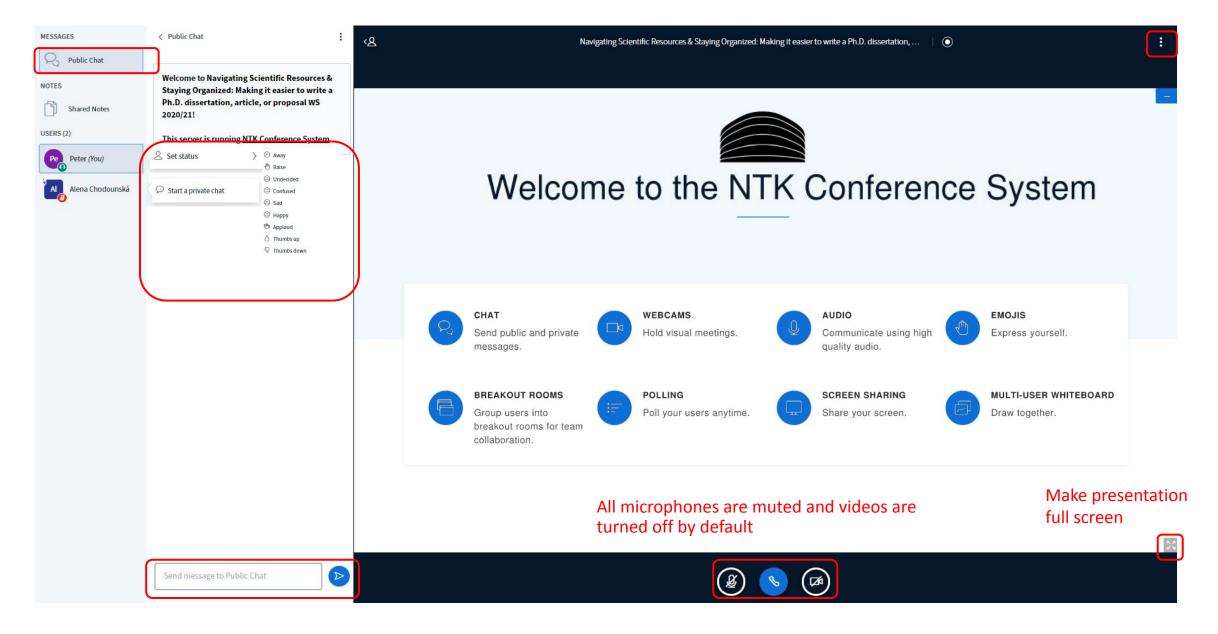
Navigating Scientific Resources & Staying Organized





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

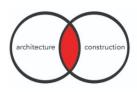
Affective computing BT: Artificial intelligence Human computer interaction RT: Behavioral sciences Cognitive systems Emotion recognition Human factors Psychology

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

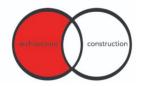
- A. AND, OR, NOT/-
- B. Phrase searching ("")
- C. Truncation (*/?/...)
- D. Advanced search & filters (search engine tools)
- E. None of the above

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

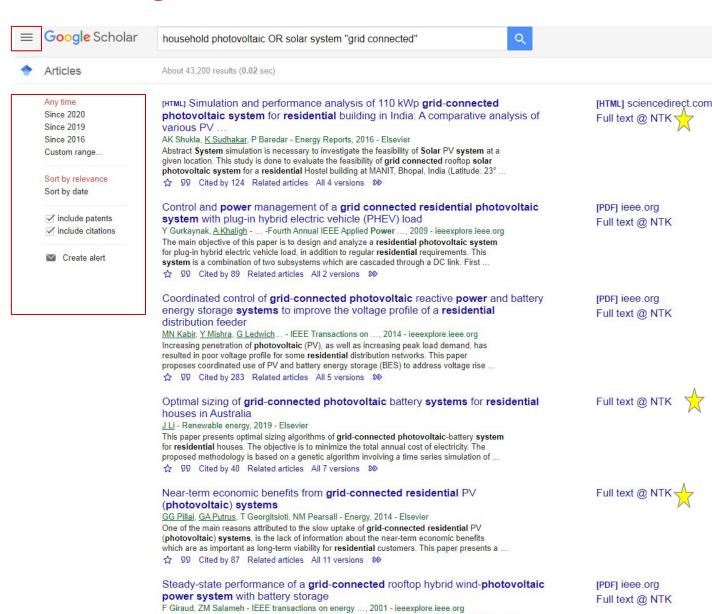
- Search engines
 - → Google Scholar
 - → Library discovery tool (<u>NTK</u>, <u>chemTK</u>, <u>CTU</u>)

