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Chemie | Biologie | Pharmazie

Infozine No. 27

The magazine for users of scientific information

Editorial

Dear readers,
We would like to extend our sincerest apologies for the year-long delay in publishing the next issue of Infozine. However, we are thrilled to announce that the latest issue is now available and we hope it meets your expectations.
At the Chemistry | Biology | Pharmacy Information Center, we understand the importance of staying informed in the fast-paced world of science. As such, we encourage our readers to make use of all the information retrieval and management tools available at ETH Zurich, which are covered in this and earlier issues of Infozine.
Being information savvy is essential for researchers and professionals alike, and staying up-to-date with the latest developments in our fields is crucial for success. We hope that Infozine continues to serve as a valuable resource for our readers, providing them with the knowledge and tools they need to excel in their work.
Thank you for your continued support and we look forward to bringing you more exciting content in future issues.
Best regards,
Your Chemistry | Biology | Pharmacy Information Center

If you are curious how this text was compiled, continue reading on page 8.

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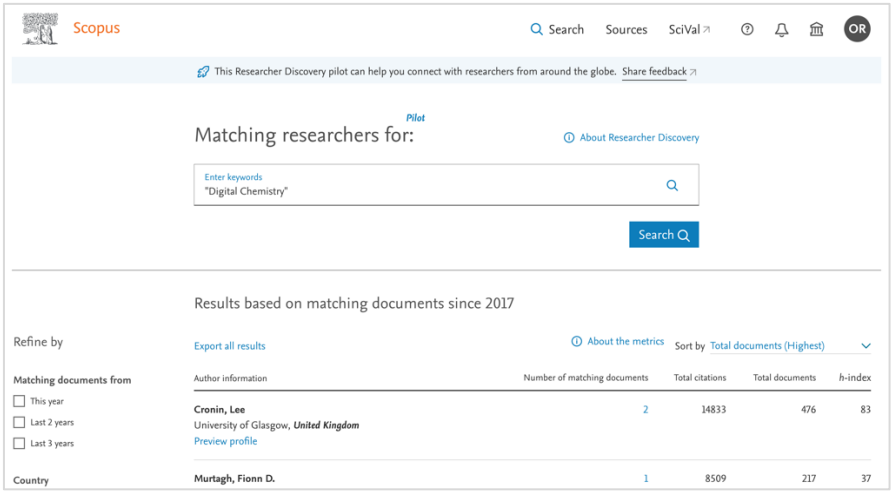
Scopus with Researcher Discovery

ETH Zurich is, among other universities, piloting the new Scopus module *Researcher Discovery*, which is already available to all ETH Zurich users at www.scopus.com until summer 2023. It can be found as a new tab between the search tabs *Authors* and *Affiliations* on the Scopus starting page and is a direct and data driven approach to find and connect with researchers from around the globe. *Researcher Discovery* includes a keyword search, which matches your search terms against a database of 17 million authors by searching through their documents.



Questions you can answer using the new module are:

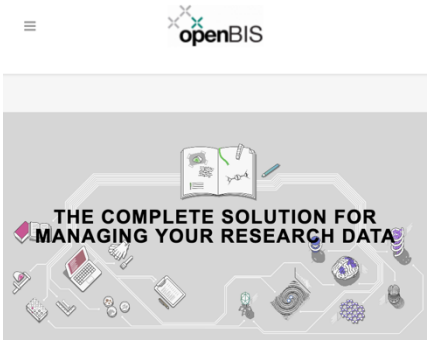
- Who are experts whose output I should follow?
- Who could be a good mentor/supervisor?
- Who else is working in my field?
- Who should I try to connect with on this topic?
- Who could I work with on this grant proposal?
- Who could contribute ideas from an adjacent area?
- Who could be a reviewer or whom could I ask for feedback?
- How can I put together the best teams for a new project?

