AI RESEARCH TOOL OVERVIEW

Aligned with the research process, six tool groups can be distinguished:
ASSISTANTS, FINDERS, CONNECTORS, ANALYZERS (incl. Syst. Lit. Rev.), WRITERS, PRESENTERS & OTHER

Tool	Description	Database / Powered by	Features	Pricing	Notes
ASSISTANTS - help you get started and support you throughout your research (brainstorming topics, outlines, keywords, "someone to talk to")					
ChatGPT	ChatGPT is probably still the best-known AI tool and chatbot. Developed by OpenAI, a company headquartered in San Francisco, California, USA. It can generate research topics and outlines of papers, help you brainstorm or give you feedback on ideas and so much more.

The current models:
GPT-4o (versatile)
GPT-4o Mini
o1 (reasoning)
o1 Mini
o1 pro mode (advanced reasoning)
o3 Mini (coming January 2025)
o3 (coming 2025) | "Like previous GPT models, the GPT-4 base model was trained to predict the next word in a document and was trained using publicly available data (such as internet data) as well as data we've [OpenAI] licensed". (Source)

ChatGPT-4 has live access to the internet. (Source) | **Advanced Voice Mode:** AI understands and responds to voice inputs, making the conversation flow more like a natural dialogue. In this mode the web search is not possible. (Available only for Plus (limited usage) and Pro (unlimited usage) plan users.)

Canvas feature: Enables users to edit text and create graphics, charts and other visual layouts. Writes, runs and helps to debug Python code from text prompts.

Custom Instructions: Personalize your experience by setting preferences and writing style, so that ChatGPT better understands your needs.

Data Analysis: ChatGPT performs data analysis, creates charts, and runs code. Various file formats can be uploaded, including .xls/ .xlsx ; .csv; .pdf; JSON. (Feature available only for Plus plan users. To use the feature, select the Chat GPT-4 model in which the feature is integrated.) More info here.

Document Analysis: You can upload documents for ChatGPT to summarize, analyze, or compare content across multiple files.

File upload and analysis: ChatGPT can analyze uploaded documents and answer questions based on their content. (Please make sure to respect copyright law | Free and premium plans available. For more information on pricing, see here. | **Registration & Account:** ChatGPT 4o mini can be used for free without any registration, though with limited features. To access the full free version, users need to create an account or sign in using their Google, Apple, or Microsoft account.

Security: Multi-factor authentication available.

We are currently not recommending ChatGPT for literature search. |

when uploading material.)

Internet Access: ChatGPT can browse the web (like Google) by clicking "Search the Web" button.

Image Generation: Capable of creating images from text prompts using DALL·E technology.

Image Recognition: Able to read and interpret images and graphics, providing descriptions or extracting information.

Memory feature: By enabling this feature, ChatGPT will retain facts from your conversations to offer a more personalized and helpful experience in the future. You can manage these 'memories' and delete any information you don't want to be saved.

Multi-Platform Access: Available via web browsers, desktop apps (for Windows and macOS users) and mobile apps (for Android and iOS users).

Operator feature: Runs tasks (operations), like hotel or dinner reservations, for you. More info here and here. Currently available only to Pro users in the U.S.

Privacy Controls: Offers options to manage your data and chat history. Provides the option to disable content usage for model training.

Projects feature: Keeps your chats, files, and custom instructions in one place.

Speech to Text feature: The mobile app offers a voice input feature, allowing you to speak your prompts.

Tasks feature: More Info.

and more...

			  ALSO: ANALYZER & WRITER tool		
Claude	Claude is developed by Anthropic, a company headquartered in San Francisco, California, USA. It performs tasks such as coding, debugging, data analysis, mathematical calculations, writing (creative, technical, and analytical), editing, visualization creation, problem-solving and more. The current models: Claude 3.5 Sonnet (new) (the latest and most powerful) Claude 3.5. Sonnet Claude 3.5. Haiku Claude 3 Opus Claude 3 Sonnet Claude 3 Haiku	Claude is a large language model (LLM) trained on a substantial dataset of text and code. The specific details of the data are not publicly available, but Anthropic emphasizes their focus on safety and reliability in the training process. (Source)	**Advanced Data Processing:** Enhanced capabilities for handling large datasets and complex analytical tasks with tools like Papaparse, SheetJS, and MathJS. **Code generation:** Coding assistance with context-aware suggestions and explanations. Can write, review, and debug code across multiple programming languages (including Python). With "Artifacts" feature activated HTML5 code can be generated and displayed right away. **Computer Use feature**: Claude 3.5 Sonnet enables the AI to interact with a computer's desktop environment, performing tasks much like a human user. This includes actions such as moving the cursor, clicking buttons, typing text, and navigating through applications. (Early version released in October 2024.) More info here. **Custom Instructions:** Personalize your experience (Claude´s responses) by setting preferences in your profile settings. **Data Analysis:** Performs complex mathematical calculations, data analysis, and visualization tasks. Can do statistical analysis and create data visualizations. **File upload and analysis:** Claude can analyze uploaded documents and answer questions based on their content. (Please make sure to respect copyright law when uploading material.) **Image recognition:** Interprets and describes images in	Free and premium plans available. For more information on pricing, see here.	**Registration & Account:** To access the free version, users need to create an account or sign in using their Google account. Privacy Policy

| | | | detail, including charts, diagrams, screenshots, and documents. Can extract text and analyze visual information. See benchmarks [here](). | | |
| | | | | | |

detail, including charts, diagrams, screenshots, and documents. Can extract text and analyze visual information. See benchmarks here.

LaTeX Support: Can render and work with LaTeX equations and mathematical notation.

Memory and contextual awareness: Maintains context only within the current active conversation. No long-term memory or context between separate conversations. Previous conversations cannot be referenced.

Mermaid Diagrams: Can create flowcharts, sequence diagrams, and other visualizations using Mermaid syntax.

Projects feature: Keeps your chats, files, and custom instructions in one place.

React Components: Can create and modify React components with Tailwind CSS styling.

SVG Creation: Can create and modify SVG graphics for diagrams and simple illustrations.

Writing style feature: Choose a writing style between normal, concise, explanatory, formal or create your own. By giving the tool couple of examples of your writing, e.g. E-Mails, it will learn your writing style.

and more...

