

How to Find & Read Research Papers

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A close-up photograph of a person's hands holding an open book. The book is open to two pages of text, which is slightly blurred. The person's hands are visible, with fingers gripping the edges of the pages. The background is dark and out of focus. Overlaid on the left side of the image is the text "It's Not a Novel!" in a large, white, sans-serif font. A short blue horizontal line is positioned below the first few letters of the text.

It's Not a Novel!

SARA S. ELHISHI



Don't read everything—read SMART

- You searched Google Scholar... found 200 papers... now what?
- Opened a paper... didn't understand anything... closed it.

How to Find Research Papers?



Resources

01

Google
Scholar

02

IEEE
Xplore

03

ACM
Digital
Library

04

Science
Direct

05

Springer

Google Scholar

- <https://scholar.google.com/>

The screenshot shows a web browser window with the Google Scholar search results for the query "liver diagnosis using machine learning". The browser's address bar shows the URL: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=liver+diagnosis+using+machine+learning&btnG=&oq=liver+diagnosis+. The Google Scholar header includes the logo, the search query in a box, and a search button. Below the header, the results are displayed as a list of articles. The first article is "Prediction of fatty liver disease using machine learning algorithms" by CC Wu, WC Yeh, WD Hsu, MM Islam, et al., published in 2019. The second article is "Diagnosis of liver diseases using machine learning" by S Sontakke, J Lohokare, R Dani, et al., published in 2017. The third article is "Artificial intelligence, machine learning, and deep learning in liver transplantation". On the left side of the results, there are filters for "Any time", "Sort by relevance", and "Any type". On the right side, there are links to "My profile" and "My library".

Articles About 1,490,000 results (0.37 sec) [My profile](#) [My library](#)

Prediction of fatty liver disease using machine learning algorithms
CC Wu, WC Yeh, WD Hsu, MM Islam... - ... and programs in ..., 2019 - Elsevier
... for prevention, early **diagnosis** and **treatment**. We aimed to develop a **machine learning** model to ... in classifying high-risk patients and make a novel **diagnosis**, prevent and manage FLD. ...
[☆ Save](#) [🔗 Cite](#) Cited by 411 [Related articles](#) [All 7 versions](#)

Diagnosis of liver diseases using machine learning [\[PDF\] researchgate.net](#)
S Sontakke, J Lohokare, R Dani - ... trends & innovation in ICT ..., 2017 - ieeexplore.ieee.org
... of its **symptoms**. Of the 2,626,418 deaths reported in the United States for 2014, **chronic liver disease** ... This paper explored 2 possibilities of **machine learning** models that can improve ...
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Artificial intelligence, machine learning, and deep learning in liver transplantation [\[HTML\] sciencedirect.com](#)

Any time
Since 2026
Since 2025
Since 2022
Custom range...

