

Semantic Scholar: A User Guide for Researchers

Navigating Scientific Literature with AI

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- **Date:** 03/10/2025
- **Version:** 1.0
- **Tool Covered:** [Semantic Scholar](#)

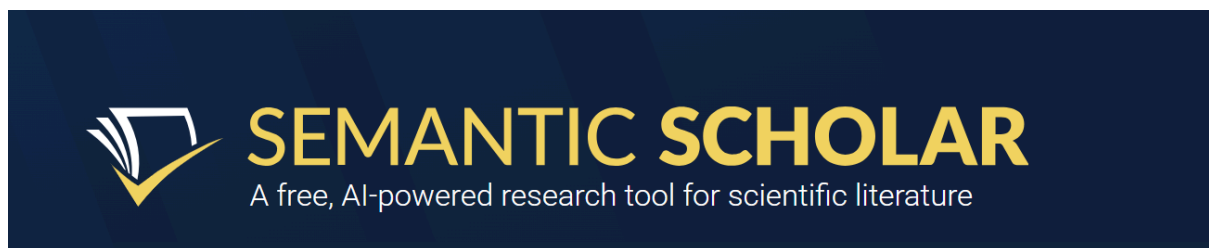


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Introduction

Semantic Scholar is a free research discovery engine created by the Allen Institute of Artificial Intelligence. It assists scholars, professionals, and students in locating, filtering, and analyzing academic papers through artificial intelligence. In contrast to Google Scholar or other search engines, Semantic Scholar does not limit itself to the match of a keyword. It displays influential references, author connections, connected topics, and AI-driven suggestions.

This guide is designed for research scholars, graduate students, and new users of the Semantic Scholar service. After this guide, you will:

- Learn to search academic papers effectively.
- Know how to work with author profiles and citation graphs.

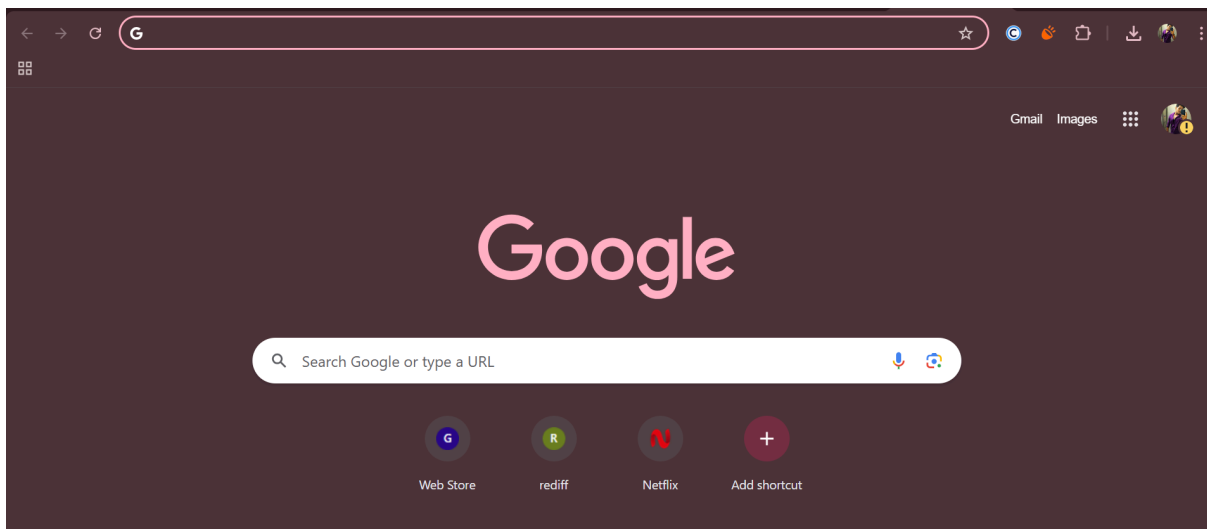
- How to save, organize, and export research articles.
- Take advantage of such advanced features as personalized feeds and Semantic Reader.