Note: Some of these features are available only in the paid version, and the usage of some features in the free version may be limited.

			ALSO: ANALYZER & WRITER tool		
Gemini	Gemini is developed by Google DeepMind, designed to process and generate multiple types of data, including text, images, and audio. The current models: Gemini 1.5 Flash Gemini 1.5 Pro Gemini 2.0 Flash Experimental Gemini 2.0 Flash Thinking Experimental	"Gemini is the result of large-scale collaborative efforts by teams across Google, including our colleagues at Google Research. It was built from the ground up to be multimodal, which means it can generalize and seamlessly understand, operate across and combine different types of information including text, code, audio, image and video." (Source)	**Deep research feature:** Acts as an AI research assistant. Creates multi-step research plans, analyses info from across the web, generates reports with links to sources. Available in Gemini Advanced plan. (More Info) **Document Analysis:** Should be available with 2.0 Flash Experimental. **File upload and analysis:** Enables users to upload documents for analysis, summarization, or comparison. Should be available with 2.0 Flash Experimental. (Please make sure to respect copyright law when uploading material.) **Google Workspace integration:** Possible to give Gemini access to manage items from your Google Workspace, like emails and documents. **Image Generation:** Capable of creating images from text prompts using Imagen 3 technology. **Image Recognition:** Able to read and interpret images and graphics, providing descriptions or extracting information. **Speech to Text feature:** Offers a voice input feature, allowing you to speak your prompts. **and more...** Note: Some of these features are available only in the paid version, and the usage of some features in the free version may be limited.	Free and Premium plans available. More information on pricing, see here.	**Registration & Account:** Users are required to register with their Google account. Light and dark background mode. The Gemini 2.0 model can be tested for free via Google AI Studio. **Other Google DeepMind Projects (currently in testing):** -Project Astra - "You can speak to Project Astra or use video to show what you see." - Project Mariner: "Project Mariner can understand and reason across everything on your browser screen, including pixels and web elements like text, code, images and forms." Google privacy policy Gemini used to be called Bard (the rebranding took place in 2024).

			ALSO: ANALYZER & WRITER tool		
Le Chat	Le Chat is a multilingual conversational AI assistant developed by the French AI startup Mistral AI. (Source)	More on Mistral technology, see here. "Mistral AI's servers are located in Europe (Sweden)." (Source)	**Canvas Feature:** Writes code from text prompts and offers a preview. **Customization / Task Agents:** Models can be fine-tuned, and agents can be created. (More info) **Internet Access:** LeChat can browse the web (like Google) by clicking "Web search" button. **Image/Document Recognition:** Able to read and interpret images and PDFs, providing descriptions or extracting information. **Image Generation:** Capable of creating images from text prompts. ALSO: ANALYZER & WRITER tool	The information on pricing, see here.	**Registration & Account:** Users need to create an account or sign in using their Google or Microsoft account. **Security**: Multi-factor authentication available. **Legal terms and conditions:** see here.
Microsoft Copilot	"Microsoft Copilot is an AI-powered digital assistant that aims to provide personalized assistance to users for a range of tasks and activities". (Source)	Copilot is running on OpenAI's Chat GPT-4. (Source)	**Code generation:** Generates and edits code. **Integrated in:** Microsoft 365 Apps (Outlook, Teams, Word, Power Point, etc.) and Edge browser. **Image Generation:** Capable of creating images from text prompts. **File upload and analysis:** Copilot can analyze uploaded documents and answer questions based on their content. (Please only upload non-copyrighted material!). **Multi-Platform Access:** Available via web browsers, desktop app and mobile apps. **Plugins:** Various Plugins (agents) available via browser.	Free and premium plans available. For more information on pricing, see here.	Copilot Prompt Gallery Copilot Lab Tutorial

Tool	Description	Database / Powered by	Filters	Other Features	Pricing	Notes
				Speech to Text feature: Offers a voice input feature, allowing you to speak your prompts. ALSO: ANALYZER & WRITER TOOL		
Meta Llama	Meta Llama is a family of large language models (LLMs) developed by Meta AI based in California, USA. The current models: Llama 3.3 (70B) Llama 3.2 (1B, 3B, 11B, 90B) Llama 3.1 (8B, 405B)	Open source.		**Offline Usage:** Models can be downloaded and used locally.	The information on pricing, see here.	Meta Llama is available for free on Meta.ai, but it is currently not available in Europe. You can try out Meta Llama via Poe.com FAQ Privacy Policy
Research Kick	"Research Kick is a suite of AI apps tailor-made for researchers and academics. Built by academics for academics." (Source)	Semantic Scholar, Google Scholar, PubMed, Scite. (Source)		Use Research Kick Start to "kickstart your research projects, brainstorm ideas, craft research questions, and identify gaps." (Source) Use Research Kick Chat to "get access to multiple AI models, connect to research databases and create assistants for all your academic tasks." (Source)	No free plan available. For more information on pricing, see here.	For a demo video, see here.
Tool	**Description**	**Database / Powered by**	**Filters**	**Other Features**	**Pricing**	**Notes**
FINDERS – find academic literature, create summaries						
Absclust	Absclust visualizes the literature search results in thematic clusters.	Semantic Scholar; can also be connected to one's own data sets (Source)	- year - citations	**File upload:** upload your own files (PDF, CSV, txt, etc.) to make them searchable and to process them. Extract information and ask questions. -Statistics on search results.	Free and premium plans available. For more information on pricing, see here.	Some features (e.g. „Find by Similarity") are not yet available.

