



ScienceDirect AI

# Getting Started with ScienceDirect AI

*Simplify* search. *Strengthen* analysis.

*Sharpen* insights.

**Alison Ferrett**

Customer Success Manager

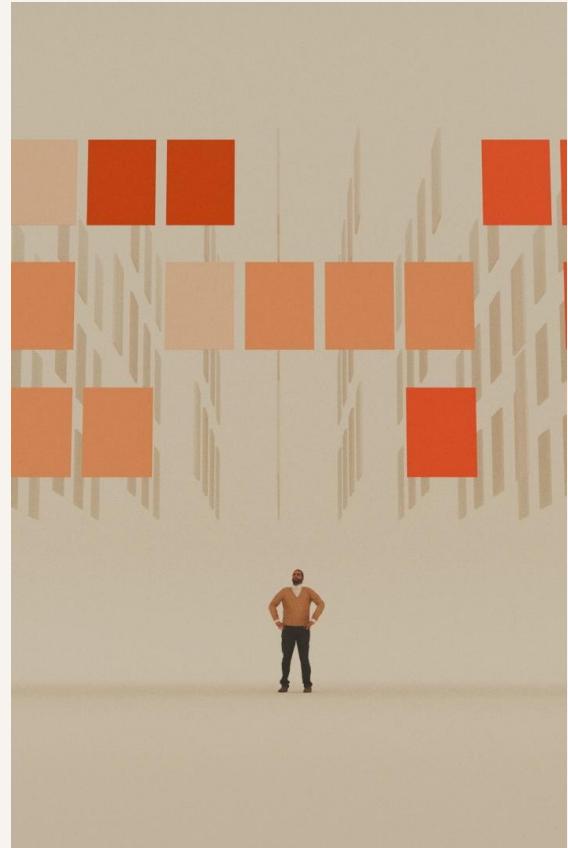


ELSEVIER



# *What we'll cover today*

- ScienceDirect AI overview
- Core features at a glance
- Deep dive:
  - Ask ScienceDirect AI
  - Compare Experiments
  - Reading assistant
  - My Library
- Use cases for researchers
- Resources to get started



# *What is ScienceDirect AI?*

*Eureka, every day* – your smarter research companion

ScienceDirect AI is a new tool that enables researchers to extract, summarize and compare insights from deep within millions of peer-reviewed articles and book chapters. It surfaces critical evidence and ties it back directly to its original source, enabling traceability and reproducibility.



# *Elsevier's responsible AI principles*

- We consider the real-world impact of our solutions on people.
- We take action to prevent the creation or reinforcement of unfair bias.
- We can explain how our solutions work.
- We create accountability through human oversight.
- We respect privacy and champion robust data governance.

Visit our [Responsible AI principles site](#) for more information.

# *Key benefits*

## **Depth**

Accesses the largest repository of full-text articles and books

## **Transparency**

Everything cited and located down to the specific passage in the specific article

## **Usability**

Designed by 100+ experts with input from 30,000 researchers across 70 organizations

## **Reproducibility**

Surfaces knowledge from methods, results, limitations and more.

## **Literacy**

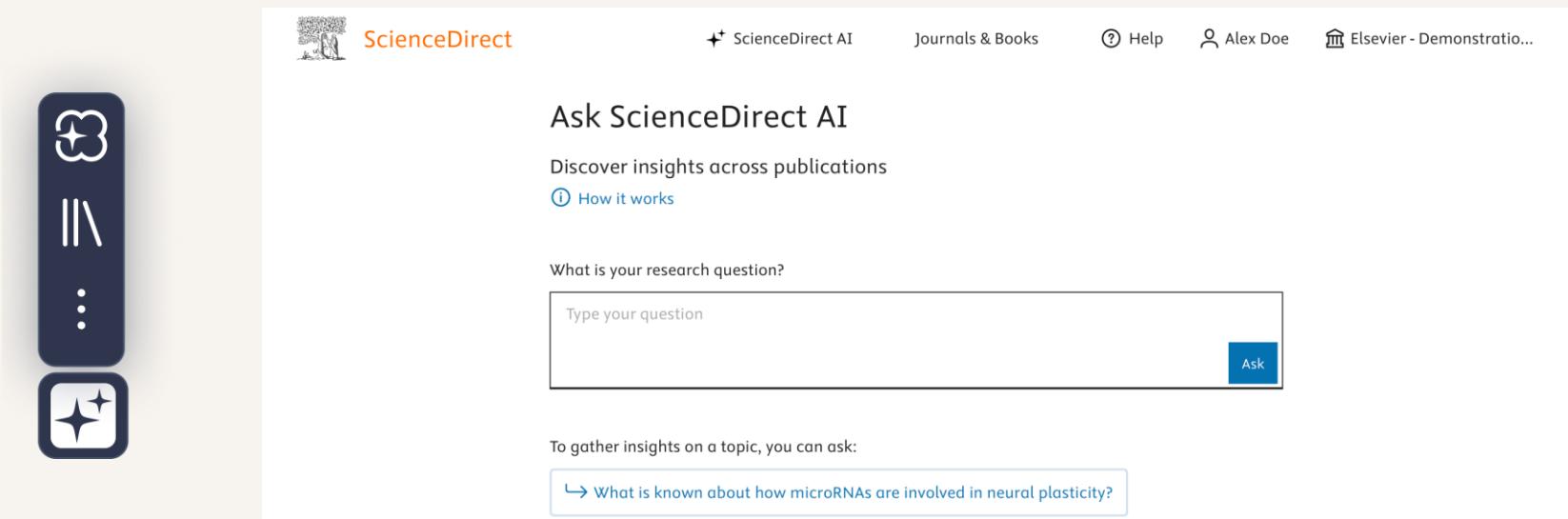
Easy to use and adopt for all levels of technical competency