Getting Started

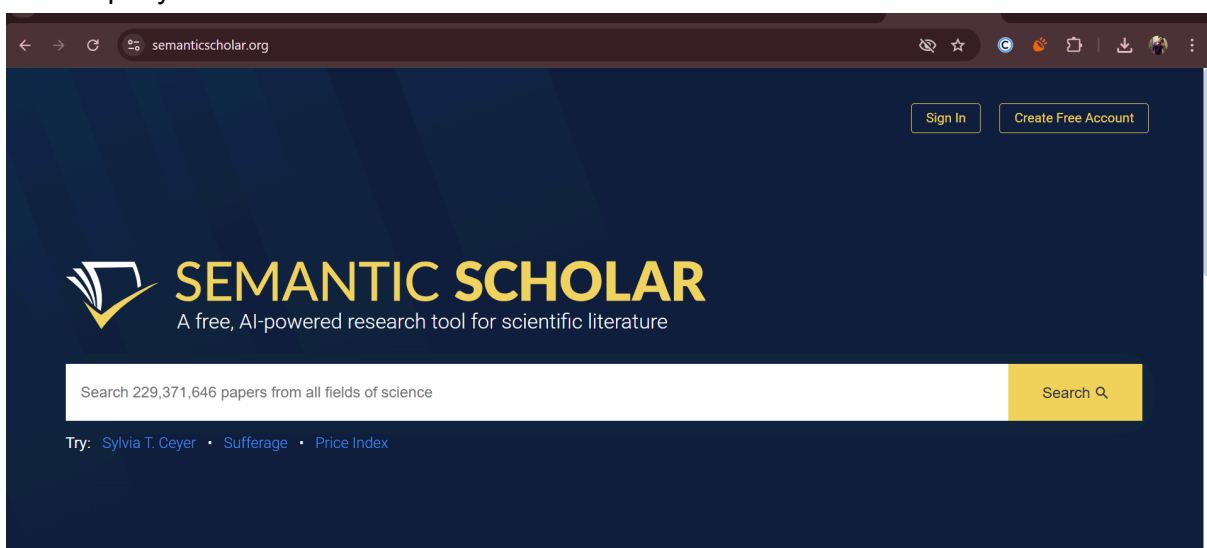
To be useful, one should know how to use Semantic Scholar, including how to access the site and create an account. This section describes the process for entering the site and, if necessary, creating a free account to personalize it.

Step 1: Open Semantic Scholar

- Open any web browser (Google Chrome, Firefox, Edge, Safari).

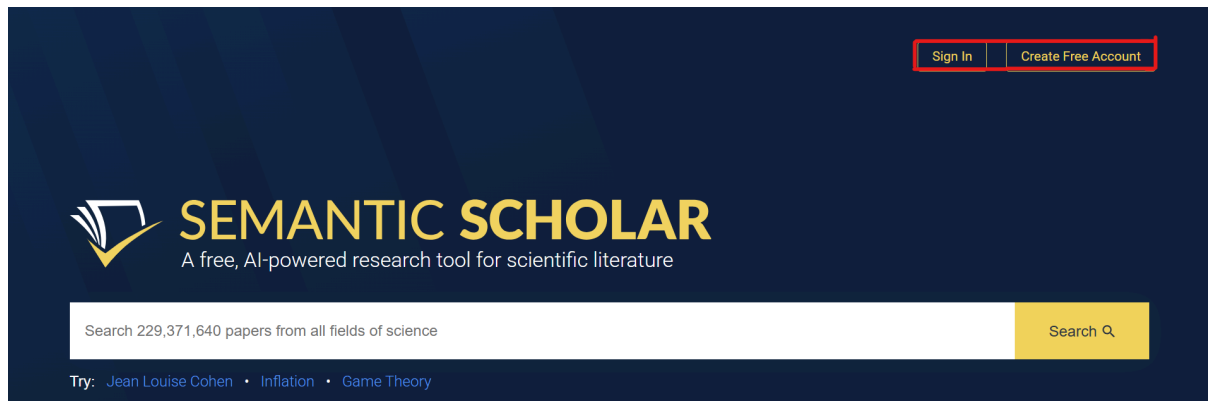


- Go to <https://www.semanticscholar.org/>
- The homepage will display a large search bar where you can type your research query.