				ALSO: ANALYZER tool		
Consensus	"Consensus is an academic search engine, powered by AI [...] We use language models (LLMs) and purpose-built search technology (Vector search) to surface the most relevant papers. We synthesize both topic-level and paper-level insights." (Source)	Semantic Scholar (Source)	- year - Open Access - minimum citations - methods used in paper - Scimago Journal Rank - subject area	- GPT4 summaries of papers. - Consensus Meters for yes/no questions. - Study Snapshots (population, sample size, methods, outcomes). - Consensus Copilot ("you can have Copilot answer questions, draft content, create lists, and more"). - Zotero integration. (Source)	Free and premium plans available. For more information on pricing, see here.	Better avoid keywords but rather type in full questions. Tips for searching.
Elicit	"Elicit uses language models to extract data from and summarize research papers." (Source) Elicit allows users to "get one sentence abstract summaries, select relevant papers and search for similar ones and to extract details from papers into an organized table." (Source)	- Semantic Scholar - The Elicit team announced that they want to add more sources soon. For more information, see here.	- PDF available - year - study type - keywords (not) in the abstract - different ranking methods	- Upload PDFs and have them summarized (please only upload non-copyrighted material!). - "List of concepts" (for searching methods, datasets and the same concept across different subjects). - Integrates with Zotero. More information.	Free and premium plans available. For more information on pricing, see here.	Better avoid keywords but rather type in full questions. For the FAQ, see here.
Evidence Hunt	AI research tool for medicine.	PubMed	-study type -discipline	Summaries and answers based on all results	Free and premium plans	The added value compared to PubMed itself is rather limited at the moment.

					available. For more information on pricing, see [here]().	
			-only last week's publications - Search boxes for PICO analysis (Population, Intervention, Comparison, and Outcome)			
[Keenious]()	„Keenious recommends relevant research papers by analyzing your document[.] [...] You can easily add Keenious as a sidebar in Microsoft Word or Google Docs so that you can get suggested relevant research". ([Source]) This means that users do not type in a question but connect Keenious directly to an entire text they are currently working on. However, the search in Keenious also works relatively well if users type in long questions.	[Open Alex]()	- year - citation count - Open Access	Highlight text in your file to only search for this specific concept or topic.	Free and premium plans available. For more information on pricing, see [here]().	Works best if connected to a longer document that is currently being worked on → the more input the better. Users should make sure that the unpublished text they are connecting to Keenious contains no sensitive data!

ORKGAsk	"ORKG Ask is a scholarly search and exploration system powered by Vector Search, Large Language Models and Knowledge Graphs" (Source) Developed by the TIB Leibniz Information Centre for Science and Technology (Hannover, Germany).	"The research articles are sourced from the CORE dataset, a comprehensive collection of open-access research literature." (Source) Technical details: "**Vector Store:** We use Qdrant for storing and retrieving vector representations of research articles efficiently. **Embedding Model:** The Nomic embedding model is utilized to encode search queries and research articles into high-dimensional vectors for semantic search. **Large Language Model:** Our system employs the Mistral Instruct 7B v0.2 LLM to extract and interpret relevant information from the selected research articles." (Source)	- year - language - impact - citation count - title - abstract - publisher - author - topic	Presents results in a table to and gives an overview on: - the answer the paper gives to the user's research question - key insights - tl;dr (too long; didn´t read) - conclusions - results - methods Further features: - export results (CSV and LaTeX) - export results to the Open Knowledge Research Graph	Free.	Better avoid keywords but rather type in full questions. For the FAQ, see here. ORKAsk is Open Source and privacy-friendly. More information on data privacy here.
Perplexity AI	"Perplexity is an alternative to traditional search	- For "Focus: Academic": no	None, apart from general filters like "Academic".	**Copilot** (only for registered users): asks questions about	Free and premium plans	We don't recommend it for academic research at the moment. It's more suited for

	engines, where you can directly pose your questions and receive concise, accurate answers backed up by a curated set of sources". (Source) Please note that PerplexityAI is not specifically designed for academic research. Users can, however, choose the focus "Academic".	information on the database. - Based on ChatGPT, ClaudeAI, and Meta Llama.		queries to better tailor the results to users' needs. (Source) **Spaces feature:** Similar to ChatGPT's Projects feature, this tool provides a dedicated folder where users can collect and organize sources, including files from the web, PDFs, Excel sheets, Word documents, and PowerPoint presentations. Users can also add custom instructions to guide the AI chatbot on how to respond effectively. ALSO: ASISSSTANT, ANALYSER & WRITER tool	available. More information on pricing, see here.	researching every-day questions.
R Discovery	Literature search tool and chatbot.	"PubMed, PubMed Central, CrossRef, Unpaywall, Open Alex and top academic research publications, including Wiley, Elsevier, Springer Nature, IOP, SAGE, Taylor & Francis, NEJM, Emerald Publishing, BMJ, Karger, Underline.io and more". "250M+ research papers, including 40M+ open access articles, across 32,000 journals as well as 2M+ preprints and 7.5M+ patents"	-year -journal ranking -subject field -number of citations	-Publications are translated into 30+ languages. -Audio versions of papers. -Connecting with Zotero & Mendeley.	Free and premium plans available. More information on pricing, see here.	Users can search both for bibliographic data and with a full question. Tool tries to identify and exclude predatory publishers from its database.

		(Source)				
scienceOS	Offers „AI Science Chat" and „AI PDF Chat". The Science Chat generates summaries based on the publications it finds. The PDF Chat summarises uploaded PDFs.	Semantic Scholar (Source)	-	- Network featureshows citation connections between the found articles. - Save PDFs found by the tool. - Export from Mendeley, Zotero and Endnote. AI Actions: workflow for prompts that help analyze PDFs (translate, summarize, create tables and figures → Analyzer). ALSO: ANALYZER & CONNECTOR tool	Free and premium plans available. More information on pricing, see here.	PDFs uploaded by a user are only visible in the user's account and are not used for training the tool.
scinapse	"We are developing a new type of tool called Research Intelligence, rather than a search engine." (Source)	Microsoft Academic Graph (till 2021), Pubmed, OpenAlex, Semantic Scholar, Springer Nature SciGraph, Pluto Lab's Crawler (Source)	-h-Index -Country -Affiliation -Subject Field -Number of Citations -and more	-Identifies research trends. -Finds subject experts. -Compares the research output of different countries, institutions, and individuals.	Free and premium plans available. More information on pricing, see here.	It's rather a benchmarking and trend analysis tool than a research tool. Planned: data on patents, research financing, companies (Source).
SciSpace	Helps researchers find, understand, and connect scientific literature. "For every paper you read, get simple	Unclear – most likely Semantic Scholar and the Directory of Open Access Books as well as the Directory of Open Access Journals ("200 million+ papers and 50	- PDF available - Open Access - "top tier papers" - year	SciSpace offers a multi-purpose platform for academic research and publishing: - analyzing papers	Free and premium plans available. More information	Better avoid keywords but rather type in full questions.

	explanations and answers from AI and discover a network of connected and relevant papers". (Source)	million+ Open Access full-text PDFs"). (Source)	- publication type - keywords - journals	- publishing papers - AI detection tool - plagiarism check - hosting journals ALSO: ANALYZER & WRITER tool	on pricing, see here.	
Semantic Scholar	"Semantic Scholar is a free, AI-powered search and discovery tool that helps researchers discover and understand scientific literature that's most relevant to their work". (Source)	For the journals and databases indexed by Semantic Scholar, see here.	- field of study - year - PDF available - author - journal / conference - different rankings	- Personal library. - Alerts for new publications. - AI-generated summaries (currently only for computer science and biomedicine).	Free.	Very detailed FAQ page.