...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



&

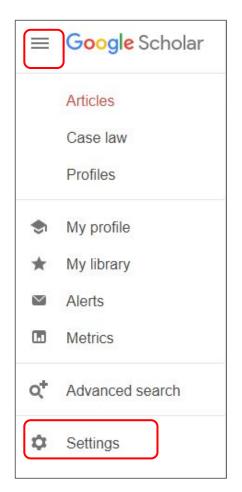


CTU is currently not fully integrated with Google
 Scholar

Library Links Setting





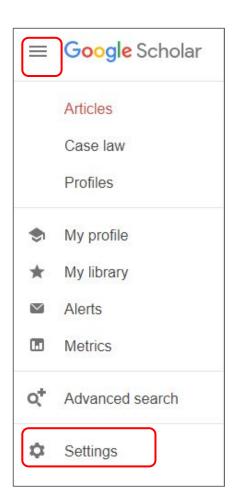


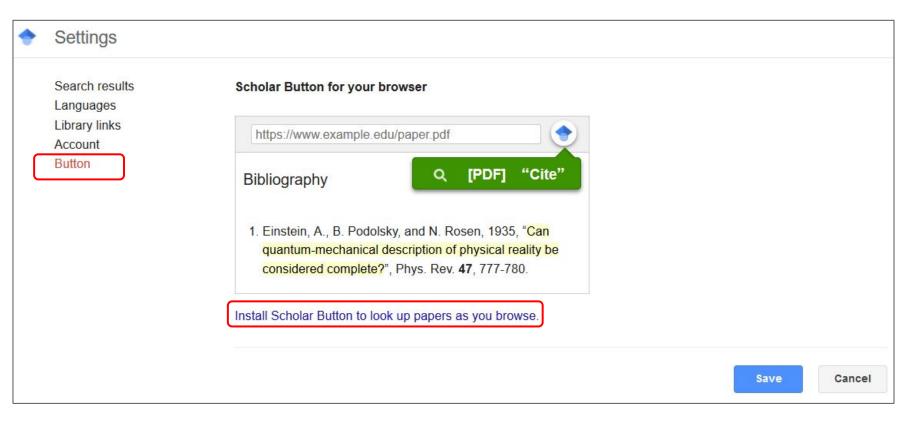
| Settings | | |
|---|---|--|
| Search results Languages Library links Account Button | Collections Search articles (✓ include patents). Search case law. | |
| | Results per page | Show library access links for (choose up to five libraries): |
| | 10 \$ Google's default (10 results) provides the | praze 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>)