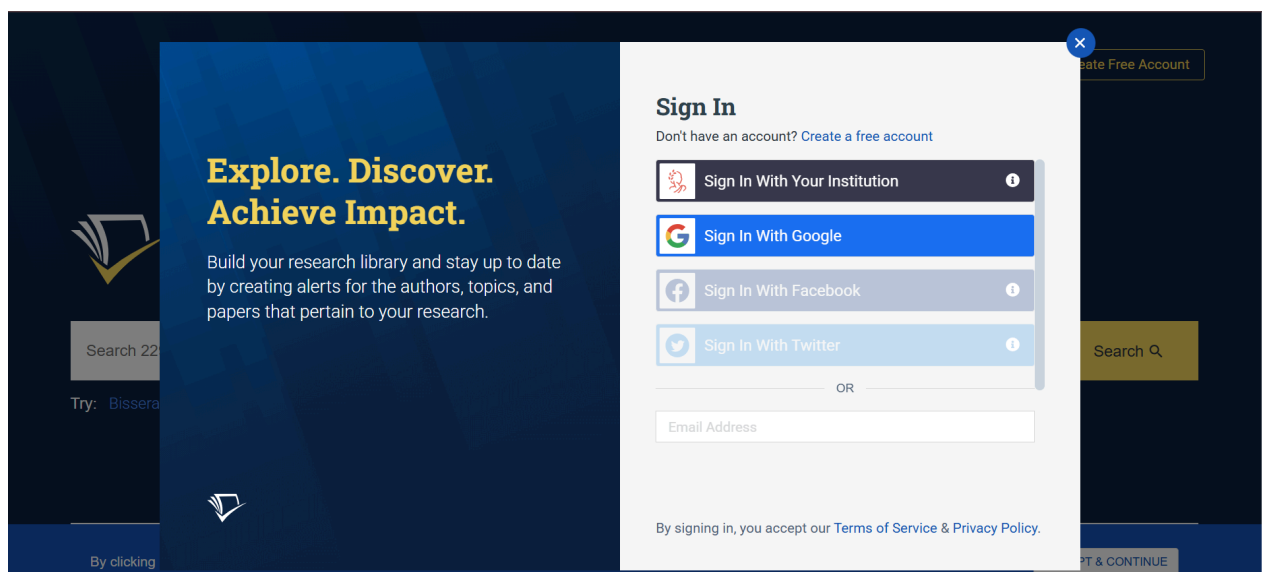
This is how the home page of Semantic Scholar looks after following the above-mentioned instructions.

Step 2: Sign In or Create an Account (Optional but Recommended)