Tool	Description	Database / Powered by	Filters	Other Features	Pricing	Notes
Undermind	Uses a complex four-step search algorithm to "mimic a human's careful, systematic search process". (Source) The tool has a special focus on search quality. (Source) More information on the algorithm can be found in this whitepaper.	Semantic Scholar	- minimum number of citations per year - only show papers published in the last 2 or 5 years	- Summaries of the topic based on the papers that were found. - Narrowing down the results based on specific topics. - Extend the results list to even more papers.	Free and premium plans available. More information on pricing, see here.	Watch a demo video here.

CONNECTORS - create visual interactive maps of search results (papers) based on their citation and subject relations

Tool	Description	Database / Powered by	Filters	Other Features	Pricing	Notes
Citation Gecko	"Gecko is here to help you find the most relevant papers to your research and give you a more complete sense of the research landscape. Start from a small set of 'seed papers' that define an area you are interested. Gecko will search the citation network for connected papers allowing you to quickly identify important papers you may have missed." (Source)	Unclear.	- year - journal - marked irrelevant - seeds cited by - seeds cited	- Import from Bibtex, Zotero, Mendeley. - Timeline layout vs. network layout.	Free.	

Connected Papers	Connected Papers is a visual tool to help researchers find and explore papers relevant to their work. Search by keyword or provide a 'seed paper' by entering the DOI, and the tool will provide a visual map of other (thematically or bibliographically) related papers.	Semantic Scholar Paper Corpus (licensed under ODC-BY). (Source)	- PDF available - Open Access - year - derivative works - prior works	- View the results as a graph or as a list. - Citation count available.	Free and Premium plans available. More information on pricing, see here.	Search by keywords, paper, title, DOI or another identifier. Better results when searching with articles (seed papers) than with keywords.
Inciteful	Inciteful.ai is a free web-based tool that helps researchers explore academic literature using network analysis of citations.	"The Inciteful database has coverage over the majority of academic papers in peer reviewed journals as well as books." (Source)	- keywords - timeline - top authors - top institutions - top journals - most important papers - review papers - recent papers - top 100 authors (on the topic)	- Literature Connector: users can explore how two bodies of literature connect to each other by entering two papers. The tool displays the shortest paths between the papers and enables interaction with the graph. Users can also search and filter through the papers. - Zotero plugin.	Free.	
Litmaps	Litmaps recommends papers based on an initial starting article. Users can search for a	More than 260 million papers from Crossref, Semantic Scholar, OpenAlex.	- year - author	- Organize articles into collections. - Find more related articles	Free and Premium plans available.	Search by keyword, author, DOI, Pubmed ID or arXiv ID.

			- keywords	with "Discover search".	More information on pricing, see here.	Yields better results when searching with articles/IDs ("seed papers") than with keywords.
topic, select an article, and Litmaps will find relevant related articles.			- data range - timeline	- Save searches, export & share findings, sign up for email alerts to be notified when new articles on a topic are published. - Citations count available.		
Local Citation Network	"This web app aims to help scientists with their literature review using metadata from OpenAlex (OA), Semantic Scholar (S2), OpenCitations (OC) and Crossref (CR). [...] This web app visualizes subsets of the global citation network that I call 'local citation networks', defined by the references of a given set of Input Articles. In addition, the most cited references missing in the set of Input Articles are suggested for further review as 'Top References'. Other missing articles citing the highest number of Input Articles are 'Top	- OpenAlex - Semantic Scholar - OpenCitations - CrossRef	- title - abstract - ID (e.g. DOI or PubMedID) - author - year - journal - cited by ID - citing ID	- Download as RIS, CVS and JSON. - Shows results both as graphic network and table.	Free	Users have to insert the DOI without the "https"-prefix, e.g. "10.3366/rom.2018.0368" instead of "https://doi.org/10.3366/rom.2018.0368".

	Citations'." (Source)					
Research Rabbit	ResearchRabbit is a citation-based literature mapping tool. Users start with a 'seed paper', and the app will find more papers relevant to the topic of interest (which is dictated by the seed papers previously selected by the user).	Unclear.	- author - recency - year - timeline	- Personalized alerts on new papers in a field. - Creates personalized collections of paper recommendations. - Discover author networks. - Share & collaborate. - Zotero integration. - Export papers with BibTex, RIS, CSV. - Citation count.	Available for free.	Search papers by title, DOI, PMID, or keywords, or upload a file (BibTeX, RIS). Better results when searching with articles (seed papers) than with keywords.
Open Knowledge Maps	Open knowledge maps provide an overview of a topic by showing the main subject areas at a glance, and documents related to each area. (Source)	PubMed (life sciences) or BASE (all disciplines), OpenAIRE.	- Open Access - relevance - author - title - year - document type - metadata quality	- Provides full text PDF for Open Access articles. - Export with BibTeX.	Available for free.	Uses the top 100 documents related to a search to create a map. Find FAQs here. Find training material here.
Scite	Scite is a research assistant and literature search tool. Based in Brooklyn, New York.	"We get full text articles and metadata from many different sources, primarily from indexing	- author - year	**AI-Powered Assistant:** Allows users to ask questions and receive answers backed by research.	Free and Premium plans available.	Works best for papers that have a DOI – less helpful for older papers and books.

| | Puts a special focus on how papers were received by other papers (support / contrast / neutral mention); also helps identifying research gaps & controversies within a field. (Source) | agreements with publishers [...] and from different open sources such as unpaywall, pubmed, fatcat, various preprint servers, university repositories, open access journals, and more." (Source and further information)

Scite data coverage | - section (e.g. methods section)

- type of reference (e.g. "supporting")

- citations

- journal

- institutional affiliation

- publication type

- topic

- editorial notice

- MeSH category
More information here. | **Smart Citations:** Provides context for how a scientific paper has been cited, indicating whether it supports, contradicts, or merely mentions the cited work.