## **Continuity**

Integrated into ScienceDirect, used by 15+ million researchers every month

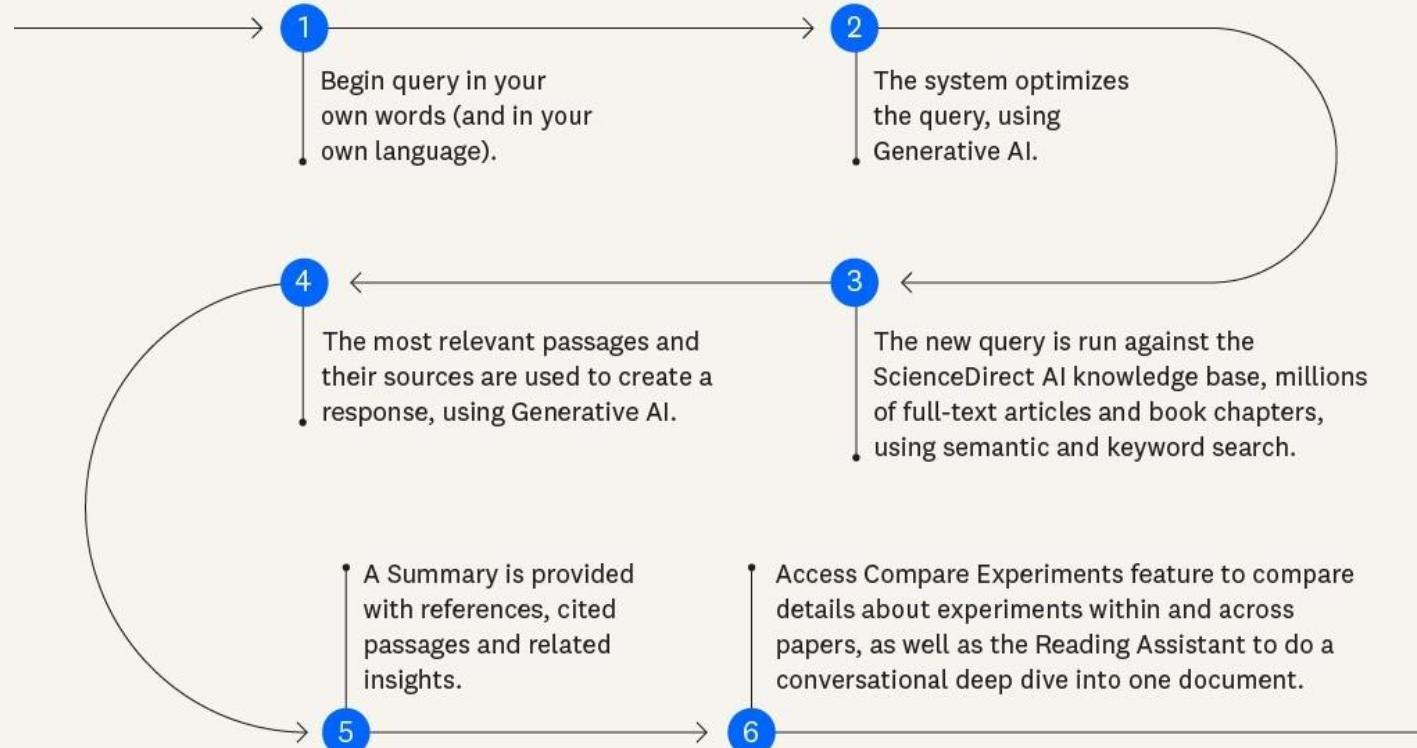
# Accessing ScienceDirect AI

Access ScienceDirect AI via the URL, [www.sciencedirect.com/ai](https://www.sciencedirect.com/ai)  
or by selecting the ScienceDirect AI symbol in the header,  
or by using the floating widget.