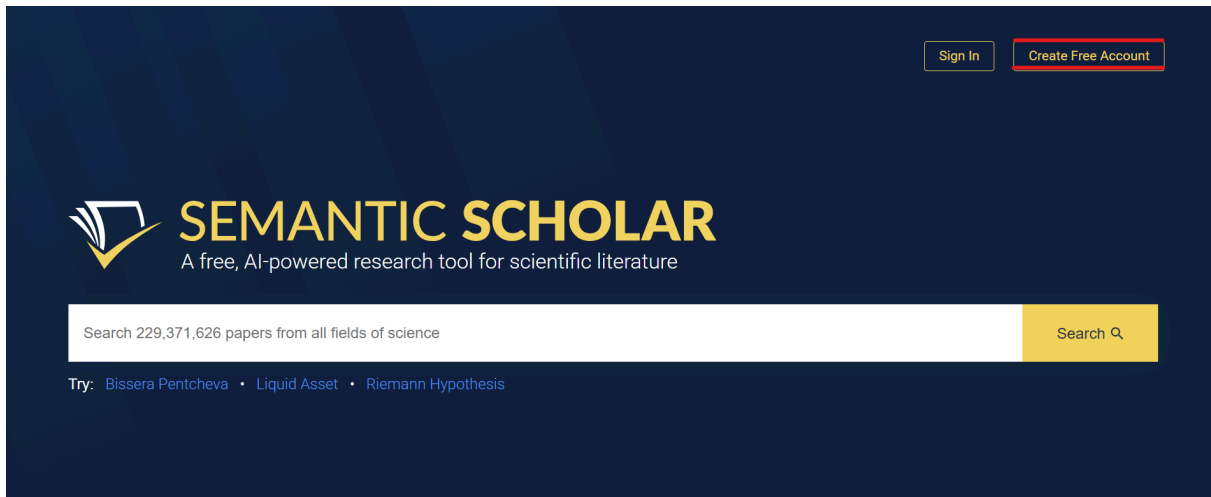


In the top-right corner of the homepage, you will see two options:

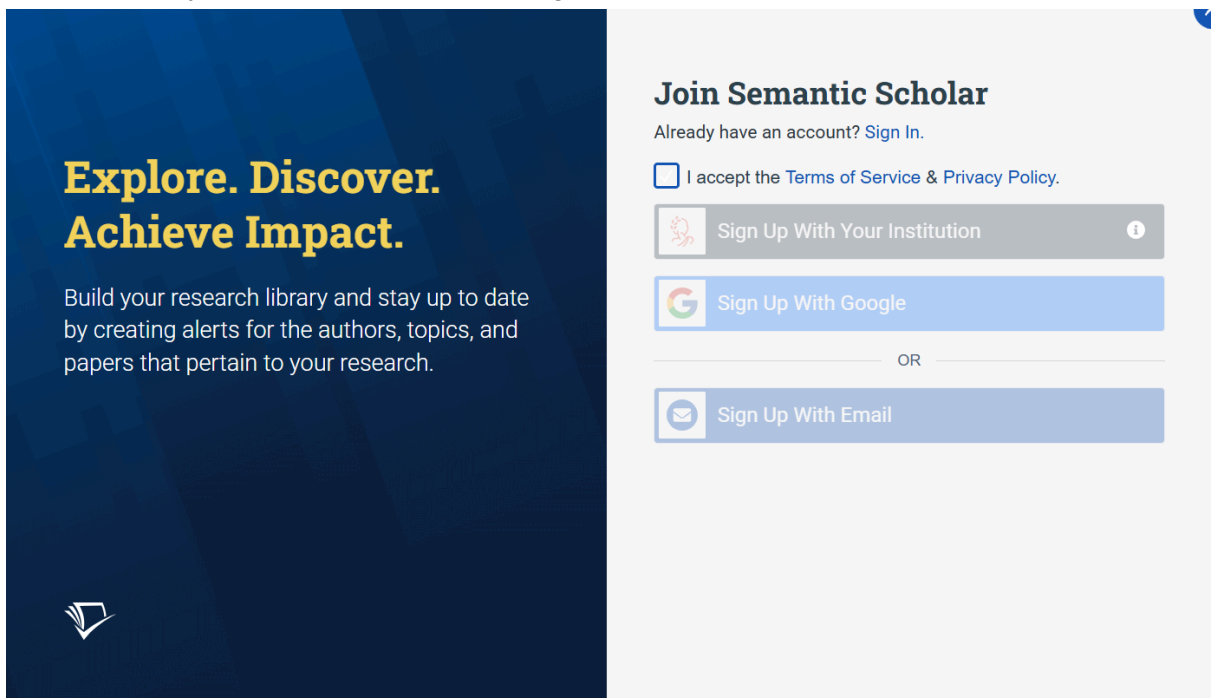
- **Sign In: For users who already have an account.**
 - Click on Sign In.
 - Enter your registered email/Google/ORCID credentials.
 - You will be redirected to your dashboard.