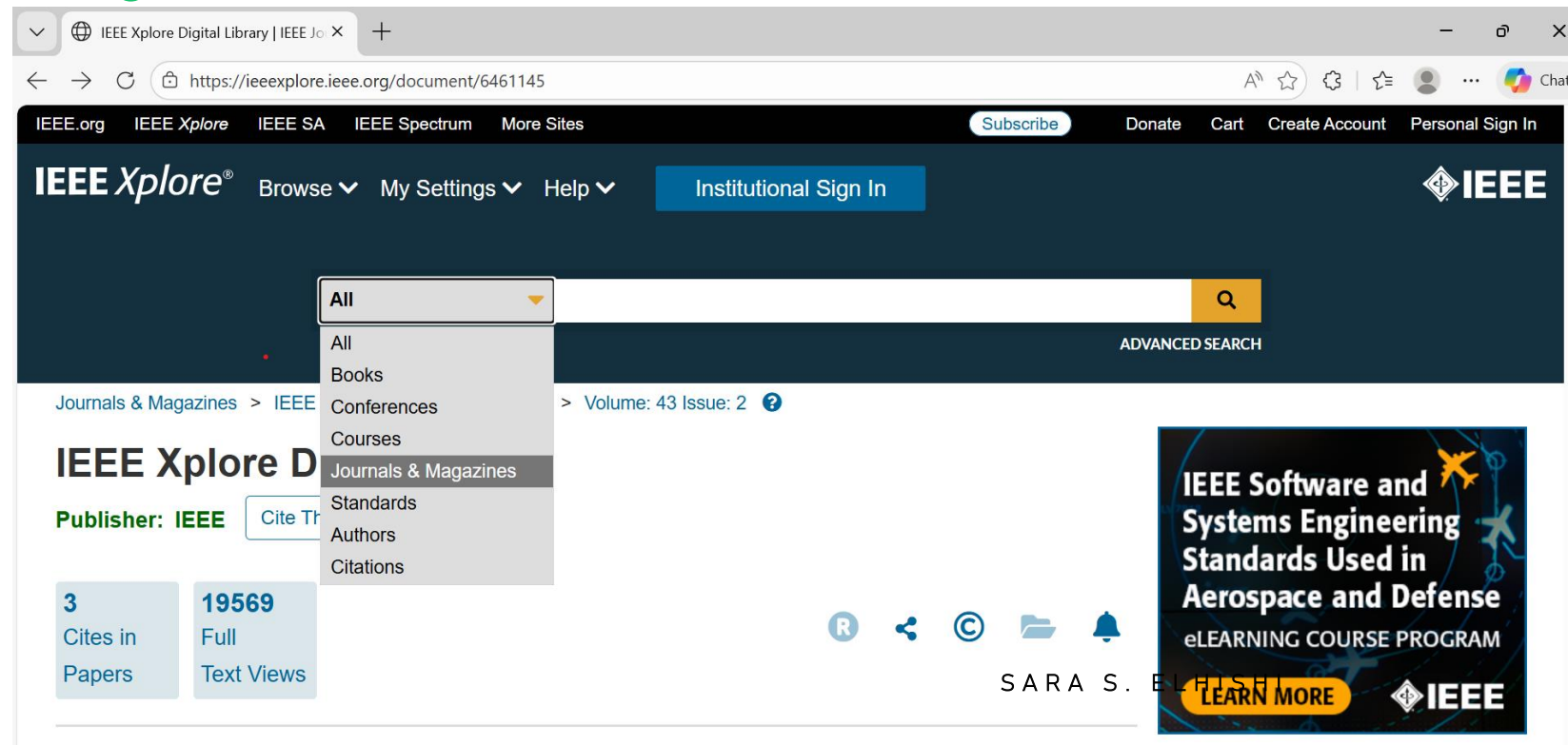
Sort by relevance
Sort by date

Any type
Review articles