If you search e.g., for "digital chemistry", you will receive a list of researchers, with a default ranking by matching documents – which can be changed to ranking by total number of documents, total number of citations, or h-index. If you refine the results by limiting to Switzerland, the profile of Kjell Jorner, a new professor at ETH Zurich, will show up. Results can be exported as a csv file. By a clicking a name, you can view the researcher's profile. Likewise, you can investigate at which institutions a particular research area is highly represented. As a researcher who wants to be found by peers, showcase your work using *Scopus Author Profiles* and the *Author Feedback Wizard*. Building on your feedback and usage, Scopus will determine the best way forward, such as adding more functionality, releasing it to more users, or changing direction altogether. Thus, try and explore *Researcher Discovery* search tool and use it to quickly find your next PI, mentor or coworker.

News from the ETH Library (1)

Publish research data: From openBIS directly to the Research Collection

Anyone using openBIS, the data management solution with electronic laboratory notebook (ELN) and inventory management system developed at ETH Zurich, can easily publish research data on the Research Collection. This makes valuable data more quickly accessible to other researchers. To do so, researchers select the relevant data in their openBIS instance and forward it directly to the Research Collection input process. There they finalize the transferred content and metadata. They then select the access mode and, if required, an end-user license for their data package. After a formal review process by the Research Collection team, the data is published as Open Research Data or with the selected restricted access rights.



Replacement for PlagScan

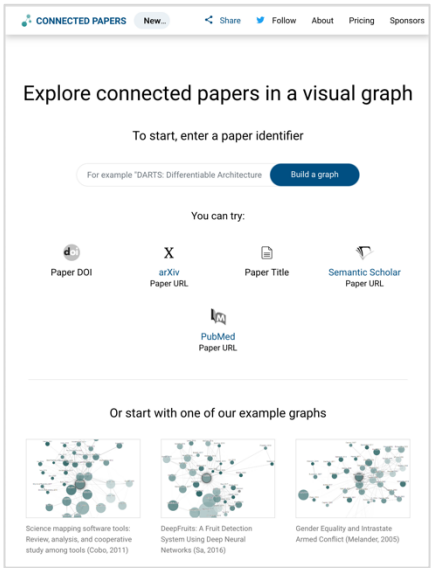
Since the end of 2022, the plagiarism software PlagScan is no longer available for professors and employees of ETH. PlagScan was bought by the US company Turnitin (market leader for this sort of software), which has changed the framework conditions for data protection and information security. The responsibility for the future plagiarism checking software now also lies with the ETH Library. The ETH Library is committed to providing software that can be used in compliance with Swiss data protection laws and is working hard to provide an adequate solution for plagiarism checking as soon as possible. Clarifications on open questions are already underway.

Visualized Literature Search – Connected Papers

A fresh way to do literature research: Connected Papers is a research tool that allows you to search for scientific articles that are relevant to your own research – and it does so in a visually appealing way.

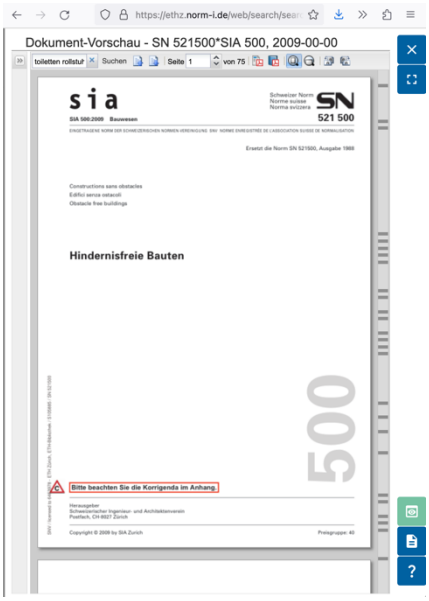
CONNECTED PAPERS

Here's how it works: Starting with a scientific article that is relevant to you, Connected Papers creates a visual representation of thematically similar articles. The few dozen articles that are most related to your original article are represented as a network in a graph. Interesting articles can be saved, downloaded in bib format and transferred to your literature management program. Literature research with *Connected Paper* thus complements your classic thematic research. In a clear and simple way, the tool shows the connections to articles with similar content.
Members of ETH Zurich can create an unlimited number of graphs with the premium license of Connected Papers. To use the tool, register with your ETH email address. More information about the tool can be found here.



New standards platform

From now on, standards can be researched on the new norml platform, which scores with numerous improvements such as a full text search.