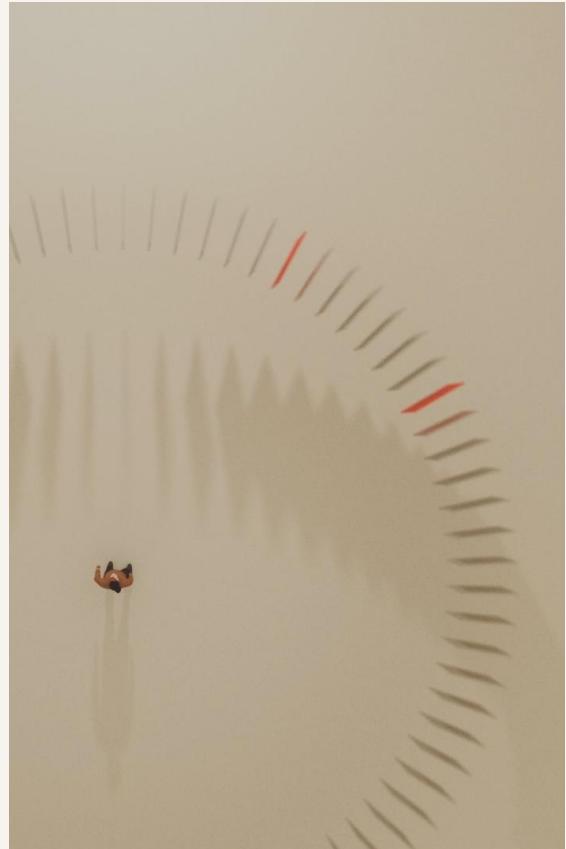
The image shows a screenshot of a web browser. On the left, a dark blue floating widget displays four icons: a magnifying glass with a brain inside, a bar chart, a vertical ellipsis, and a starburst inside a square. The main content area is titled 'Ask ScienceDirect AI' and features the ScienceDirect logo. It includes a sub-header 'Discover insights across publications', a 'How it works' link, and a text input field with the placeholder 'Type your question'. A blue 'Ask' button is located to the right of the input field. Below this, a section titled 'To gather insights on a topic, you can ask:' shows a sample query: 'What is known about how microRNAs are involved in neural plasticity?'. The ScienceDirect AI interface is set against a light gray background with a white header bar containing links for 'ScienceDirect AI', 'Journals & Books', 'Help', 'Alex Doe', and 'Elsevier - Demonstratio...'. The overall theme is white with blue and gray accents.

# How does it work?



# *Core features at a glance*

- Ask ScienceDirect AI
  - Search and summarize insights from millions of articles and book chapters, using your own words to describe what you need.
- Compare Experiments
  - Extracts and compares key experimental details (goals, methods, results) from multiple studies into structured tables.
- Reading Assistant
  - Chat, ask follow-up questions and summarize sections of an individual article or book chapter.
- My Library
  - Save references directly into your Mendeley Library and access your Mendeley Library in ScienceDirect.



# Deep dive: Ask ScienceDirect AI

- **Functionality:**
  - Uses natural language queries to provide insights across the underlying corpus of full-text, peer-reviewed scientific papers and book chapters
- **The results:**
  - Summary response provides an overview to your query with references to the articles or chapters used
  - References with a bespoke summary in reference to your query
  - Related insights from other articles, explaining their relevance

## Ask ScienceDirect AI

Discover insights across publications

 [How it works](#)

What is your research question?

methods for encapsulation of flavonoids to increase stability

Ask

To gather insights on a topic, you can ask:

↳ [What is known about how microRNAs are involved in neural plasticity?](#)

# Deep dive: Ask ScienceDirect AI

- **Use cases:**

- Search over millions of full-text, peer-reviewed articles and book chapters
- Dive deeper into a specific topic or specific research question
- Read the exact passage in the full-text that the AI assertion comes from