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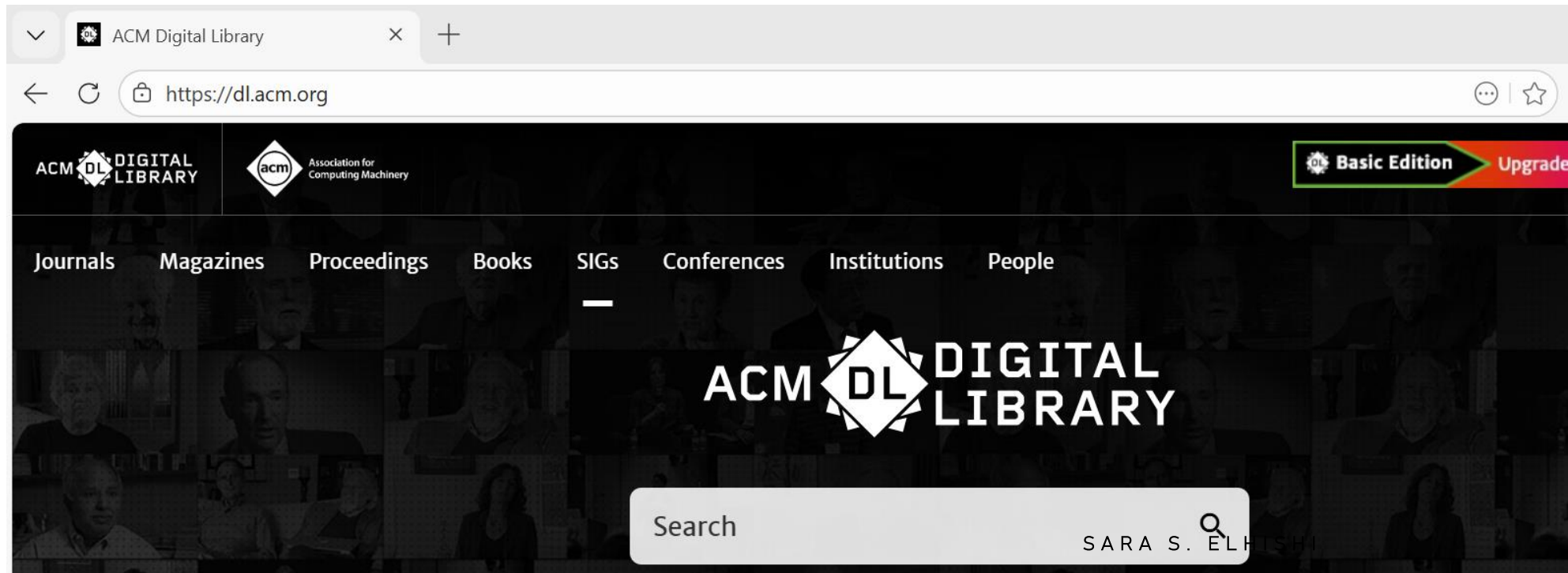
IEEE Xplore