In addition to the previously available standards from ASTM International, DIN (DE), Electrosuisse (DE), IEEE International, INB / SM / ES / SIA National / SIA International (DE/FR), ISO (EN), and VDI (DE), the IEC standards are now also available.
The IEC is an international standardization organization in the fields of electrical engineering, electronics and information technology. It standardizes regulations for more than 170 countries worldwide and offers a global, neutral and independent standardization platform. IEC standards form the basis for risk and quality management. They are used in certifications to verify that manufacturers' specifications are kept. For licensing reasons, the standards portal is accessible exclusively to members of ETH Zurich. Within the ETH Zurich network.

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Subscribe to Infozine by registering on our website with just an e-mail address, because that's all we want to know about you. Then, every time a new issue of the Infozine is published, you will receive the link to the English and German editions, free of charge and no strings attached. Unsubscribing is also easy and informal.

News from the ETH Library (2)

Swiss Year of Scientometrics

Scientometric indicators and data such as the h-index or Journal Impact Factor (JIF) are nowadays important for the evaluation of research performance and the governance of scientific institutions. However, although their appropriate use requires contextualization and interpretation, scientometric data and indicators are often used thoughtlessly. This can lead to misinterpretation and ultimately to wrong decisions. Against this background, ETH-Bibliothek is organizing a "Swiss Year of Scientometrics" (SYoS) from June 2023 to May 2024 as part of a project funded by swissuniviersities. Further information can be found on the project's website at https://yearofscientometrics.ethz.ch.

New Open Access publishing opportunities as of 2023

As a scientist at ETH Zurich, you can now publish open access articles in journals of the following publishers as of January 1, 2023:

- American Chemical Society (ACS)
- Canadian Science Publishing
- Microbiology Society
- Springer Nature
- Oxford University Press (OUP)
- Portland Press

The following conditions apply:

American Chemical Society (ACS)

The agreement with ACS allows members of ETH Zurich to publish in the entire portfolio (gold open access and hybrid journals) free of charge in open access. The article quota is limited. The ETH Library will cover these publishing costs as far as the budget allows. If this budget is exhausted, the article costs will be charged to the authors with a strongly discounted publication fee. The ETH Library will inform you in a news release as soon as this point is foreseeable.

Springer Nature

The agreement with Springer Nature is valid for another three years. It allows ETH members to publish in practically all Springer Nature journals free of charge. This agreement covers almost all hybrid journals of Springer Nature. The Nature Research portfolio is now also part of the contract. However, the quota of articles for this portfolio is limited. The ETH Library will cover the publishing costs as long as the budget allows. If this budget is exhausted, the authors will be charged for the article costs. ETH Library will inform in a news release as soon as this point is foreseeable.
In a separate agreement allows ETH authors to publish free of charge via the ETH Library in the Gold Open Access journals of the Springer imprints BioMedCentral and SpringerOpen.

Oxford University Press (OUP)

Members of ETH Zurich can publish free of charge as corresponding authors in all hybrid journals of OUP. Gold Open Access publications receive a 10 percent discount on all publication fees. See OUP's website for simple instructions on how to publish Open Access with Oxford University Press.

Additional information

The specific terms and conditions for accessing and publishing in the journals can be found on the pages Agreements with publishers on Open Access publications and Financing of publication fees by the ETH Library

New ordering interface in ETH Library @ swisscovery

Are you curious which optimizations in the lending and ordering process in ETH Library @ swisscovery have been developed? These are available to you now:

- Clearer design of the ordering interface and simplified ordering process.
- Your last selected pickup location remains saved.
- Display of costs for chargeable services.
- If available, the borrowing offer free of charge for you is displayed.
- In the ordering process, you can see the estimated delivery times and the loan period.
- In your account, all your borrowings, orders and fees will be displayed under ETH Zurich, provided you always select a pick-up location at ETH Zurich (borrowings made before November 14, 2022 will still be displayed under your borrowings at the respective holding library).

As a first step, select your preferred pick-up location. How to do is explained in these instructions (PDF).
Our tip: ETH members benefit from many free offers – To use them, your SWITCH edu-ID must be linked to your ETH account. How to do this, is explained in the these instructions. (PDF).