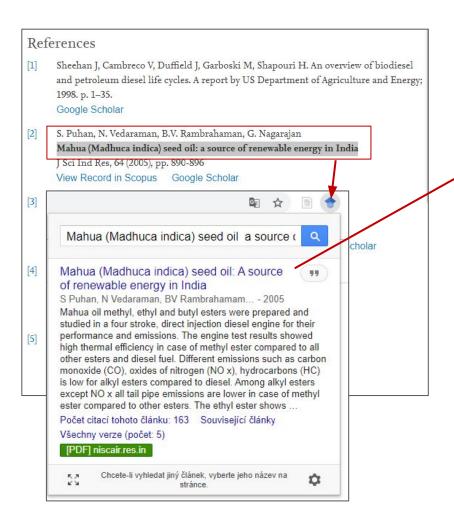




Google Scholar Button

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

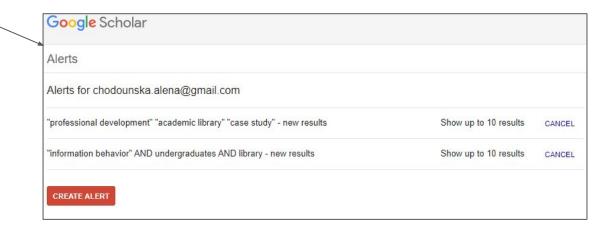
Worldwide energy consumption has increased 17 fold in the last century and, as a consequence, the carbon dioxide (CO₂), sulfur dioxide (SO₂) and nitrogen oxides (NOx) emissions from the combustion of fossil fuels have damaged the atmosphere to a significant extent. CO₂ emissions have risen over the last 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

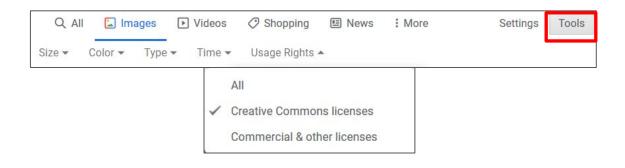
- Library links
- Citation management tools
- Google Scholar Button
- Google Scholar Alerts
- Google Scholar Account
 - GS author profile
 - My library





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

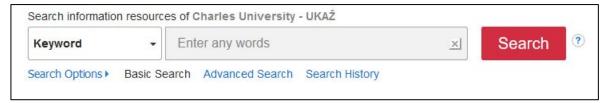
Library Discovery Tools



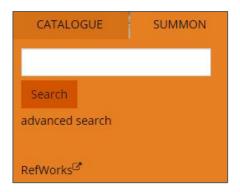
https://www.techlib.cz/en/



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



https://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

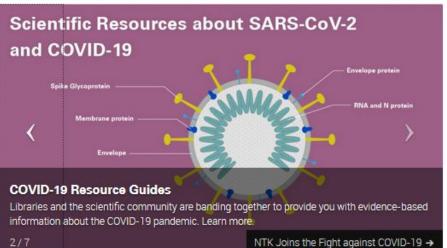
eJournals & eBooks

(eResources) and

What We Have -

Services & Support - Culture & Events - Who We Are - Projects & Innovation -

Search NTK pages... Q



Selected eResources

Returning materials

30. 4. - Starting May 1, you can return print materials using the Bibliobox located in front of the NTK3 entrance. Please note that due to the necessity of quarantining returned materials, all items you return will be removed from your library a ...

more →

News

Preparing to open main library spaces

24. 4. - We are ensuring disinfection and safety mechanisms for our patrons and staff. Therefore, will not open our main spaces on April 27. In the meantime, we stand ready to assist you

Loan Services during the COVID-19 Crisis

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

Today we're closed All hours Team Study Rooms Print, Scan, Copy Wi-Fi What's On

Contact Us

- Contact Form
- (+420) 232 002 535 (Mon-Fri, 9am-5pm)
- info@techlib.cz









Quick Links

- Education & Research Support
- Subject Guides
- Futorials
- Become a Patron
- How to... (tech guides)
- Places to Study
- Suggest a Purchase
- Interlibrary Loan Services
- Conference Services & Rentals
- High Schools Support
- Contact Info and Directions
- NTK in numbers

Quick access to main databases including Web of Science and Scopus

www.techlib.cz/en/

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





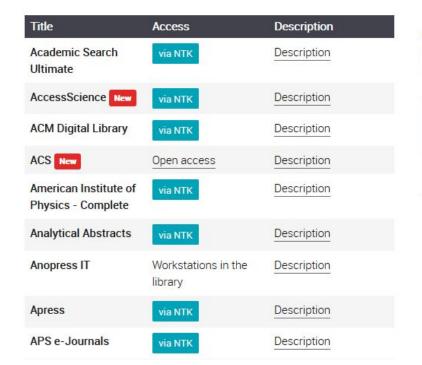
What We Have - Services & Support - Culture & Events - Who We Are - Projects & Innovation - Search NTK pages...Q