- <https://ieeexplore.ieee.org/>



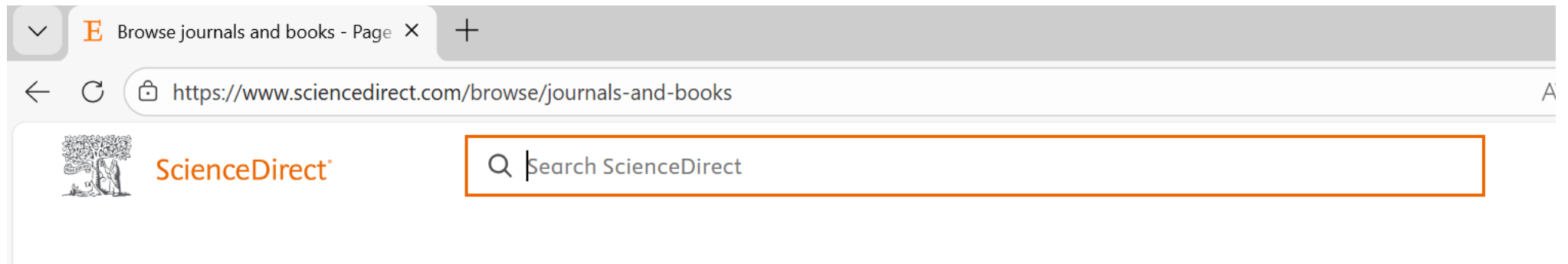
ACM Digital Library

- <https://dl.acm.org/>



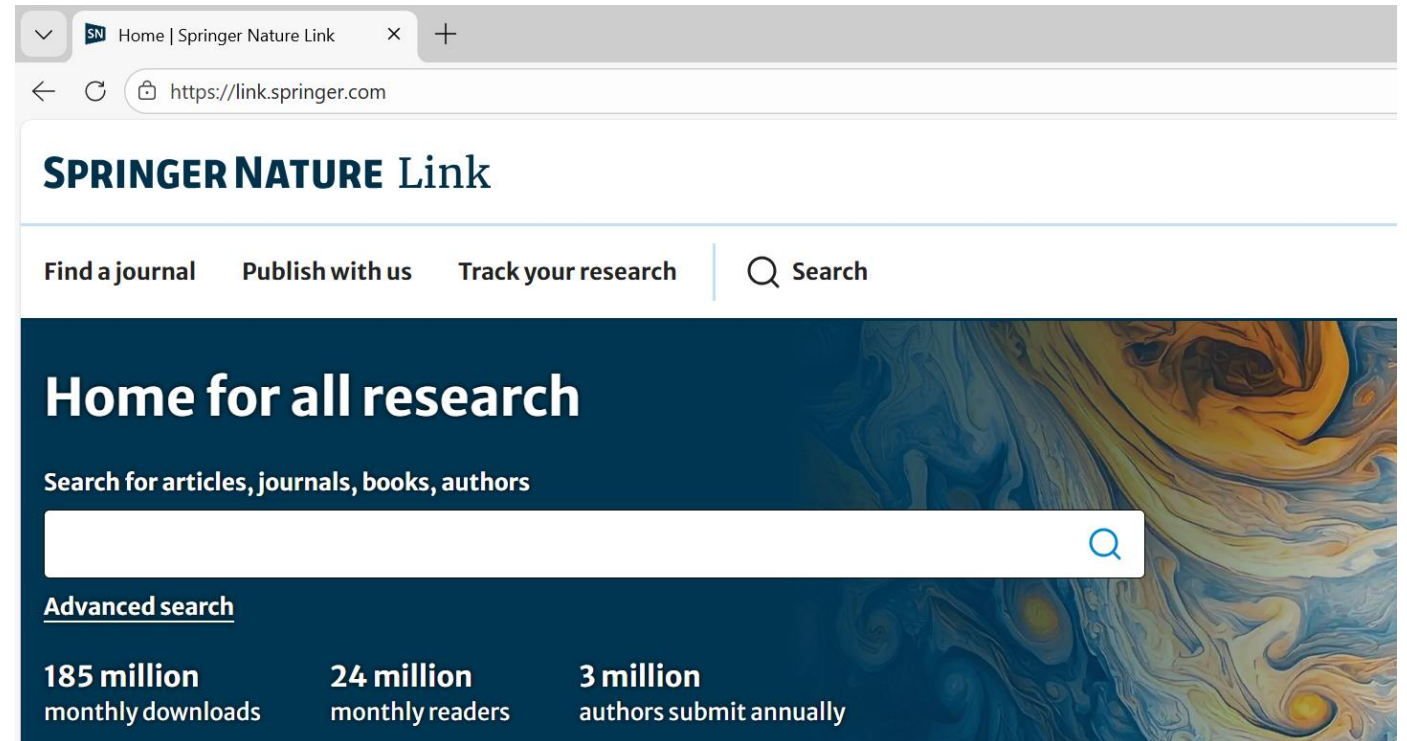
Science Direct

- www.sciencedirect.com



Springer

- <https://link.springer.com/>



When To Use Each?

How To Search?



Keywords, Not Sentences

Remove filler words

Focus on **main terms only**

Bad: “How can I improve neural network performance in classification?”

Good: “neural network optimization”

Use Quotes (" ")



Quotes force the search engine to match the exact phrase.



Loose search: Machine Learning



Strict Search: "Machine Learning"



Use Filters

- Don't just search and scroll blindly—control the results.
- For new technologies: sort by “Year”
- For strong papers: sort by “Citations”
- For focused search: sort by “Relevance”



Any time

Since 2026

Since 2025

Since 2022

Custom range...

Sort by relevance

Sort by date

Any type

Review articles

☐ include patents

☒ include citations

☒ Create alert

Prediction of fatty liver disease using machine learning algorithms

CC Wu, WC Yeh, WD Hsu, [MM Islam](#)... - ... and programs in ..., 2019 - Elsevier

... for prevention, early **diagnosis** and **treatment**. We aimed to develop a **machine learning** model to ... in classifying high-risk patients and make a novel **diagnosis**, prevent and manage FLD. ...

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Diagnosis of liver diseases using machine learning

[S Sontakke](#), [J Lohokare](#), [R Dani](#) - ... trends & innovation in ICT ..., 2017 - [ieeexplore.ieee.org](#)

... of its **symptoms**. Of the 2,626,418 deaths reported in the United States for 2014, **chronic liver disease** ... This paper explored 2 possibilities of **machine learning** models that can improve ...