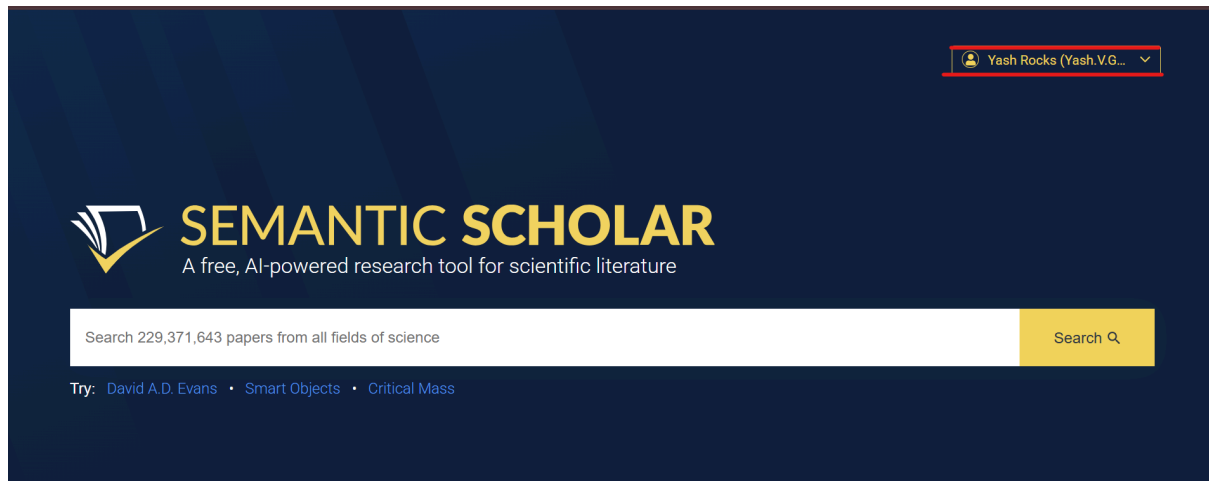
- **Create Free Account: For new users who are using Semantic Scholar for the first time.**
 - Click on Create Free Account.



- Choose your preferred method (Google, ORCID, or email).



- Fill in basic details (name, email, password).
- Verify your email if prompted.



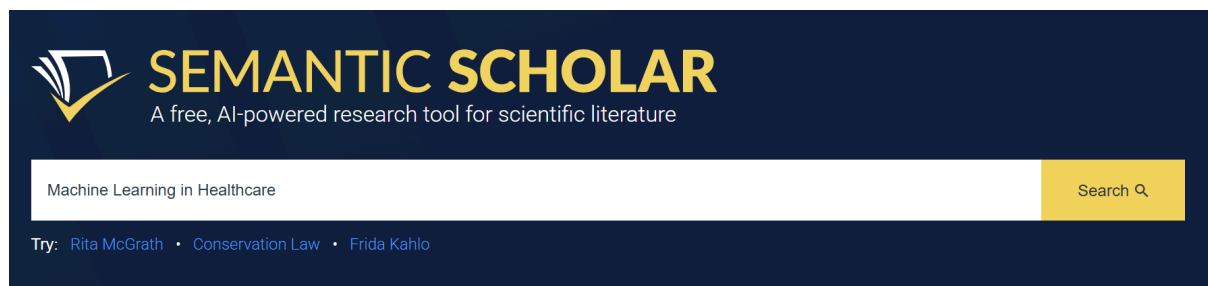
Once signed in, click your profile icon to start saving papers, creating collections, and following topics.

Searching for Papers

After having signed into Semantic Scholar, you should know how to search the research papers. The site offers a powerful search engine with filters and AI-based recommendations to enable you to easily locate the most relevant results.