Briefly explained

Scientometrics

What is Scientometrics? Science Direct Topics explains it as "*the study of the quantitative aspects of scientific communication, R&D practices, and science and technology (S&T) policies*," Wikipedia as "the field of study which concerns itself with measuring and analyzing scholarly literature". Today's scientometrics is mostly based on the work of Derek J. de Solla Price and Eugene Garfield. The latter created the Science Citation Index and the Impact Factor and founded the *Institute for Scientific Information*, whose *Journal Citation Reports* are now published by Clarivate. If you want to look up impact factors, use the Databases and Tools module on our website.

CAS SciFinder Discovery Platform

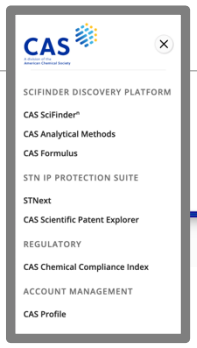
Since January 2023 ETH Zurich has access to the CAS SciFinder Discovery Platform, which includes two additional CAS products, CAS Formulus and CAS Analytical Methods, in addition to the well-known CAS SciFinder-n collection.

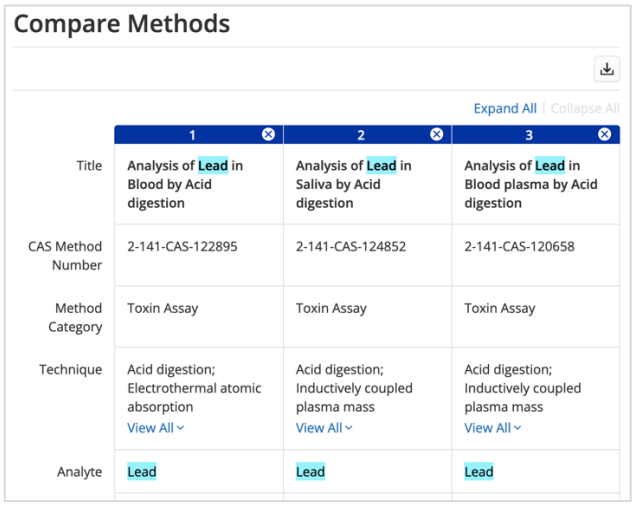
CAS Formulus and CAS Analytical Methods are integral parts of SciFinder-n but they can also be used as stand-alone products. You can access them via the three dots in the upper left-hand corner of the SciFinder-n window (first figure on the right).

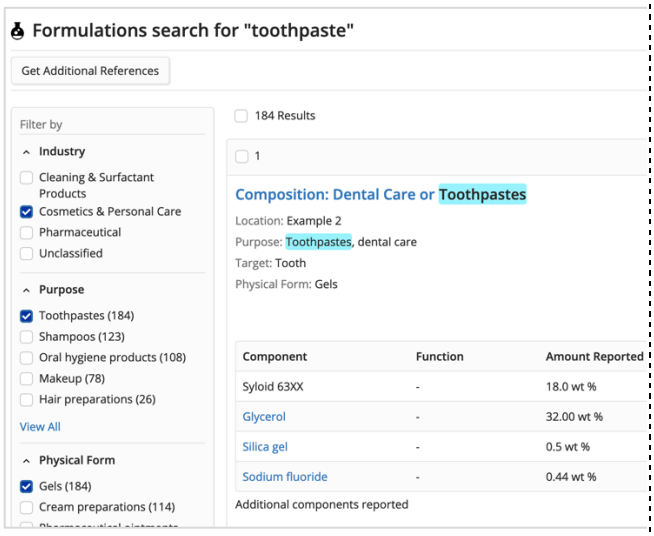
CAS Analytical Methods is a curated collection of analytical protocols including information on analytes, matrices, reagents, instrumentation and validation data. The analytical methods can be compared side-by-side and exported in different formats (second figure right on the right).

