search engine tools)
- E. None of the above

Database Search Tips

AND, OR, NOT/-







Phrase searching



Truncation



Filters



- Advanced search
 - (author, title, abstract, full text, other)

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

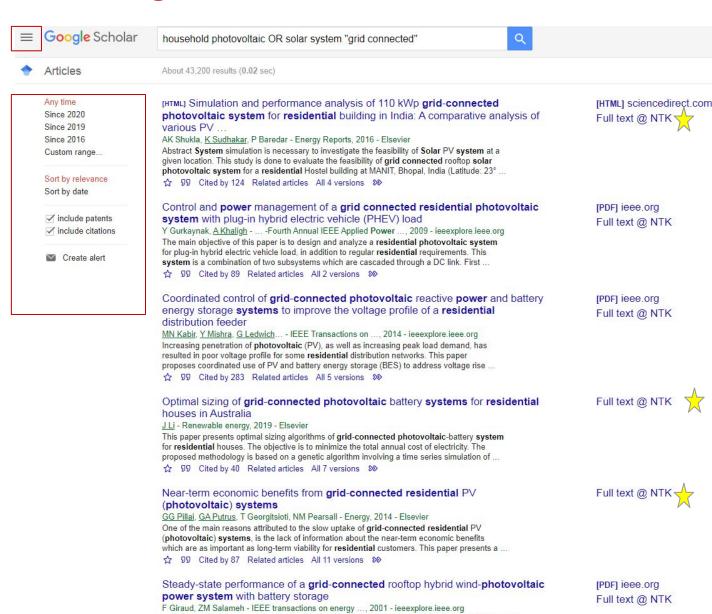
- Search engines
 - → Google Scholar
 - → Library discovery tool (<u>NTK</u>, <u>chemTK</u>, <u>CTU</u>)

...searching through multiple databases and collections mentioned below

- Article/book databases
 - → Paid databases (eg. <u>IEEE</u>, <u>ScienceDirect</u>, see <u>library subscribed databases</u>)
 - → Open databases and journals (eg. <u>DOAJ</u>, <u>PubMed Central</u> and <u>others</u>)
- Preprint collections on servers as <u>arXiv</u>, <u>ResearchGate</u>, <u>Academia.edu</u>
 or <u>institutional repositories</u>
- Citation databases <u>Web of Science</u> and <u>Scopus</u> (no full text, but links to full text)
- & **P2P servers** as <u>Sci-Hub,</u> <u>LibGen,</u> Ulož.to

2. GOOGLE SCHOLAR

Library Links



in time of low demand to use it when the residential load needs ... SALAMEH: STEADY-STATE