**Remember: Every statement includes a citation for further research or reference.**

## Summary

### Methods for Encapsulation of Flavonoids to Increase Stability

#### Encapsulation Techniques:

- **Nanotechnology:** Utilizes nanoparticles, microcapsules, nanolotions, and hydrogels to embed flavonoids, enhancing their stability and bioavailability ([Li et al., 2023](#)).
- **Microencapsulation:** Involves physical methods like spray drying, lyophilization, supercritical fluid precipitation, and solvent evaporation; physicochemical methods such as coacervation, liposomes, and ionic gelation; and chemical methods like interfacial polymerization and molecular inclusion complexation ([Morsy et al., 2025](#)).
- **Nano-capsules:** These can be made from sugars, polysaccharides, lipids, phospholipids, or synthetic polymers, protecting flavonoids from oxidation and degradation, thus increasing their shelf life and allowing controlled release ([Vazhappilly et al., 2021](#)).

#### Wall Materials:

- **Lipids, Polysaccharides, Proteins, and Synthetic Polymers:** These materials are used to encapsulate hydrophobic flavonoids, improving their stability and bioavailability ([Premathilaka et al., 2022](#)).
- **Cyclodextrins, Lipid Nano-capsules, Liposomes, and Inorganic Materials:** Such as silica microspheres, are also effective in enhancing flavonoid stability ([Lozano-Pérez et al., 2017](#)).

# Deep dive: Compare Experiments

- **Functionality:**

- Extract goals, materials, methods, results, and conclusions from studies in your response or selected articles into a table, experiment by experiment

- **The results:**

- An easy-to-read table containing all experiments, which can be easily exported into a CSV
- If there are multiple experiments in an article, all will be included

- **Use case:**

- Comparative understanding of past experiments
- Identifying gaps and limitations, inspiring further experiments to be done
- Less time spent manually compiling and note-taking

Compare experiments Beta

AI-summarized research experiments or studies for:  
*"methods for encapsulation of flavonoids to increase stability"*

AI-generated content may vary in quality. Verify important information. [Learn more](#)

| ARTICLE   | EXPERIMENT / STUDY                            | GOAL  | MATERIALS  |
|---|---|---|--|
| <a href="#">Article</a><br>Towards innovative food processing of flavonoid compounds: Insights into stability and bioactivity <a href="#">↗</a><br>Yu Fu, Wanning Liu, Olugbenga P. Soladoye<br><i>LWT</i> • Volume 150 • 2021<br><a href="#">Export article as CSV</a> | <a href="#">Review of existing literature</a> | To discuss the impacts of structure on the stability of flavonoids  | Flavonoids, hydroxyl groups, glycosyl groups, methyl groups, acyl groups, lecithin, Tween-20, metal ions, proteins, dietary fiber, carbohydrates |
|   | <a href="#">Review of existing literature</a> | To summarize the impacts of different thermal processing methods on the stability and bioactivity of flavonoids | Flavonoids, microwave, radio frequency, ohmic heating  |

# Deep dive: Compare Experiments

- How to compare experiments

- From a ScienceDirect AI query:
  - From the Summary page, scroll down and select  Compare experiments ↗
  - The experiments from documents used in the summary response will be included.
- From a ScienceDirect search results list page:
  - Select the research articles you want to include in the comparison.
  - Click  Compare Experiments ↗ from the top of the article list.

**Remember:** If there is more than one experiment in the paper or book chapter, each experiment will be included individually. Documents with no experiments will not be included.

# Deep dive: Reading Assistant

- **Functionality:**

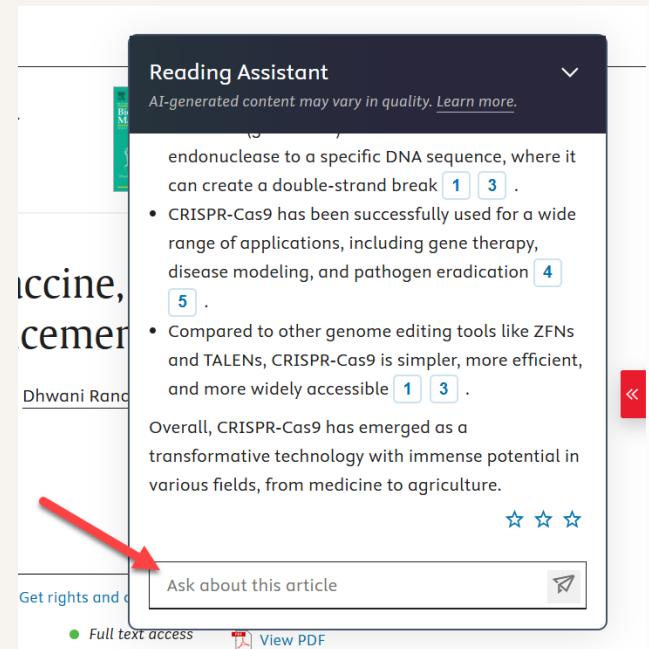
- Built to summarize or analyze individual articles or chapters
- Embedded in the article/book chapter page on ScienceDirect