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

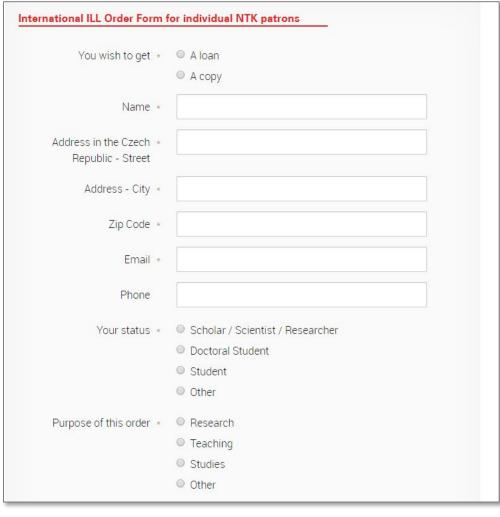
Getting Full Text (when Sci-Hub is down) ;-)

- 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:

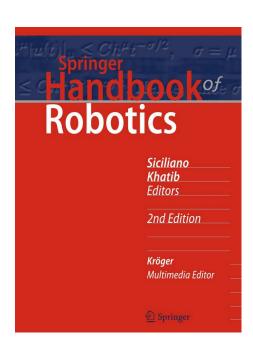
- Use <u>ILL form</u> (Interlibrary Loan)
- Ask for assistance: info@techlib.cz

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



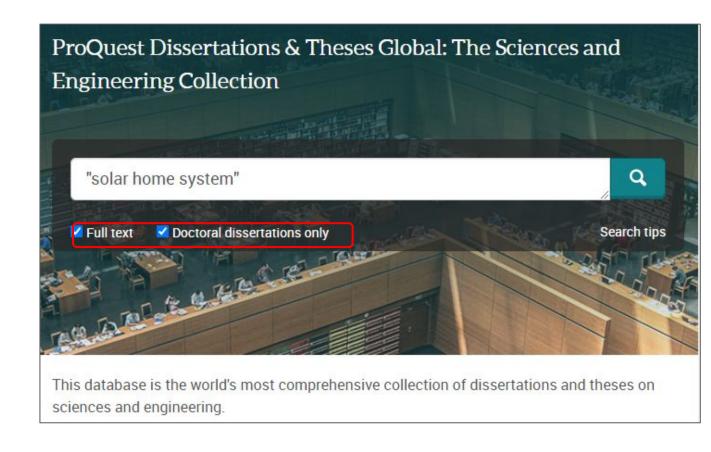
| 56 Hum | anoids | |
|-------------|--|-------|
| Charle | es C. Kemp, Paul Fitzpatrick, Hirohisa Hirukawa, Kazuhito Yokoi, | |
| | ke Harada, Yoshio Matsumoto | 1307 |
| 56.1 | Why Humanoids? | 1307 |
| 56.2 | History and Overview | |
| 56.3 | Locomotion | |
| 56.4 | Manipulation | |
| 56.5 | Whole-Body 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 | |
| Refer | ences | |
| 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 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)
- → <u>ProQuest Thesis</u> and <u>other international repositories</u>

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)



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, Oueensland 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