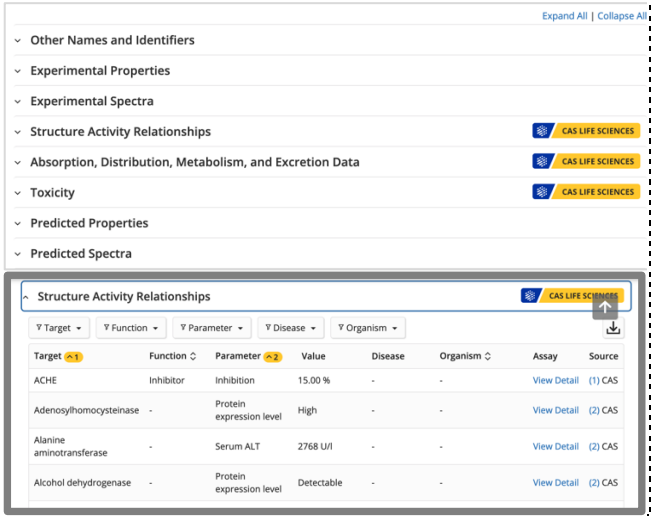
CAS Formulus is a collection of formulations sourced from journals, patents and product inserts. It allows for searching baseline formulations, exploring regulations and identifying relevant ingredients (third figure on the right).
Another notable addition to the CAS SciFinder Discovery Platform is **CAS Life Sciences Content** with SAR and ADMET data, available via the Substance Search on the Substance Detail pages. It provides a tabular display and an easy overview of ligand structures, common pharmacological parameters, assay details, and various filtering and download options (fourth figure on the right).
Furthermore, **ChemZent**, which contains the entire collection of *Chemisches Zentralblatt*, the first and oldest comprehensive abstracts journal in chemistry that was published from 1830 till 1969, is now included in your Reference Search. ChemZent includes both original German and English-translated abstracts.

All these products can be accessed using your CAS SciFinder-n account. New users need to register here using their ETH Zurich e-mail address.





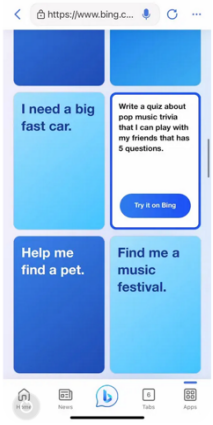




App Tip (1)

Bing

The redesigned app for the Bing search engine offers access to Microsoft's new AI products in addition to other services. The chatbot is based on GPT-4 and can access search results from the internet in addition to the trained language model.
Currently, 200 conversations can be started per day, with each conversation consisting of up to 20 in-session turns.



Furthermore, an AI-assisted image creator based on Dall-E can be used.

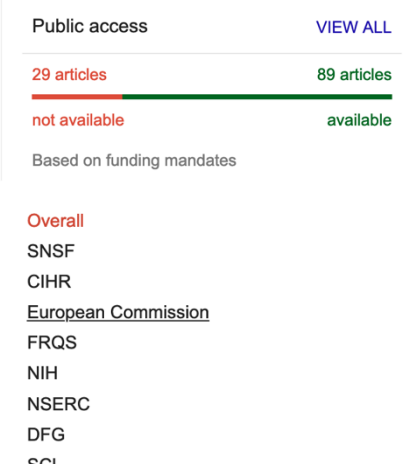
The app is available for iOS and Android.

New Google Scholar functionality

Recently, Google Scholar has introduced a new feature. Google Scholar profiles now include a "Public Access" section to help you track and manage public access mandates for all your articles. You can view the public access status of articles funded by individual agencies, make changes, and export a public access summary for inclusion in your project reports or other uses. On the "Public Access" page in your profile, you will see a list of agencies that funded your articles (this is available only for public profiles). You can review the public access report for an agency by clicking its name. Use the "Export" button on any report to save a copy.

Funding agencies can require articles to be available at a particular repository (e.g., PubMed Central), at a group of repositories (any subject or institutional repository), or anywhere on the web. Agency-specific reports take these requirements into account. When an article is available at a suitable location, you'll see a link to it on the right. Missing links can be provided to Google Scholar. For agencies, who specify a particular repository, Google Scholar also includes a link to submit your article to that repository. Google Scholar crawls and indexes the links you provide and will automatically update your public access reports.

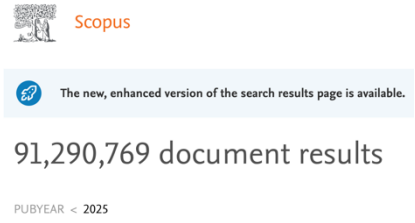
If you see errors on your public access reports, you can correct them. For example, you can remove articles, correct publication dates, or update funding information. For more details, see the public access help page.