Dashboards: Enables users to build and manage collections of articles and chat with them.

Visualizations: Create literature maps.

Reference Check: Assesses how references in a manuscript have been used to ensure proper citation of sources.

Browser Extension: Offers direct access to Smart Citations while reading articles online.

Zotero plugin: Integrates Smart Citation data in Zotero library.

ALSO: ASSISTANT, FINDER & ANALAYZER TOOL | More information on pricing, see here. | Main focus on the natural sciences and medicine.

Help & Support Center |
| VOSViewer | "VOSviewer is a software tool for constructing and visualizing bibliometric networks. These | The tool can use data from/ the APIs of:
- Web of Science
- Scopus
- Dimensions | - different ways of visualizing the data

- many filters | There's a desktop version and a web version. | Free. | For a video tutorial, see here. The website also offers a lot of training material and examples. |

	networks may for instance include journals, researchers, or individual publications, and they can be constructed based on citation, bibliographic coupling, co-citation, or co-authorship relations. VOSviewer also offers text mining functionality that can be used to construct and visualize co-occurrence networks of important terms extracted from a body of scientific literature." ([Source](#))	- Lens - PubMed - Crossref - Europe PMC - OpenAlex - Semantic Scholar - OpenCitations - WikiData			It is a bit harder to master than other Connector tools, but also offers more possibilities for analysis.

Tool	Description	Database / Powered by	Features	Pricing	Notes
ANALYZERS - summarize papers and allow you to ask questions about the paper that the tool will try to answer					
[Acrobat AI Assistant](#)	"Save time and simplify your workflow across multiple documents with AI Assistant. Generate summaries, get quick answers[.] […]Ask questions and get quick answers linked to sources primarily from your docs." ([Source](#))	Unclear.	- You can use voice prompts in the mobile app. - Can analyze multiple documents at the same time. - "Automatically generate meeting summaries and identify action points from transcripts." ([Source](#)) - Brainstorming feature. - Editing feature. - Creating feature (e.g. "write an email summarising the most important points of this report").	There's only a premium plan. More information on pricing, [see](#).	**Please make sure to respect copyright law when uploading material.**

ChatPDF	Users can get summaries of articles and ask questions to help them understand the content.	Uses "ChatGPT API from OpenAI to generate an answer." ([Source](#))	- Accepts PDFs in any language and can chat in any language. - Answers contain references to their source in the original PDF document. - Create folders to organize your files and chat with multiple PDFs in one conversation.	Available for free.	To get started, upload a file or copy & paste a URL. **Please make sure to respect copyright law when uploading material.**
DocAnalyzer.ai	docAnalyzer.ai offers conversations with one or many documents at once.	"Unlike competitor analysis tools that merely extract and index information, docAnalyzer.AI deploys a more nuanced, multi-step/multi-agent approach to provide a deeper understanding of a document's content. Leveraging advanced AI technologies, such as OpenAI's API among others, our technology stack uses an ensemble of strategies to deliver contextually rich and meaningful responses." ([Source](#))	- Can analyze multiple documents at the same time. - Covers various languages. - Can be used on a mobile device. - Collaborating and sharing feature.	Free and Premium plans available. More information on pricing, see [here](#).	More information on docAnalyzer.ai, see [here.](#) **Please make sure to respect copyright law when uploading material.**

Documind	"Documind is used to ask questions, summarize document, generate reports or create a chatbot trained on your documents." ([Source](#))	GPT-4o	- Can analyze multiple documents at the same time. - Can generate reports and essays. - Covers various languages. - "Create a chatbot trained on your documents and share it with anyone with a shareable link. No signup required to use your link, and you can also place it on your website." ([Source](#))	Various premium plans available. More information on pricing, see the bottom of the page [here](#).	**Please make sure to respect copyright law when uploading material.**
Explainpaper	Explainpaper is an AI-powered platform that helps readers understand complex academic research papers. It allows users to highlight sections of a paper and receive simplified explanations of key concepts in them.	The free version is based on ChatGPT 3.5, and the Pro version is based on GPT-4o.	Users can switch between the different levels of expertise for the explanations (from 5-year-old to expert).	Free and Premium plans available. More information on pricing, see [here](#).	Some issues may occur with larger texts (~300 pages). **Please make sure to respect copyright law when uploading material.**

Julius	"Julius writes and executes R & Python code to accomplish analytical tasks. With straightforward natural language commands, users can guide Julius to create charts, run statistical tests, or solve math equations." (Source)	Uses GPT-4o, Claude 3 and Gemini 1.5.	-Exploratory data analysis - One-way Analysis of Variance (ANOVA) - Descriptive Statistics - Correlation Matrix & Analyzing Gene Expression	Free and Premium plans available. More information on pricing, see here.	Privacy policy **Please make sure to respect copyright law when uploading material.**
Humata	"Skip through long technical papers with ease. Summarize findings, compare documents, and search for answers. Humata will read every file you upload and will generate answers based on the content of your documents. Each answer Humata generates will cite relevant sections from your uploaded documents." (Source)	Uses the GPT 4.0 model for premium plans.	**Conversational document interaction:** Users can ask questions about the content of their files, and Humata will provide answers. **Summarization:** Humata can generate summaries of key information within documents. **Annotation and reference tracking:** Humata can provide page numbers and other references to guide users to the source material. **Productivity enhancement:** Humata can help users save time by finding information and insights within their documents.	Free and Premium plans available. More information on pricing, see here.	Creating an account is required. Upload PDF, DOCX, DOC, PPTX or PPT. **Please make sure to respect copyright law when uploading material.**