&

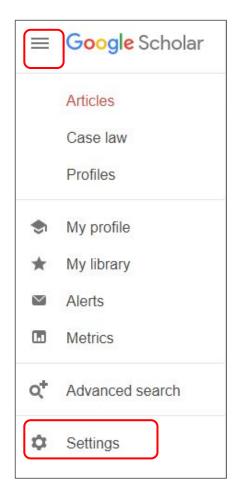


CTU is currently not fully integrated with Google
 Scholar

Library Links Setting





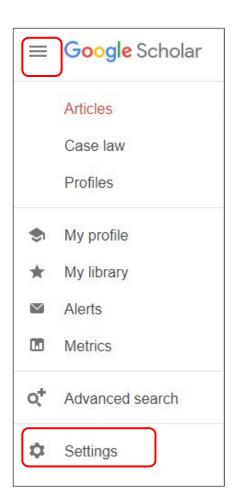


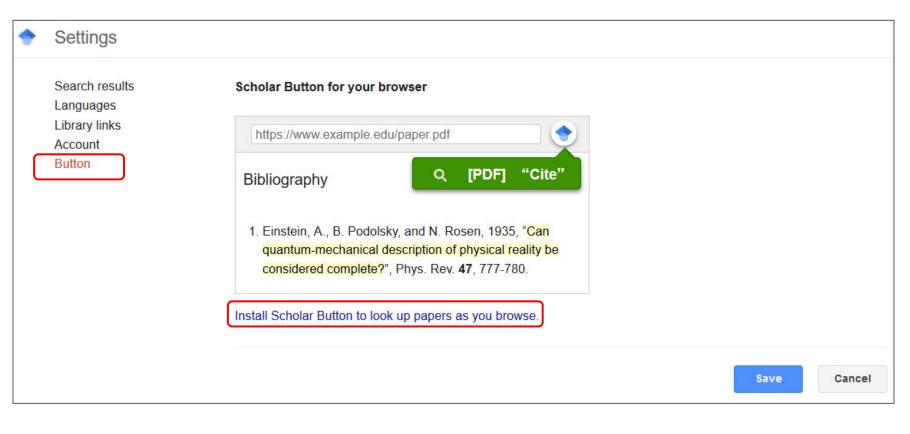
Settings		
Search results Languages Library links Account Button	 Collections Search articles (✓ include patents). Search case law. 	
	Results per page	Show library access links for (choose up to five libraries):
	10 \$ Google's default (10 results) provides the	praze e.g., Harvard
	Where results open Open each selected result in a new browser window	✓ National Library of Technology - Full text @ NTK ✓ Státní technická knihovna - Získat v STK ✓ Masaryk University - Get Fulltext at MU ✓ Vysoká škola chemicko-technologická - Získat přes VŠCHT (SFX) ✓ Czech University of Life Sciences Prague - Získat full text □ Czech National Library - Full-text @ NKP (JIB) □ Museum of Decorative Arts in Prague - Get it @ UPM via ART SG
	Bibliography manager Don't show any citation import links.	Městská knihovna v Praze - Získat v MKP □ Národní lékařská knihovna v Praze, ČR - Plný text v NLK □ Vysoká škola ekonomická v Praze (Prague University of Econom - Full-Text @ VŠE □ Mestska knihovna v Praze - ProQuest Fulltext
	Show links to import citations into BibTeX \$.	Online access to library subscriptions is usually restricted to patrons of that library. You may need to login with your library password, use a campus computer, or configure your browser to use a library proxy. Please visit your library's website or ask a local librarian for assistance.
		Save

Google Scholar Button



Browser extension (<u>Chrome</u>, <u>Firefox</u>, <u>Opera</u>)

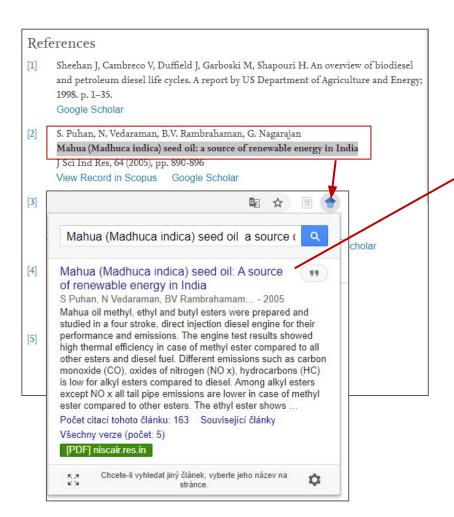




Google Scholar Button

Quick access to full text & citations download





Mahua (Madhuca indica) seed oil: A source of renewable energy in India

Sukumar Puhan¹, N Vedaraman¹, B V Rambrahamam¹ and G Nagarajan²

¹Chemical Engineering Division, Central Leather Research Institute, Chennai ²Department of Mechanical Engineering, Anna University, Chennai

Mahua oil methyl, ethyl and butyl esters were prepared and studied in a four stroke, direct injection diesel engine for their performance and emissions. The engine test results showed high thermal efficiency in case of methyl ester compared to all other esters and diesel fuel. Different emissions such as carbon monoxide (CO), oxides of nitrogen (NO_x), hydrocarbons (HC) is low for alkyl esters compared to diesel. Among alkyl esters except NO_x all tail pipe emissions are lower in case of methyl ester compared to other esters. The ethyl ester shows lower NO_x emission compared to other esters. Based on this study, mahua oil methyl ester performs well compared to other esters on the basis of performance and emissions.