Scopus now includes 90 million records

Scopus (www.scopus.com), Elsevier's abstract and citation database, has achieved a significant data milestone as Scopus now includes over 90 million records. The contents come from 7,000 publishers in 105 countries and 27,950 active peer-reviewed journals. There are currently 20.54 million open access articles (+12.5% in 2022) and 6,126 open access journals (+13.3% in 2022) indexed in Scopus. Among the 90 million records are the following content types:

- Book Titles: Scopus includes 2.48 million total book items from 69.2k individual book series volumes and 289k stand-alone books.
- Conferences: Scopus includes content from 149k conference events including 11.6M conference papers.
- Preprints: Preprints were added to Scopus in 2021: An additional 460k were added in 2022 (+41.8%) for a total of 1.56 million preprints available today.
- Funding: There are over 19.1 million fully indexed funding acknowledgements (+12.4% in 2022): Award Data from 600k US Funders and 500k Key Global Funders are incorporated into Scopus Author Profiles.
- Patents: Scopus includes 49.0 million patents from 5 major patent offices (WIPO, EPO, USPTO, JPO, UK IPO).



A paper every 37 hours

This guy is probably the dream of all over-ambitious PIs. Rafael Luque Alvarez de Sotomayor, 44, one of the most prolific scientists in Spain, has published more than 1,000 Papers according to Google Scholar and more than 800 according to Scopus. Last year he authored some 110 articles, this year he has already published 58 until end of March. The chemist admitted that since December, he has been using the artificial intelligence program ChatGPT to "polish" his texts. But now his university suspended him without pay for the next 13 years, for working as a researcher at other institutions, despite holding a publicly funded full-time contract at the University of Córdoba.

Resigning over high APCs

The entire editorial boards of two leading neuroscience journals, *NeuroImage* and *NeuroImage: Reports*, resigned as the publisher, Elsevier, denied the boards' request to lower the article processing charges, from 3,450 to 2,000 US dollars or less. The board now started a new non-profit journal, *Imaging Neuroscience*. For comparison, the APC for *Nature,* Springer Nature's flagship journal, is 9,750 Euros Euros and for *Cell*, published by Cell Press and part of Elsevier's portfolio, the APC is 9,030 Euros.

Journal Recommendation

New Ground

This is a new and quite unique journal that was recently founded by Thilo Körkel, a former editor of the German *Spektrum der Wissenschaft* and a manager at *Nature*. *New Ground – Journal for Advances in Science* is intended to help societies find new common ground to scientifically address global challenges. It presents selected findings from recognized researchers and is designed to be accessible to researchers across scientific disciplines. *New Ground* is neither scholarly literature (since it does not publish original research) nor a journalistic publication (since the publication of an article involves the payment of a fee, and since each article needs to be approved by the author(s) of the original research). *New Ground* articles are written by Ph.D.-qualified expert science writers. More about the project in a blog post at Scholarly Kitchen.

ScientifyResearch

ScientifyResearch is a research funding database that is – according to the producers – the first comprehensive database on this topic that is not pay-walled, has eligibility filters allowing to focus on relevant funding and open calls and covers all disciplines. However, when starting a search you will realize that there is an offer for a free trial and premium versions requiring subscriptions. You can do a basic search without registration, but in order to see results, you have to provide your personal information to set up a free account.

ChatGPT writes a book

Springer has always been an innovative publisher that has taken advantage of new technologies. For example, in 2019 Springer already published a machine-generated chemistry book on lithium-ion batteries. Now, a team from Springer Gabler is working on a book that will be generated using GPT. According to an article in the German newspaper FAZ, work on this title has been finished. According to the publisher's announcement, the book *Einsatzmöglichkeiten von GPT in Finance, Compliance und Auditing* by the authors Alexander Hüsch, Dirk Distelrath and Tanja Hüsch (ISBN 9783658414184, 49.99 EUR) will be published on October 11, 2023. By the way, members of ETH Zurich can read and perform full-text searches of all FAZ articles online, since the ETH library has licensed access to the FAZ-Bibliotheksportal platform. The interesting article can be found there by searching the newspaper title *Wenn ChatGPT ein Fachbuch schreibt*.