☆ Save Cite Cited by 101 Related articles All 4 versions

[HTML] Artificial intelligence, machine learning, and deep learning in liver transplantation

[M Bhat](#), [M Rabindranath](#), [BS Chara](#), [DA Simonetto](#) - Journal of hepatology, 2023 - Elsevier

... **Liver** transplantation (LT) is a life-saving **treatment** for individuals with end-stage **liver disease**... omics data in the development of an appropriate **treatment** plan. Current methods to collate ...

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[PDF] [researchgate.net](#)

[HTML] [sciencedirect.com](#)

Browser tabs: "liver diagnosis" using machine lea X

Address bar: [https://scholar.google.com/scholar?as_ylo=2022&q="liver+diagnosis"+using+machine+learning&hl=...](https://scholar.google.com/scholar?as_ylo=2022&q='liver+diagnosis'+using+machine+learning&hl=...)

Google Scholar search bar: "liver diagnosis" using machine learning

Articles About 411 results (0.17 sec) My profile My library

Any time
Since 2026
Since 2025
Since 2022
Custom range...

Fatty liver diagnosis using deep learning in ultrasound image
CH Wu, CL Hung, TY Lee, CY Wu... - 2022 IEEE International ..., 2022 - ieeexplore.ieee.org
... **uses** CAP as the basis for fatty liver grading. The main purpose of this study is to develop a system **using deep learning** ... of the liver and Nidneys and **use** texture analysis to diagnose ...
☆ Save Cite Cited by 23 Related articles All 4 versions

Deep federated machine learning-based optimization methods for liver tumor diagnosis: A review
[AM Anter](#), L Abualigah - Archives of Computational Methods in ..., 2023 - Springer

How To Read a Research Paper ?



The Smart Reading Strategy



Don't read papers linearly from page 1 to end.



Read papers smartly by jumping between sections to extract values.



Suggested Flow:

Title + Abstract
Introduction
Figures
Conclusion
Optional: Methodology

Title + Abstract



What is The problem?



What did they do?



This is a filter step!

Introduction



Why does this problem matter?



What is the story behind the paper?

Figures



If there's a model, pipeline, framework or architecture, look at them before reading text.



They often explain the whole system faster than paragraphs.

Conclusion



Results and Contributions



Jump to the end early.



See if the paper actually delivered something useful.

Optional: Methodology



Only go here if you really need details for implementation or deep understanding.



Don't read every equation!



Your goal is to extract Ideas, not perfections.

How To Evaluate a Paper ?





Good Signs

- Recent (last 5 years*)
- Published in known venue
- Clear problem + clear results
- Has citations



Red Flags

- No clear contribution
- Very old (not foundational)
- Weak or unclear results
- Hard to explain simply



Venue Matters

- Conferences are fast and have cutting edge ideas.
- Journals usually have more detailed and mature work
- Both are valuable, just know what you're reading

Key Mindset

A big mistake is respecting every paper equally.

Some papers are simply not worth your time.

Train your eye to spot signs/flags quickly

If a paper is very complex, does that mean it's good?

Common Mistakes?



Reading Every Word



Research papers are not meant to be read word-by-word.



You're not studying for an exam, you're extracting ideas.

Starting Too Hard



People open a complex paper, get lost, and think the problem is them.



Start simple, then go deeper

No Notes



If you don't write, you will forget.



Reading without notes = wasted effort.

Trying to Understand Everything



Don't expect to understand 100%



Even experts don't fully understand every detail.



Partial understanding is progress.

Good Habits



Start With Surveys

Summarizes many papers

Explains the field

Easier to understand

gives you the big picture before details

Suggested Note Template



Problem



Key Idea



Method



Data Source



Summarized Results



Weakness

Final Message

- Research is not about reading more papers...
It's about reading the right papers the right way.
- What we learned Today:
 - Where to find papers
 - How to search effectively
 - How to read smartly
 - How to evaluate quality



Don't wait.
Try this today



Pick a topic



Search for 2–3 papers



Apply the strategy

Thanks
