

# AI tools for scientific research and writing - checklist

The questions below can help you assess an AI tool. An ideal scenario is when all questions can be answered with “yes”. If not all questions can be answered positively, it does not disqualify a tool per se, but may be relevant for the final decision to use it. If individual questions do not apply to your tool, please skip them.

## General

Question	Yes	No	Not specified
<b>Have you defined the purpose for which you want to use a tool?</b> (e.g. for literature research, text analysis, academic writing)			
<b>Does the designated AI tool have the functions required for this purpose?</b>			

## Access

Question	Yes	No	Not specified
<b>Is it possible to access the tool without registration?</b>			
<b>Is the tool available free of charge?</b>			
<i>If yes:</i> <b>Is free access sufficient for the intended objectives?</b>			
<b>Does free access provide access to the entire database?</b> (e.g. restriction of data in the free version of ChatGPT)			
<i>If no:</i> <b>Has your institution licensed the tool?</b>			
<b>Is there any information about the provider and a contact address on the website?</b> If this information is missing, it may indicate a lack of transparency.			
<b>Is there information on the website about how the AI tool is financed?</b> For example, is the tool financed by publishers, through advertising or through the sale of data? It needs to be considered whether the funding affects the credibility of the results.			

## Database

*AI tools always operate with a limited database. Make sure that the database matches your query and your area of expertise. Pay particular attention to when the database was last updated and whether it contains the most recent data.*

Question	Yes	No	Not specified
Is it made transparent what data is processed by the AI tool?			
Is the database adequate for the intended objectives?			

## Data protection and copyright

Question	Yes	No	Not specified
Can you find information on data protection on the website? (e.g. a privacy policy, use of cookies)			
Do you know if and how your own data is used and do you agree with these conditions? For example, prompts may be used to further develop the AI tool and/or your data may be stored.			
When uploading data: Is it possible to object to the further use of uploads?			
Have you checked if your material contains any personal data? If your material contains personal data: Personal data of others may never be uploaded without consent.			
Do the usage rights of your material permit uploading it to an AI tool? In principle, copyrighted material such as scientific papers must not be duplicated. This is only permitted if the works are available under free licenses (e.g. Creative Commons licenses) and these licenses allow such use or it is otherwise permitted according to copyright law.			

## Utilization and results

Question	Yes	No	Not specified
<b>Can you use the tool in your preferred language?</b> (e.g. can you search in your preferred language? Are the results displayed in your preferred language?)			
<b>Are the results plausible?</b>			
<b>Are the results relevant to the intended objectives?</b> (= Do they fit the topic and the research question?)			
<b>Are there features that allow you to continue working with the results?</b> (e.g. filters, follow-up questions, ...)			
<b>Are the results presented in a clear and visually appealing way?</b>			
<b>Are the principles of Good Scientific Practice being observed?</b> <a href="#">(Link)</a>			
<b>Can the information be clearly traced back to its original source?</b>			
<b>Are links to the full texts of the original sources provided?</b>			
<b>Can results and generated content be exported?</b> (e.g. in reference management programs)			
<b>Can the chat history be archived?</b>			