Keywords: Biodiesel, Diesel engine, Emissions, Mahua oil, Renewable energy

IPC Code: F02B13/10

Introduction

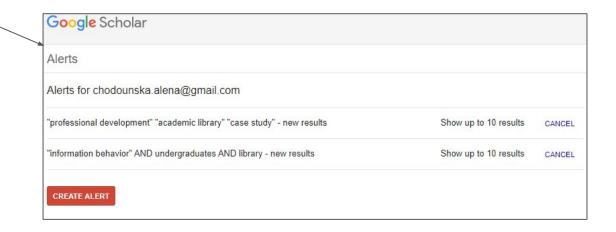
Worldwide energy consumption has increased 17 fold in the last century and, as a consequence, the carbon dioxide (CO₂), sulfur dioxide (SO₂) and nitrogen oxides (NOx) emissions from the combustion of fossil fuels have damaged the atmosphere to a significant extent. CO₂ emissions have risen over the last two decades, reaching an atmospheric content of 360 ppm, estimating the world CO₂ emissions at about 26 billion metric ton per year.

diesel fuels substitute; soybean oil in the USA, rapeseed and sunflower oils in Europe, palm oil in south East Asia and coconut oil in Philippines are being considered as substitutes for diesel fuels. Since edible oil demand is higher than its domestic production (Table 1), there is no possibility of diverting this oil for production of biodiesel in India. Being a tropical country, India is rich in forest resources having a wide range of trees, which yield a significant quantity of oilseeds. The production of

Google Scholar Tips & Tricks

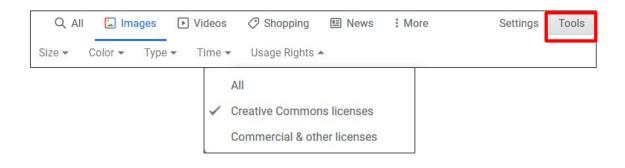
- Library links
- Citation management tools
- Google Scholar Button
- Google Scholar Alerts
- Google Scholar Account
 - GS author profile
 - My library





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

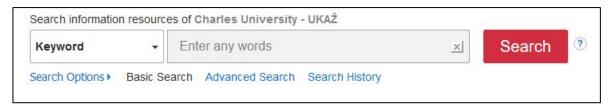
Library Discovery Tools



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



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



https://ukaz.cuni.cz



- 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





chem^{TK}

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

What We Have -

Services & Support -

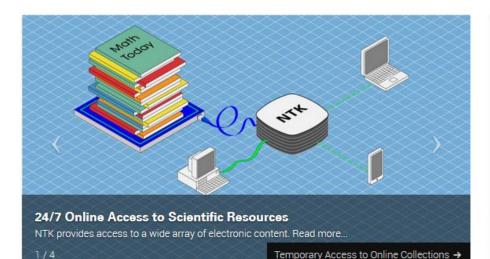
Culture & Events - Who We Are -

Projects & Innovation -

eLIB

Search NTK pages... Q

► Czech My account -



NTK Hours: 8:00 - 2:00 All hours Team Study Rooms Print, Scan, Copy What's On Current seating occupancy: 259 out of 900

Contact Us

- Contact Form
- (+420) 232 002 535

(Mon: 12-8 p.m., Tue-Fri: 9 a.m.-5 p.m.)

info@techlib.cz
 info@techlib.cz

F You O

Quick Links

- Education & Research Support
- Subject Guides
- Tutorials
- Become a Patron
- How to... (tech guides)
- Places to Study
- Suggest a Purchase
- Interlibrary Loan Services
- Conference Services & Rentals

News

Digitization of EOD historical books

5. 10. - From October 1-31, you can order digital copies of historical books from nine EOD (eBooks on Demand) member libraries for 10 euros. More information can be found here.

Winter Semester webinars

23. 9. - We've prepared a series of free Winter Semester webinars for doctoral students and other early career researchers. Registration is open.

Changes starting September 1

1. 9. - Starting September 1, you can use the Team Study Rooms and the Quiet Study Room again. Library seating capacity has been increased to 900, and 46 persons can now be in