- **The results:**

- Concise AI-generated answers, with references to places in the paper
- Clicking on a reference highlights the part of the article used to generate response

- **Use cases:**

- Determine if this article is relevant to the research question
- Find information from within the article quickly
- Summarize different sections of the article



# Deep dive: My Library

- **Functionality:**

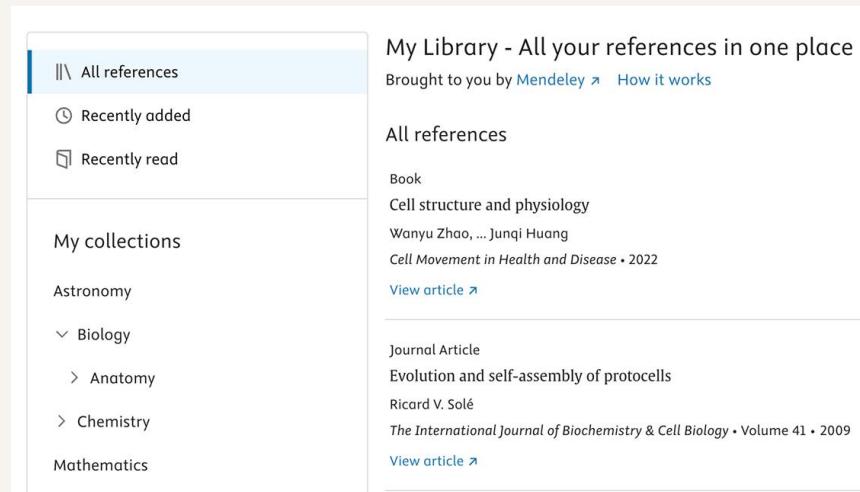
- Reference space to save and view papers discovered using ScienceDirect AI
- Any citations saved via My library will also be accessible through Mendeley and vice-versa
- You can access My Library using the floating AI widget

- **The results:**

- View all citations in a single place for easier reference management
- Navigate between finding relevant scientific literature and reviewing your citations seamlessly

- **Use cases:**

- Saving citations to review later
- Collecting relevant citations for a literature review
- Keep track of and organize citations saved over time



The screenshot shows the 'My Library' interface. On the left, a sidebar lists 'All references', 'Recently added', and 'Recently read'. Below this are sections for 'My collections' (Astronomy, Biology, Chemistry, Mathematics) and 'All references' (Book, Journal Article). A sample citation for 'Cell structure and physiology' by Wanyu Zhao, Junqi Huang is shown, along with a link to 'View article'.

My Library - All your references in one place  
Brought to you by [Mendeley](#) [How it works](#)

All references

Book

Cell structure and physiology

Wanyu Zhao, ... Junqi Huang

*Cell Movement in Health and Disease* • 2022

[View article](#)

Journal Article

Evolution and self-assembly of protocells

Ricard V. Solé

*The International Journal of Biochemistry & Cell Biology* • Volume 41 • 2009

[View article](#)

# *Use cases for researchers – from information overload to insights*

- **Reviewing literature**
  - Ask complex questions and receive synthesized responses to speed up your literature review process.
  - Get a sense of which papers are likely to contain information helpful to you.
- **Evaluating experiments**
  - Use the Compare Experiments tool to evaluate and compare experiments using one intuitive overview table
- **Identifying relevant content quickly**
  - Use the Reading Assistant to find relevant portions of an article or focus on the data that matters most to you



# *Resources for more information*

ScienceDirect AI is here to elevate your research experience. Start exploring! .

- **Useful links:**

- [ScienceDirect AI Website](#)
- [ScienceDirect AI Video - Transformative Search](#)
- [ScienceDirect AI Video - Compare Experiments](#)
- [ScienceDirect AI video - Reading Assistant](#)
- [ScienceDirect AI – FAQs](#)
- [ScienceDirect AI Quick Reference Guide](#)
- [ScienceDirect AI Libguide](#)
- [ScienceDirect Support Center](#)

Have questions?

Contact your dedicated Customer Success Manager



**Alison Ferrett**

[a.ferrett@elsevier.com](mailto:a.ferrett@elsevier.com)

# Thank you for your time.