Step 1: Enter Your Search Query

- Type a keyword, paper title, or author name into the search bar.
Example: "Machine Learning in Healthcare"
- Press Enter or click the search icon.



Step 2: Review the Search Results

The results page will show:

- Paper title
- Authors
- Year of publication
- Citation count
- Quick access to PDF (if available)

About 31,000 results for "Machine Learning in Healthcare"

Fields of Study ▾ Date Range ▾ Has PDF Author ▾ Journals & Conferences ▾ Sort by Relevance ▾ ☰ ☰

Federated machine learning in healthcare: A systematic review on clinical applications and technical architecture

Zhen Ling Teo Liyuan Jin +10 authors D. Ting Medicine, Computer Science · Cell Reports Medicine · 1 February 2024

62 PDF PubMed Save Cite

A Comprehensive Review on Machine Learning in Healthcare Industry: Classification, Restrictions, Opportunities and Challenges

Qi An Saifur Rahman Jingwen Zhou James Jin Kang Medicine, Computer Science · Italian National Conference on Sensors · 22 April 2023

TLDR This paper examined the effectiveness of machine learning algorithms in improving time series healthcare metrics for heart rate data transmission (accuracy and efficiency) and demonstrated time series tasks based on past values. [Expand](#)

181 [PDF] PDF Save Cite

Step 3: Apply Filters

On the left of the results page, there will be filters to narrow your search:

- **Sort by Relevance:** Shows the most relevant papers to your search query (the default option).
- **Sort by Citation Count:** Displays the papers with the most citations first. Useful in recognizing well-known or classic works.
- **Sort by Most Influential Papers:** Highlights those papers that were most influential in the research field by the AI model used at Semantic Scholar.
- **Sort by Recency:** Shows the most recent publications first, which can be helpful when keeping up to date with new studies.

About 31,000 results for "Machine Learning in Healthcare"

Fields of Study ▾ Date Range ▾ Has PDF Author ▾ Journals & Conferences ▾ Sort by Relevance ▾ ☰ ☰

Federated machine learning in healthcare: A systematic review on clinical applications and technical architecture

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Sort by Relevance ▾
Sort by Relevance
Sort by Citation Count
Sort by Most Influential Papers
Sort by Recency

Exploring a Paper

Once you have located a research paper that appears to be of interest, you can click to see more information. In this part, you will learn how to open a paper, its structure, and how to access the entire text in case it is provided.

Step 1: Open a Paper

Click on the title of a paper to open its detailed page.

About 31,000 results for “Machine Learning in Healthcare”

Fields of Study ▾

Date Range ▾

Has PDF

Author ▾

Journals & Conferences ▾

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Step 2: Paper Details

On the details page, you will find:

- **Abstract:** A summary of the research.
- **Figures & Tables:** Visual representations from the paper.
- **Citations:** List of other papers that cited this one.
- **References:** Sources used by this paper.
- **Related Papers:** AI-suggested similar works

n Healthcare

Federated machine learning in healthcare: A systematic review on clinical applications and technical architecture

Zhen Ling Teo, Liyuan Jin, +10 authors D. Ting • Published in [Cell Reports Medicine](#) 1 February 2024 • Medicine, Computer Science, Engineering

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62 Citations

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Topics

62 Citations

31 References

Related Papers

Figures from this paper

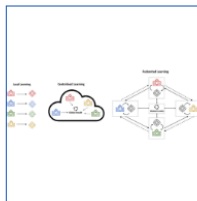


Figure 1

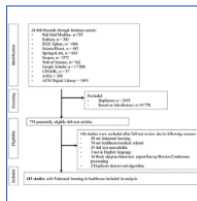


Figure 2



Figure 3

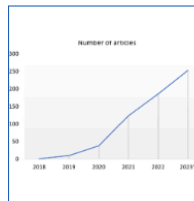


Figure 4

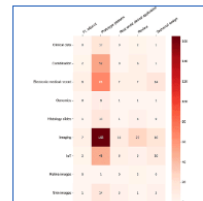


Figure 5

[View All 7 Figures & Tables](#)

Step 3: Access Full Text


- In case there is a free PDF, a PDF button will be present.
- Otherwise, Semantic Scholar redirects to the publisher's website, on which you might access the paper (often with institutional access).