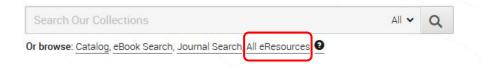
Selected eResources

- Cambridge Journals
- EBSCOhost
- Emerald Premier
- Encyclopedia Britannica
- IEEE Xplore
- IOPscience
- Nature Complete
- Oxford English Dictionary
- Oxford Journals
- ProQuest Central
- ProQuest EBook Central
- ScienceDirect
- Scopus
- SpringerLink
- Taylor & Francis Online
- Web of Science
- Wiley Online Library

www.techlib.cz/en/

Direct Access to **Databases** and Collections Provided by NTK





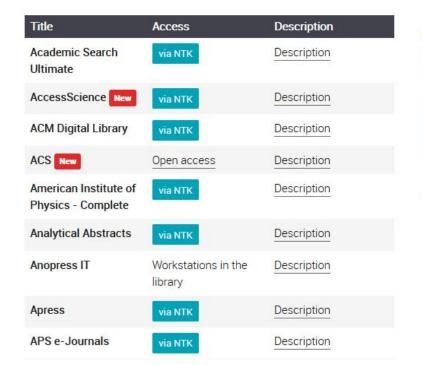
What We Have - Services & Support - Culture & Events - Who We Are - Projects & Innovation - Search NTK pages...Q

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.





Type to filter

| RESOURCE TYPE
| CONTENT TYPE
| SUBJECTS
| ACCESS
| CONTENT LANGUAGE



My account -

Contacts

chem^{TK}

eResources Acquisition

eiz@techlib.cz

(+420) 232 002 572

eResources Administration

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

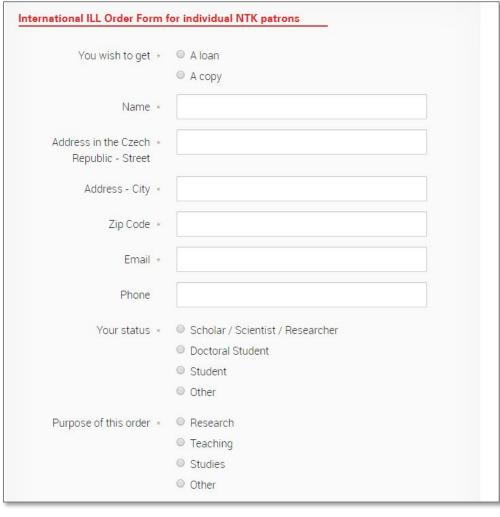
Getting Full Text (when Sci-Hub is down) ;-)

- 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
 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



For materials that are not available online:

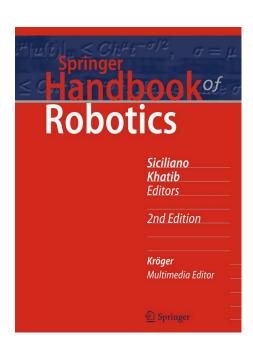
- Use <u>ILL form</u> (Interlibrary Loan)
- Ask for assistance: info@techlib.cz

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

4. TYPES OF RESOURCES

Handbooks, Textbooks, & Encyclopedias

To get familiar with terminology and context for a new project



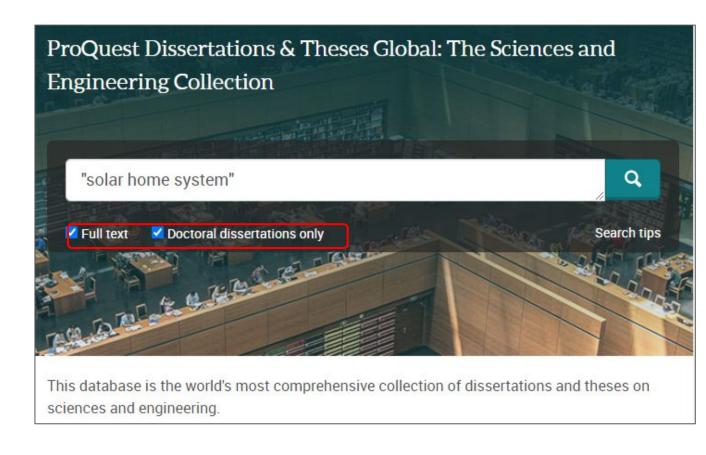
56 Hum	anoids	
Charle	es C. Kemp, Paul Fitzpatrick, Hirohisa Hirukawa, Kazuhito Yokoi,	
	ke Harada, Yoshio Matsumoto	1307
56.1	Why Humanoids?	1307
56.2	History and Overview	
56.3	Locomotion	
56.4	Manipulation	
56.5	Whole-Body Activities	
56.6	Communication	
56.7	Conclusions and Further Reading	1329
Refer	ences	
57 Safet	v for Physical Human–Robot Interaction	
	io Bicchi, Michael A. Peshkin, J. Edward Colgate	1335
57.1		
57.2		
57.3	sared to transfer on principal and the same of the sam	
57.4		
57.5	Safety Standards for pHRI	
57.6	Conclusions	
References		
58 Socia	I Robots that Interact with People	
	ia Breazeal, Atsuo Takanishi, Tetsunori Kobayashi	12/10
58.1	Social Robot Embodiment	
58.2	Multimodal Communication	
58.3	Expressive Emotion-Based Interaction	
58.4		
58.5	Conclusion and Further Reading	
50.5	ences	
1 1 2 2 2		1500
	t Programming by Demonstration	1271
aude	Billard, Sylvain Calinon, Rüdiger Dillmann, Stefan Schaal History	