Web of

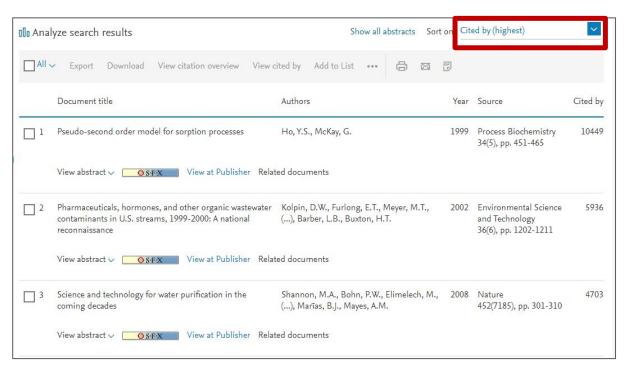
Science

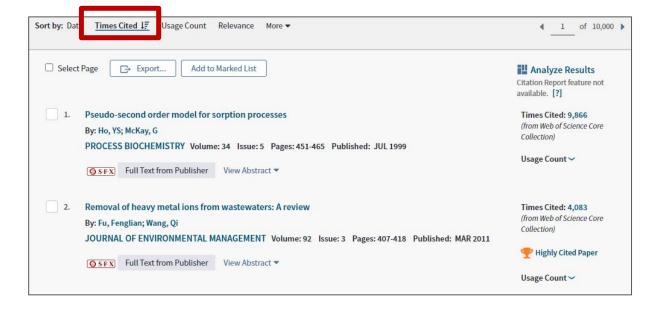
Finding Seminal Articles

- 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

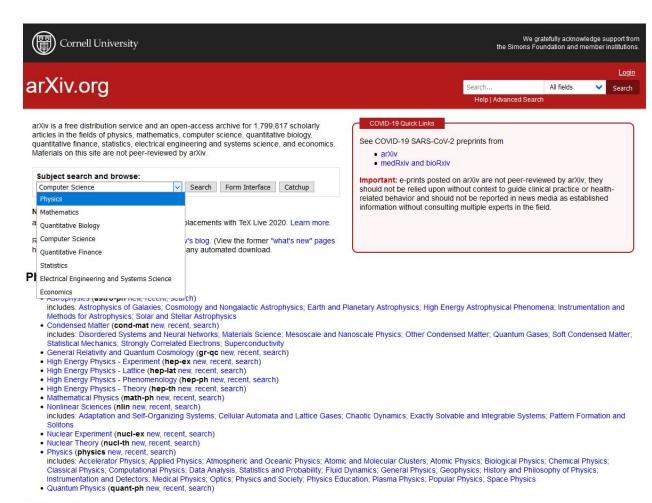
https://resources.library.lemoyne.edu/guides/EdD/Sy stematic-Review/Seminal-Works





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 (<u>arXiv</u>, <u>bioRxiv</u>, others): articles published before peer review.
- Conference papers, conference proceeding books.

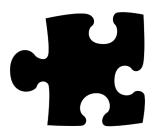


Mathematics

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 for evaluating usefulness
- Notes about the relationship with your work (methodology, contradictory or confirmatory conclusions, and so on)
- Electronic or written notes



that the American system of higher education is perceived to be pre-

eminent and when higher education institutions (hereafter, HEIs)

around the world are searching to improve their performance they look

to universities in the U.S. as their benchmark model, while scholars

from the whole world are attracted to American academia (Clotfelter

2010). However, from the internal American perspective, the higher education sector is not free of problems, and its worldwide dominance

has also recently been challenged (Altbach et al., 2011), Nowadays,

HEIs in both continents are under pressure due to declining public

Received 8 August 2016; Received in revised form 14 July 2017; Accepted 26 July 2017

and public pensions, see Kwiek, 2015]

Available online 14 August 2017 0048-7333/ © 2017 Elsevier B.V. All rights reserved.

1 http://www.sharpfairacking.com/AKWU2016.html. It should be underlined that university rapurely scientific methodology such as DEA or other nonparametric methods as used in our paper. Do

nality, lack of statistical robustness etc.) and propose a new generation of ran

HEI's managers and policymake

regional and country-specific ones.

Data envelopment analysis (DEA) is used in this study - a metho-

dology which constructs a production frontier in the multi-input/multi

output case - in order to evaluate the relative efficiency of a sample of

500 higher education institutions (in ten European countries and the U.S.) for the period between 2000 and 2012. Different models are es-