Libraries and Collections

Semantic Scholar enables you to store and categorize papers effectively, and therefore, it is easier to manage your research.

Step 1: Save a Paper

- Click Save (bookmark icon) on the details page to add the paper to your own library.
- This allows you to reread papers without going through the search engine once again.



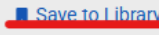




DOI: 10.3390/diagnostics11030555 • Corpus ID: 232386020

Association of Preterm Birth with Depression and Particulate Matter: Machine Learning Analysis Using National Health Insurance Data

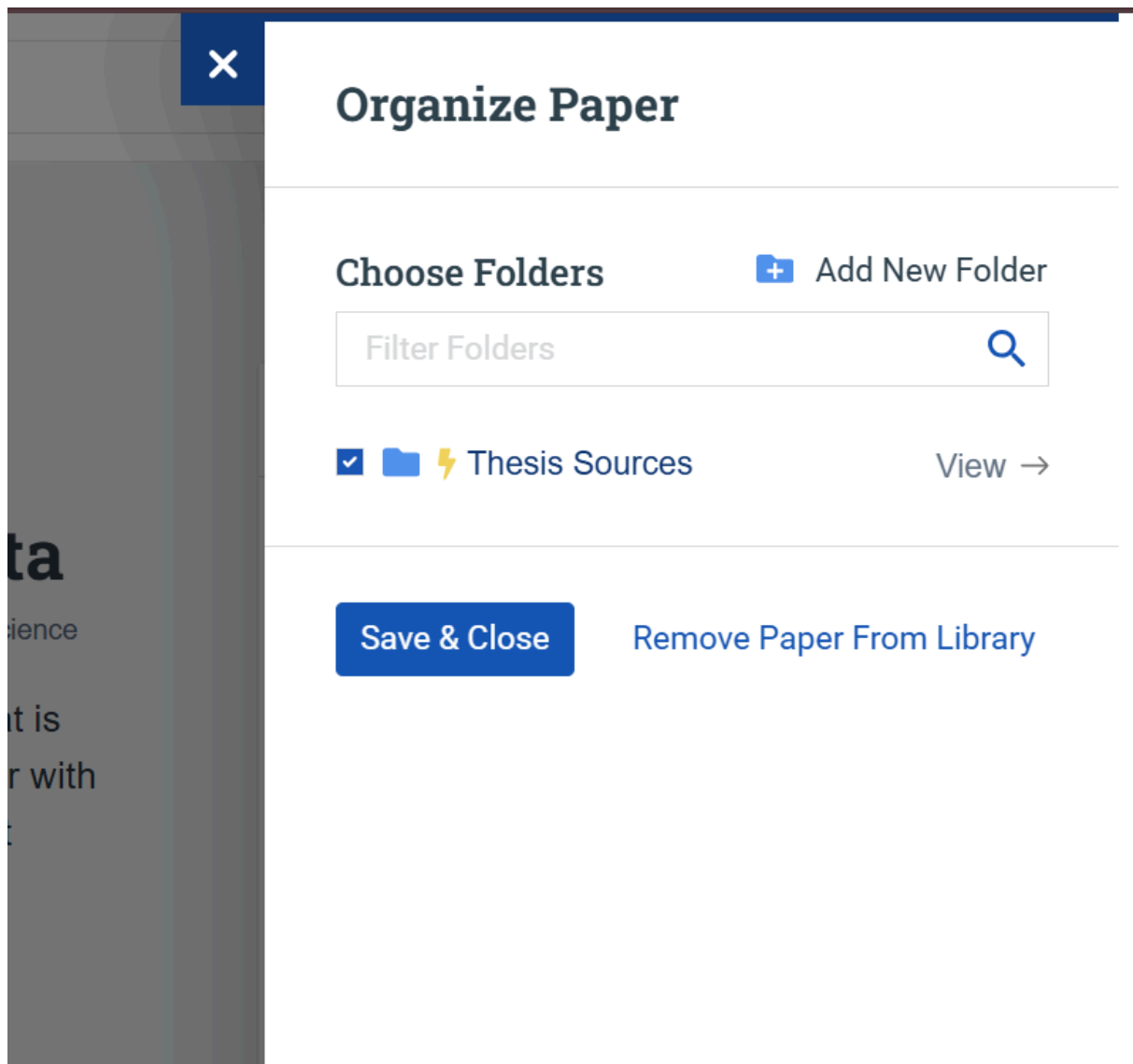
Kwang-Sig Lee, Hae-In Kim, +5 authors K. Ahn • Published in *Diagnostics* 1 March 2021 • Medicine, Environmental Science