NotebookLM	AI-powered research/learning assistant, resource management and note-taking tool developed by Google.	Powered by Gemini 2.0.	**Audio Overviews**: Transforms documents into conversational, podcast-style audio with two AI voices. **Document Upload and Analysis:** Users can upload various documents, including PDFs, Google Docs, text files, YouTube videos, and web pages. NotebookLM analyzes the content, generating summaries and suggesting follow-up questions. **Summarization**: Text and audio summaries of uploaded or linked content. **Assistance with Citations**: NotebookLM answers users' questions with citations that point directly to the relevant sections of the document. **Integration with Google Workspace**: NotebookLM integrates with Google Workspace, including Google Docs and Google Drive. Users can upload documents and access other Google tools like Sheets and Calendar without interrupting their workflow. **Content Organization and Management**: NotebookLM lets users create separate notebooks for different projects. **Interactive mode:** Participate in the generated podcast by asking questions and talking to the two podcast hosts.	Free and Premium plans available. More information on pricing, see here.	**Registration & Account:** Users need to create an account or sign in using their Google account. Learn how NotebookLM protects your data here. **Please make sure to respect copyright law when uploading material.**

Otio.ai	"An AI-native workspace, custom built for research. 1. Summarize and chat with your documents. 2. Write and edit in an AI text-editor." (Source)	Powered by GPT-4o, Claude 3.5 & Mistral (Source)	- Creates Youtube summaries. - Creates essay outlines. - Compares documents. - Can be used to draft reports. - Includes a text editor. ALSO: WRITER tool	Free and Premium plans available.	**Please make sure to respect copyright law when uploading material.**
Paperguide	Paperguide discovers, analyzes, and synthesizes academic literature with AI assistance.	Based on AI models: GPT4, GPT-4o, Claude 3.5. Sonnet.	-AI Writing Assistant -AI Search (Beta version) -Chat with PDF -Literature Review (Beta version) -Extract Data -Reference Manager ALSO: FINDER & WRITER Tool	Free and Premium plans available. More information on pricing, see here.	**Please make sure to respect copyright law when uploading material.** Video Review/Tutorial
PDF.ai	PDF.ai is an AI-powered platform that enables users to summarize, search, and collaborate on PDF documents.	"We use gpt-3.5-turbo-16k for all paying customers. For freemium users, we use gpt-3.5-turbo (4K base model). The gpt-3.5-turbo-16k model offers four times the context length of the 4k base model." (Source)	**AI-powered PDF summarization**: Upload a PDF and PDF.ai will generate a summary of the document's main points and insights. **Interactive PDF chat:** Users can ask questions about the PDF content, and PDF.ai will provide answers pulled directly from the document. **Collaborative workspace:** PDF.ai allows users to invite team members to access and discuss PDF files.	Free and Premium plans available. More information on pricing, see here.	Requires users to create an account or to sign up with their Google or GitHub account. **Please make sure to respect copyright law when uploading material.**

Scholarcy	An AI-powered research assistant tool designed to help students and researchers understand and synthesize academic articles more efficiently. (Source)	The specific inner workings of Scholarcy are not publicly available.	**Article Summarization:** Analyzes academic papers and provides summaries highlighting key points. **Interactive Flashcards:** Creates flashcards with important information from the article. **Citation Highlighting:** Identifies and highlights key citations within the article. **Open Access Link Finder:** Locates freely available versions of the research paper (if available). **Comparative Analysis (Premium):** Analyzes how a new paper builds upon or differs from previous research in the field (available in the paid version).	Free and Premium plans available. More information on pricing, see here.	Find video tutorials here. **Please make sure to respect copyright law when uploading material.**
ANALYZERS - Systematic Literature Review Tools					
ASReview	ASReview, developed at Utrecht University, is an open-source software for systematic reviews, enabling researchers to efficiently screen literature. It utilizes machine learning to prioritize articles for inclusion, streamlining the review process. (Source)	The software is installed on devices locally. This ensures that nobody else has access to users' data, except when they share it with others. (Source)	**Collaborative Screening:** Multiple researchers can work on the same review project simultaneously **Customizable screening strategies.** **Integration with Reference Managers:** Compatibility with various reference management software.	Free.	**Please make sure to respect copyright law when uploading material.**
Covidence	Covidence is a web-based tool designed to streamline the systematic review process.	Cloud-based platform. (Source)	**Blind Screening:** Allows reviewers to independently assess studies without being influenced by others' decisions. **Cochrane reviews:** info here. **Collaborative Screening:** Multiple researchers can work	Free and Premium plans available. More information	**Please make sure to respect copyright law when uploading material.**

| | | | on the same review project simultaneously.

Customizable Inclusion/Exclusion Criteria: Define clear criteria for including or excluding studies in your review.

Data Extraction: Extract relevant data points from included studies for analysis during the review process.

Data export: info here**.**

Duplicate Detection: Automatically identifies and removes duplicate entries.

Quality Assessment: info here. | on pricing, see here. | |
| Rayyan | Web-based and mobile application specifically designed to facilitate the screening process for researchers conducting systematic reviews. (Source) | "Rayyan uses artificial intelligence, machine learning, and natural language processing to understand language, learn from decisions, and help research teams reduce the time it takes to complete their systematic reviews and literature reviews." (Source) | **Collaborative Screening:** Multiple researchers can work on the same review project simultaneously, streamlining the process.

Blinding Option: Enables anonymous screening of articles to minimize bias based on author or publication details.

Customizable Inclusion/Exclusion Criteria: Define clear criteria for including or excluding studies in your review.

Duplicate Detection: Automatically identifies and removes duplicate entries.

Full-Text Review Integration: Upload and manage full-text articles alongside citations for detailed review within Rayyan.

Data Extraction Tools: Extract relevant data points from included studies for analysis during the review process.