SICILIANO, Bruno a Oussama KHATIB, ed. <u>Springer Handbook of Robotics</u>. 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)
- → Use a filter (available e.g., in Scopus, Web of Science, Semantic Scholar)



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, GDipPsych³ , & Wendy Moyle, PhD, MHSc, BN, RN⁴

- 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

Use **citation databases** to find reliable journals and proceedings:

→ ("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 (@ NTK)



Web of Science (@ NTK)

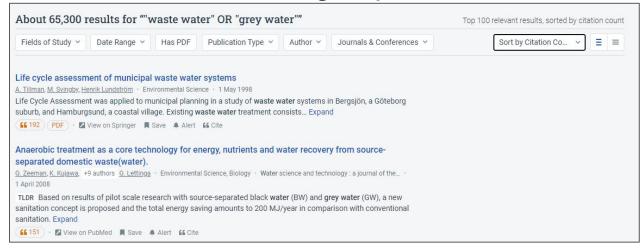


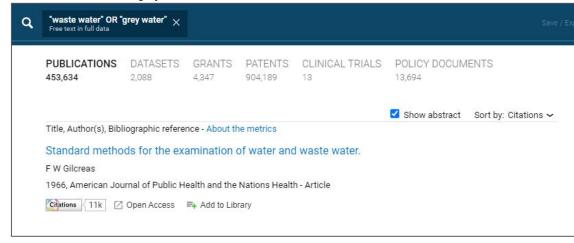
→ Learn more about Citation Databases at <u>our webinars</u> (November 16 & November 23)

Finding Seminal Articles (2)

Other **search engines for academic resources** that enable sorting results by number of citations:

- <u>Semantic Scholar</u> (a free search engine developed by the <u>Allen Institute for All</u>)
- <u>Dimensions</u> (a commercial scholarly search platform, the free version includes searching in publications and datasets only)



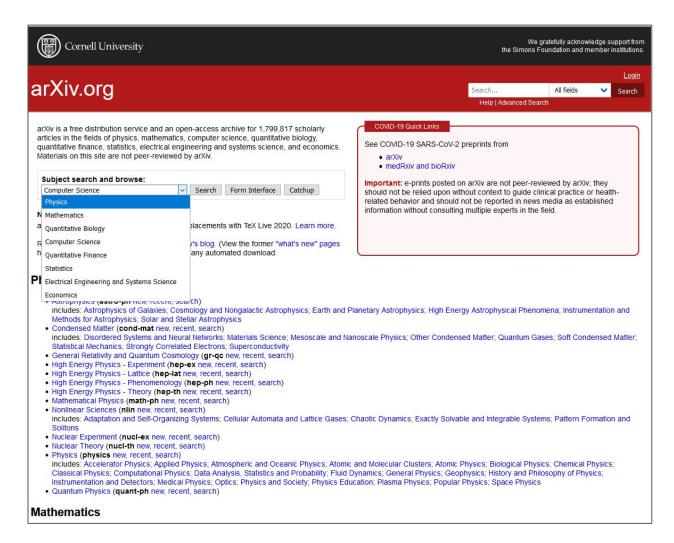


Semantic Scholar: https://www.semanticscholar.org/

Dimensions: https://app.dimensions.ai/discover/publication

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

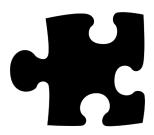
- Follow key scholars and institutions in your research field
- Preprint servers (<u>arXiv</u>, <u>bioRxiv</u>, others): articles published before peer review
- Conference papers, conference proceeding books
- Informal exploration of early-stage ideas: blogs, social networks, lectures



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?