timated for different input-output sets and assumed frontier: global,

Nadezda Firsova

The research is motivated by the fact that most previous studies Insert Text

Zkontrolovat zdroje pro rešerši

25/11/2020 18:48:46 ×

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

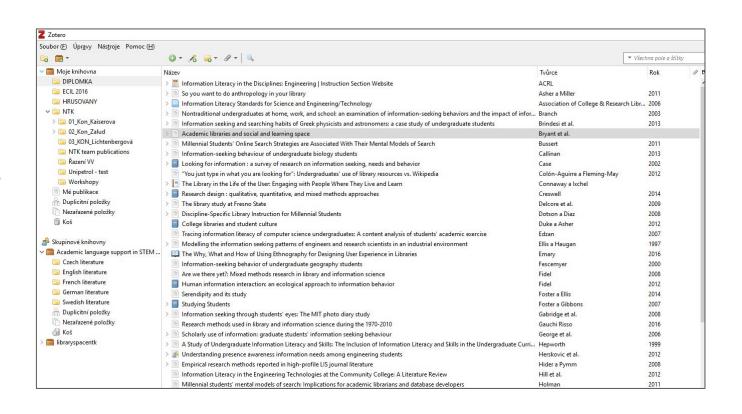
Zotero

<u>CitacePRO</u>

Mendeley

<u>JabRef</u> (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**

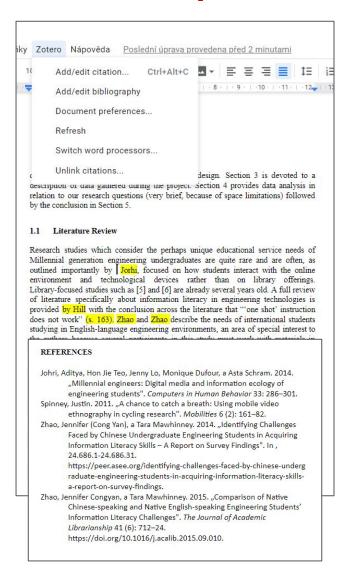
Strengths

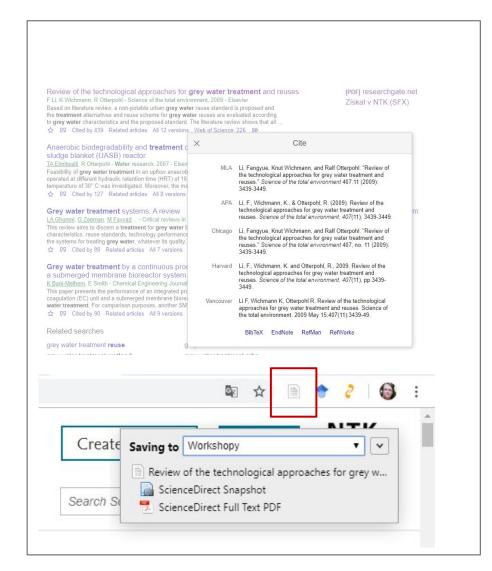
- Quick download from databases, Google Scholar, and "regular" web pages
- Integration with Word and Google Docs allows automatic creation of reference list
- Sharing citations with team
- Good management options (including tags, groups, and de-duplication)
- Synchronization between devices and cloud

Weaknesses

Limited storage (300 MB in free version)

Zotero (Personal Experience)





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)

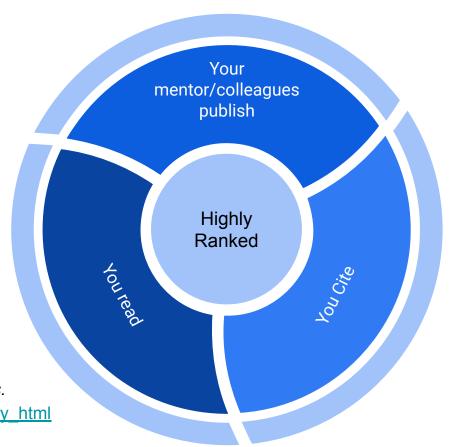
University of Manchester Library. (n.d.). *How to get published in academic journals.*https://www.escholar.manchester.ac.uk/learning-objects/mre/getting-published/story_html
5.html

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 <u>avoiding predatory and questionable conferences</u>
- 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., <u>IEEE</u> conferences)
- Look for conferences for doctoral students to gain experience presenting in English (e.g., <u>ECRF-ICSA</u>, <u>DOKBAT</u>)
- 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 (<u>Publons</u>) | <u>Scopus ID</u> | 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 <u>remote consultation</u>:

- 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

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Thank you

Questions?