AI-powered Features (Limited): Offers basic AI features like suggesting articles for inclusion/exclusion based on | Free and Premium plans available. More information on pricing, see here. | **Please make sure to respect copyright law when uploading material.** |

			previous decisions (potentially expanding in the future). (Source)		
Tool	Description	Database / Powered by	Features	Pricing	Notes
WRITERS - help to write and edit your paper					
DeepL Write	DeepL Write is an AI-powered writing assistant that can improve users' written communication. It will help with your writing by correcting the grammar, spelling, and punctuation, as well as providing suggestions for alternative words and phrasing. (Source)	DeepL Write utilizes advanced natural language processing and machine learning models developed by DeepL.	- Grammar and spelling correction. - Vocabulary enhancement with suggested synonyms. - Sentence structure optimization for clearer and more concise phrasing. - Tone and style adjustments (e.g., formal, casual, creative).	Free and Premium plans available. More information on pricing, see here.	Currently supports four languages: English (UK and US), German, French and Spanish. It is planned to add more in the future. Use DeepL Write via following platforms: - Website - Desktop apps (Windows) - DeepL for Google Docs - DeepL for Google Slides - DeepL for Gmail - DeepL for Microsoft Word **Please make sure to follow your institution's AI guidelines!**
Flot.ai	Allows you to edit and paraphrase your writing in various ways across many apps and websites.	ChatGPT 3.5 (free version) ChatGPT 4 (premium versions)	- Includes a translation feature. - Integrates ChatGPT in your workflows. - Grammar check. - AI Memory: "build a personal knowledge base by memorizing […] information with Flot AI Memory, recall it anytime, anywhere, simply by chatting with AI" (Source).	Free and Premium plans available. More information on pricing, see here.	**Please make sure to follow your institution's AI guidelines!**
Grammarly	Grammarly serves as a collaboration partner throughout the writing	Grammarly's products are powered by an advanced system that	- AI Writing tool. - Grammar check.	Free and Premium	Log in with a Google, Facebook or Apple account.

	process, assisting with brainstorming initial ideas, formatting citations, and various other tasks. (Source) It functions as an all-in-one writing assistant available for desktop and browser use.	combines rules, patterns, and artificial intelligence techniques like machine learning, deep learning, and natural language processing to improve your writing. (Source)	- Plagiarism check. - Paraphrasing tool. ALSO: ASSISTANT tool	plans available. More information on pricing, see here.	Available in 500,000+ mobile, web, and desktop applications including Windows and Chrome, Firefox, Safari, Edge. **Please make sure to follow your institution's AI guidelines!**
Jenni AI	Jenni's AI-powered text editor assists users in writing, editing, and citing text.	Uses the latest AIs models. "Some product features take advantage of GPT-4´s capabilities". (Source)	- AI Autocomplete. - In-text citations. - Paraphrase and rewrite. - Chat to your PDFs. - Import sources via .bib file. - Export your draft to LaTeX, .docx, or HTML without formatting loss. - Outline builder. - Multilingual support. - Save and manage research in folders. ALSO: ASSISTANT and ANALYZER tool	Free and Premium plans available. More information on pricing, see here.	Jenni is currently only available as a desktop version. "Jenni strives to generate content that is 100% plagiarism-free. However, occasionally there may be sentences that Jenni writes that also happen to be on the web." (Source) **Please make sure to follow your institution's AI guidelines!**

Mimir Mentor	"Mimir reformulates your text scientifically using artificial intelligence. […] Mimir's artificial intelligence shapes your thoughts into scientific sentences." (Source)	No information.	- Find sources that are relevant to a statement made in your text. - Check whether citations adhere to a chosen citation style. - Plagiarism detector.	Free and Premium plans available. Pricing information is only visible when you're logged in (under "Account").	**Please make sure to follow your institution's AI guidelines!**
NovelAI	NovelAI is a monthly subscription service that provides AI-assisted authorship, storytelling. (Source)	Powered by advanced natural language processing and machine learning algorithms, NovelAI helps users generate unique stories, illustrations, and interactive text adventures. (Source)	- Text generation with various modes to customize the writing style, tone, and genre. - Image generation based on text prompts, with options to choose different art styles. - Interactive text adventure mode for collaborative storytelling. - Theme editor to customize the writing environment. - Integration with writing tools like Microsoft Word and Google Chrome.	Free and Premium plans available. More information on pricing, see here.	NovelAI is designed specifically for creative writing and storytelling, unlike more general-purpose AI writing tools. Introduction (Demo) Video **Please make sure to follow your institution's AI guidelines!**

Paperpal	"Designed as an all-in-one AI academic writing assistant, Paperpal streamlines and enhances academic writing by supporting authors at every step, from the first draft to final submission." (Source)	Unclear. "Paperpal employs a variety of AI models best suited to specific features. We also use our own proprietary suite of specialized AI and generative AI models trained on scholarly data." (Source)	- Grammar checker. - Paraphraser. - Reference finder. - Plagiarism check. - Pre-submission check for academic journals. - Outline, abstract and title generator. - Essay writer.	Free and Premium plans available. More information on pricing, see here.	**Please make sure to follow your institution's AI guidelines!**
QuillBot	QuillBot is an AI-powered online writing tool that helps users improve their writing by providing various modes to rephrase text while preserving its meaning. It allows users to paraphrase, summarize, check grammar and plagiarism, translate, outline, and create citations.	QuillBot's AI is trained on datasets that teach it the right and wrong ways to write, including information on grammar, spelling, punctuation, tone, sentence structure, and clarity. The AI learns from user feedback, such as when users "ignore" certain paraphrasing suggestions. (Source and more information here)	- Paraphrasing with 8 predefined modes and unlimited custom modes to change vocabulary, sentence structure, and writing style. - Integrated thesaurus to find synonyms. - Integration with Microsoft Word and Google Chrome. - Grammar and plagiarism checking. - Summarization. - Citation generation. - Writing style modes (e.g. formal, simple, creative).	Free and Premium plans available. More information on pricing, see here.	Learn how to use QuillBot's free paraphrasing AI — demo and tutorial **Please make sure to follow your institution's AI guidelines!**

Tool	Description	Database / Powered by	Features	Pricing	Notes
Yomu AI	Yomu is an AI-powered writing assistant that helps users write essays and papers. (Source)	Powered by Sourcely.	- Paraphrase. - Expand, shorten, summarize and turn bullet points into detailed text. - Document assistant helps to write entire sections and gives feedback. Also offers AI autocomplete and plagiarism checker.	Free and Premium plans available. More information on pricing, see here.	**Please make sure to follow your institution's AI guidelines!**
Writefull	"Writefull offers AI-based language feedback, writing widgets, and big data insights to help authors and copy editors improve their texts." Created by team from the Neatherlands, Spain and the UK. (Source)		-Academizer: mekes your informal sentences sound academic. -Paraphraser -Title generator: Generates titles based on abstracts -Abstract Generator: Generates an abstract from your full paper. -GPT Detecor: checks if the text has been generated by AI. -Integration with MS Word and Overleaf -Writeful Revise		**Please make sure to follow your institution's AI guidelines!** "We strongly value privacy and security. Our servers do not store your texts, and no document or text ever reaches our hard drive. We also do not use the language suggestions you receive (or accept/reject) to improve our models; we improve Writefull's models by training on published articles and by carrying out linguistic analyses. Read our full privacy policy here." (Source)
Tool	Description	Database / Powered by	Features	Pricing	Notes
PRESENTERS – help to create presentation slides					
Beautiful.ai	Presentation software that helps users create presentations using AI-powered design templates.		- AI-driven slide design and layout. - Pre-designed templates and themes. - Collaboration tools for team projects. - Integration with various media and content formats.	There's only a premium plan. More information on pricing, see here	**Please make sure to respect copyright law when uploading material.**