TLDR Preterm birth has strong associations with depression and particulate matter and what is really needed for effective prenatal care is strong intervention for particulate matters together with active counseling and medication for common depressive symptoms (neglected by pregnant women). [Expand](#)

 [PDF] Semantic Reader    

Step 2: Create Collections

- Organize saved papers into folders according to theme or project, e.g., Thesis Sources or AI in Education.
- You have complete control over how you organize your research, with the ability to rename collections, restructure them, and even export them.



Advanced Features

Semantic Scholar also has a number of advanced features to improve your research process and productivity.

Personalized Feeds

Subscribe to topics, authors, or journals to stay informed.

You will automatically see new papers in your areas of interest in your feed and will thus be informed without making an additional effort.

Recommendations

Based on your activity, Semantic Scholar recommends related and trending papers.

This allows you to find studies that you might not have typically found, increasing your literature coverage.

Best Practices

- **Plan Your Search:** You can think of related words or synonyms to enter before typing out keywords to enhance a search.
- **Filter efficiently:** Ranking things by relevance, citation, or recency will help to find the most useful papers in the least time possible.
- **Leverage Recommendations:** The AI-driven recommendations that Semantic Scholar offers can guide you to find related or trending articles that you otherwise would have overlooked.
- **Periodically Revise Saved Paper:** Update your library by deleting the old or changing collections.
- **Be Consistent:** Use the same naming conventions, citation styles, and notes within your saved papers.

Conclusion

Semantic Scholar is not just a search engine but a research assistant powered by AI. It assists researchers in saving time and concentrating on high-impact work, whether through basic searches or citation guidance and personalized suggestions. This guide would enable new users to learn to navigate and manage academic literature within a short period of time.

FAQS

Q1: What is the advantage of using Semantic Scholar instead of other academic search engines?

Semantic Scholar uses AI to highlight key citations, summaries, influential authors, and connected topics, making searches more precise and research more efficient compared to traditional search engines.

Q2: Does Semantic Scholar offer programmatic access to its data through an API or downloadable dataset?

Yes, Semantic Scholar provides APIs and downloadable datasets for researchers who want to programmatically access paper metadata, citations, and other research data.

Q3: Is Semantic Scholar available as a mobile application?

Yes, Semantic Scholar is available as a mobile-friendly website, and apps are available for iOS and Android devices.

Q4: Which browsers does Semantic Scholar support?

Semantic Scholar works on all major modern browsers, including Google Chrome, Firefox, Safari, and Microsoft Edge.

Q5: Does Semantic Scholar support integration with Zotero?

Yes, Semantic Scholar allows users to export citations to reference managers like Zotero, EndNote, and BibTeX for easy reference management.

Questions for SMEs/Manager

1. Should this guide include mobile app instructions, or only focus on the web platform?
2. Do we need to compare Semantic Scholar vs Google Scholar in detail?