Reading: Smart, Careful, Mindful

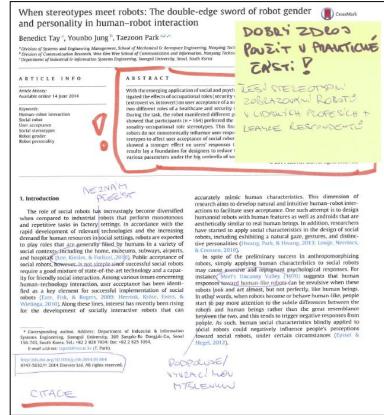
- Be smart and picky. Focus on abstract, conclusion, and specific issues (e.g., research design) before reading the whole paper
- Make notes from the very beginning; it will save your time later
- Create your own system to organize materials and thoughts
- Get familiar with writing and citing habits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

Managing Resources

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



Example of electronic notes



Example of written notes

Citation Management Tools

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

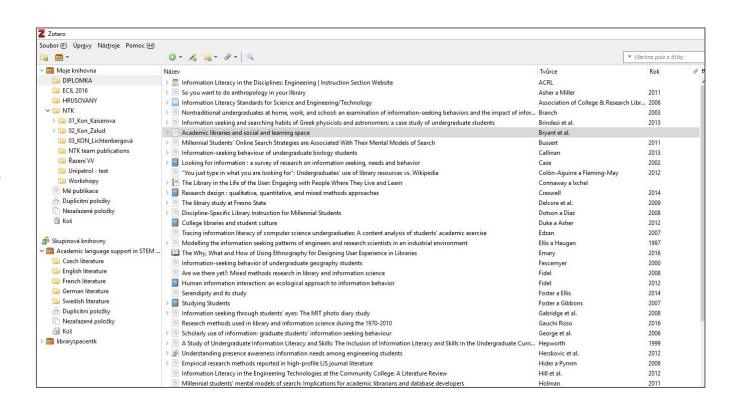
Zotero

CitacePRO

Mendeley

<u>JabRef</u> (integrated with LaTeX)

EndNote (subscription for UCT students)



Use them, but don't trust them absolutely!

6. PUBLISHING AND PRESENTING RESEARCH OUTPUTS

Have You Ever Published in a Scientific Journal or Conference Proceedings?

- A. Yes, as a co-author
- B. Yes, as the corresponding (lead) author
- C. Not at all

How to Find High-quality Journals and Conferences

- Ask your mentor and/or peers
- Use citation and analytical databases to identify reliable journals and conferences: <u>Web of Science</u>, <u>Scopus</u>, <u>Inspec Analytics</u>
- Try recommender services such as those from <u>Elsevier JournalFinder</u>, <u>WoS</u>
 <u>Manuscript Matcher</u>
- Look for conferences specifically intended for doctoral candidates in order to gain experience presenting in English (e.g., <u>ECRF-ICSA</u>, <u>DOKBAT</u>)
- Read tips about <u>avoiding predatory and questionable conferences</u>

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

Choosing the Right Journal or Conference

- Consider relevance of the conference to your field as well as its intended audience
- Review its quality & reputation (journal metrics, editorial board, conference organizers, mentor recommendations)
- Review the <u>peer-review process</u> and author services provided
- Investigate discoverability (e.g., can the journal or conference be easily found online)
- Open Access, Open Data (Research Data: Sharing and Publishing)
- Article processing charge (APC) and other costs and benefits of submitting an article or attending the conference
- Learn whether you can submit the same content to multiple journals or conferences at the same time (or not)

Northcentral University Library (2021). Research Process: Scholarly Publication.

https://ncu.libquides.com/researchprocess/scholarlypublication

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://quides.lib.unc.edu/measure-impact/publish

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 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:

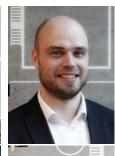
- <u>STEMskiller</u> comprehensive skills set map for early career researchers
- LaTeX support
- Bibliometric services
- Subject guides































Contacts

Alena Chodounská

alena.chodounska@techlib.cz

Tomáš Razím

tomas.razim@techlib.cz

Thank you

Questions?