Gamma.app	Creates presentation slides and websites from papers, documents or texts provided.		- Generates Slides and websites. - Provides charts, graphs, images. - Offers pre-made templates. - Export as PDF or PPT files.	Free and Premium plans available. More information on pricing, see here.	**Please make sure to respect copyright law when uploading material.**
Simplified	Versatile AI design tool for creating media such as presentations, images and various content for social media.		- AI Video - AI Design - AI Writer - AI Chatbot and more...	Free and Premium plans available. More information on pricing, see here.	**Please make sure to respect copyright law when uploading material.**
Slaides AI	Google Chrome extension that creates slides from a text or a topic provided.		- Creates up to 10-page presentation. - Magic write feature helps with paraphrasing and inserting citation references as well as suggesting pictures to use in the presentation.	Free and Premium plans available. More information on pricing, see here.	**Please make sure to respect copyright law when uploading material.**
Tool	Description	Database / Powered by	Features	Pricing	Notes
OTHER					
Acemate	"Acemate analyzes your lecture materials and creates customized learning resources such as summaries and exams with solutions. It provides you with instant feedback, helping you identify and address any	Documents uploaded by users. (Users can keep them private or share them with others.)	- Chat with your documents. - Create summaries automatically from your lectures. - "Track your knowledge: Understand relationships between concepts, identify topics to work on and track your progress with our knowledge graphs." - "Upload your existing old exams to get detailed solutions and generate new ones that replicate their style, format and difficulty."	Free (at the moment).	Currently, Acemate supports English, German, Spanish, French, Portuguese, Italian, and Dutch.

	knowledge gaps. If you have questions, the AI chat offers precise explanations with referenced sources from your lecture materials." ([Source](#))		- "Our exam generator creates questions based on your lecture materials and evaluates your answers."		
[AI-Cards](#)	"AI Usage Cards is a free university service that allows anyone to document AI in scientific works. The cards can be used to provide transparency to ChatGPT, GPT-4, and others in less than 10 minutes, ensuring that you're responsibly using AI-generated content." ([Source](#))	Input by users on how they utilized AI tools in their term papers or other writings.	"Our platform is designed to be easily incorporated into any work, and can be generated in less than 10 minutes using our free service. AI Usage Cards are machine-readable and easy-to-use, ensuring that you can report AI-generated content with minimal effort. Similar to model cards and data cards, they can be incorporated easily into your works." ([Source](#))	Free.	For more information, see this [paper](#) and this [video](#).
[BioRender](#)	The tool creates professional science figures and graphs.		- Templates available. - Icon and image library. - Custom Icons: "Find icons you need for even the most specialized fields of life science, or we'll create it in as little as 48 hours." - Poster builder.	Free and Premium plans available. More information on pricing, see [here](#).	
[GigaBrain](#)	"GigaBrain scans billions of discussions on reddit and other online communities to find the most useful posts and comments	[Reddit](#) database.	Answers your question with TLDR answer gathered from the responses or Reddit users. The original responses are linked in the answer-summary.	Free and Premium plans available. More information	

				on pricing, see here.	
Hugging Face	"The Hugging Face Hub is a platform with over 900k models, 200k datasets, and 300k demo apps (Spaces), all open source and publicly available, in an online platform where people can easily collaborate and build ML together. The Hub works as a central place where anyone can explore, experiment, collaborate, and build technology with Machine Learning." (Source) Based in New York City, USA.	Many of its tools, including the Transformers library, Datasets library, and other resources, are freely available under permissive open-source licenses like Apache 2.0. More info here.	You can download a variety of models and datasets directly to your local Python environment, enabling you to build and customize your own AI applications. Additionally, with the "Spaces" feature, you can experiment with and utilize models in Hugging Face's cloud environment.	Free and Premium plans available. More information on pricing, see here.	Video tutorial
Lateral	An AI-powered research management tool designed to help academics, researchers, and students organize, read, and analyze academic literature more efficiently. (Source)	"We have built our own machine learning technology (LIP API) to make content suggestions. Your content is not sent to Open AI servers." (Source)	**Centralized Library:** Store and organize your research papers from various sources in one place. **AI-powered Summarization:** Generates summaries of research papers. **Annotation and Note-taking:** Annotate papers directly within Lateral, highlight important passages, and take notes.	Free and Premium plans available. More information on pricing, see here.	Integrates with various academic databases and reference managers like Mendeley and Zotero.

			Advanced Search: Search within your library using keywords, filters, and citations. **Citation Management:** Generate bibliographies in various citation styles. **Collaboration Tools (Beta):** Share your research papers and collaborate with colleagues on annotations and notes (still under development).		
Poe	AI platform developed by Quora, where users can try out different AI models. More info here.		Try out different AI models, like ChatGPT, Claude 3.5 Sonnet, Gemini and many more. New models are added regularly.	Free and Premium plans available. More information on pricing, see here.	

The information on the tools is based on the following sources:

- Tool testing by the members of the AI-Team of Tübingen University Library (for the following groups: ASSITSTANTS (partly), FINDERS and CONNECTORS)
- AI Advantage Youtube content https://www.youtube.com/@aiadvantage/videos
- Dr. Andy Stapleton Youtube content https://www.youtube.com/@DrAndyStapleton/videos
- AI newsletters and blogs:
  - The Rundown AI
  - AI Breakfast
  - Heike Baller's blog *Profi-Wissen*
  - Aaron Tay's blog *Musings about Librarianship*
- Suggestions from our course participants and colleagues

You can find more information on Artificial Intelligence for Academic Research on the website of Tübingen University Library.