## **Generative Al Academic Research & Writing**

1. Keyword Creation	<b>Tools</b> : ChatGPT, Gemini, Copilot, Perplexity <b>Prompt</b> : Act as if you are a researcher in [the name of your field], aiming to read and summarize the literature on [the field you want to research]. Using the block method, suggest some main keywords to search for and then write a [search engine name: Web of Science/ EBSCO/ PubMed/ Scopus, etc.] search string. [Optional: include the following keywords in the search]	Claude perplexity  deepseek
2. Retrieve Top Cited Papers	Tools: Academic search engines such as Scopus, WoS, PubMed, Medline, etc. Goal: Run the search on Scopus, WoS, PubMed, Medline, etc., and rank by top cited. Export results as a ".ris" file.	SCOPUS SCOPUS WEB OF SCIENCE
3. Locate Central Papers	<b>Tools</b> : VOSViewer, LitMaps, Research Rabbit <b>Goal</b> : Find "central" papers—the ones everyone has cited.	ResearchRabbit  Litmaps
4. Download PDFs	Tools: Zotero, Sci-Hub Goal: Download PDFs of the identified papers.	2 oter scriub
5. Design Extraction Process	<b>Tool</b> : ChatGPT, Gemini, Copilot, Perplexity <b>Prompt</b> : Act as if you are a researcher in [your research field]. If you want to review the top 100 most cited papers in your literature to understand the main trends, theories, and findings, what are 5-8 main questions you want to explore and know from each of these papers? Write each question in one short question format. Present results in table format with column 1 a short title for the questions and column 2 the actual question.	Gemini  perplexity  **Claude
6. Extract and Analyse	<b>Tools</b> : Petal.org, Elicit.org, explainpaper <b>Design</b> : Use the questions designed in the previous step. These tools will "ask" those questions from all the papers efficiently and quickly. Export results.	Petal NotebookLM € Elicit ©docAnalyzer.ai explainpaper
7. Read, Learn, Apply	Tools: ChatGPT, Gemini, Copilot, Perplexity, Claude, Explainpaper Goal: Use the summary created in the past step as the "context" for this step. Use it to generate research ideas, identify gaps in literature, formulate hypotheses, conduct literature reviews, and assist with writing.	Gemini  Claude  Claude  SCISPACE  perplexity  QuillBot

ChatGBT is the first publically available Generative AI content generator that answers questions, engages in conversations and provides generic explanations.

Copilot adapts to user prompts, personalises responses, and provides contextual assistance across different domains, including writing, coding, and professional workflows.

\*\*Claude is trained to have natural, text-based conversations, and it excels in tasks like summarisation, editing, Q&A, decision-making, code-writing, and more.

Gemini can generalise and seamlessly understand, operate across and combine different types of information including text, code, audio, image and video.

Scopus provides access to bibliographic info., including abstracts and citations. It is one of the world's largest abstract and citation databases covering various scientific disciplines, including life, social, & physical sciences.

Scopus

Copilot

Perplexity is used for research, content generation, and information retrieval.

It allows
users to engage
with data in a more
intuitive way compared to the
traditional information engines.

This citation-based literature mapping tool connects your research interests to related articles and authors.

Web of Science is a bibliometric database used to measure, evaluate, and track scientific research. It contains scientific articles from leading scientific journals. WEB OF SCIENCE

SCI-HUB allows users to search for and access millions of articles and academic papers



academic papers in a matter of clicks for free.

## ResearchRabbit

It is an open-access,
easy-to-use
reference
management tool
that serves as your personal
research assistant and helps
you collect, organize, cite, and
share your research sources.

Litmaps creates maps for your research by searching our literature database; linking your reference manager; or through automatic generation from seed articles.

## **4** Litmaps<sup>®</sup>

Analyses, summarises, makes

Petal is an Al tool that can link to your own knowledge base of research papers to produce fully sourced & reliable answers to your research questions in real time.

papers, extracting relevant data, and generating summaries, filtering and ranking academic articles based on specified criteria, helping you discover important insights from vast amounts of information.

sense & provides assistance making connections between your papers. It builds connections across your notes, documents, and data to aid in research and NotebookLM learning processes.

Heuristica uses a mind map like UI to dive deep into a subject creating concept maps from your research paper in a way that makes acquiring, visualizing, and organising knowledge easy.

explainerpaper helps you understand complex academic research papers quickly and easily. It allows you to highlight confusing sections and receive simplified explanations of the key concepts.

 $\mathbf{e}x$ plainpaper

SCISPACE helps researchers by taking the hard work out of the formatting, editing, and submissions part of the publishing process.

This writing assistor elevates and perfects your writing as it paraphrases, summarizes, checks for grammar and plagiarism, translates, outlines, and creates citations.