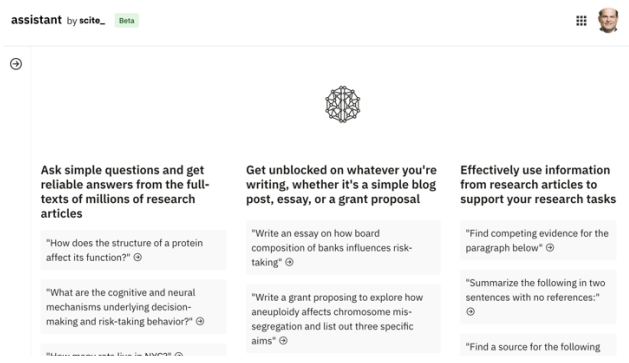
Acronym Generator

Find individual acronyms for your research project by using some keywords describing your project. Try Acronym Generator and if you are not happy with the results, try Acronymify, which suggested CHLORINATE as an acronym for us.

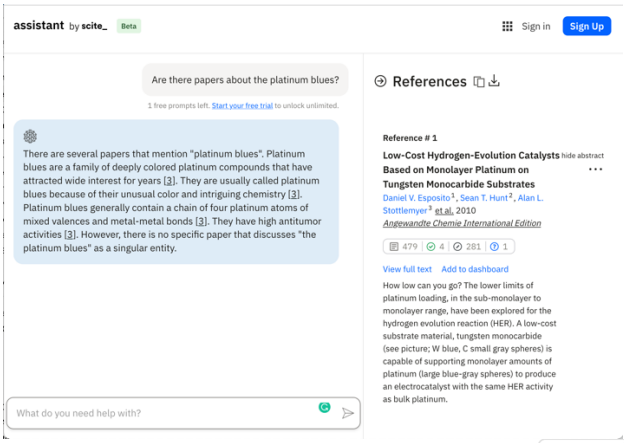
CHLORINATE — CHemistry bioLOgy phaRmacy INformATion cEnter

News from scite

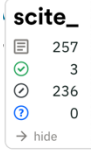
scite is an award-winning platform for discovering and evaluating scientific articles via Smart Citations. Smart Citations allow users to see how a publication has been cited by providing the context of the citation and a classification describing whether it provides supporting or contrasting evidence for the cited claim. This is not only helpful to judge the reliability of a given paper, it is also interesting to see how and with which wording the article was referenced. As scite has access to the full text papers, you can not only spot if and by whom your paper was cited (as you can do with other databases, e.g., Scopus, Dimensions or Google Scholar) but also how: you see the context immediately.



In addition, scite has now received another feature, the assistant by scite (Beta). Just type in your query in the search box "What do you need help with?" You can ask simple questions and get reliable answers from the full-texts of millions of research articles. You can effectively use information from research articles to support your research tasks and get unblocked on whatever you are writing, whether it is a simple blog post, an essay, or a grant proposal. The system is a bit slow, but that might be due to popular demand. Conclusion: Still beta; the author's existing publications on this topic are not yet found.



Scite is fee-based but there is a free browser extension and a free Zotero plug-in that allows you to screen evaluated papers from a journal's website.



App Tip (2)

Picture Pilot

Drawing is actually so easy – and yet we find it so difficult. Roland Siegenthaler's app *PicturePilot* aims to resolve this discrepancy. For each icon, be it a bicycle, a car, a cow or the Statue of Liberty, the app shows the easiest way to draw it. On the smartphone screen, the app demonstrates how to draw an icon line by line. When you trace these lines with your finger, you will draw a reasonable picture of e.g., a bicycle.

The second learning stage involves drawing without guide lines. In the end, even the most untalented individuals will be able to draw a bicycle completely from memory.

In one week, you can easily develop a visual vocabulary of 50 icons. That's enough visual material to shine on the flipchart in the next meeting or the next class you are teaching.

Free for iPhone/iPad and Android Phone/Tablet.

Guidelines for AI authorship

Researchers have started using advanced AI chatbots like ChatGPT, released in November 2022. Thus, publishers start defining rules about using large language models (LLMs) ethically. *Nature*, along with all Springer Nature journals, has formulated the following two principles, which have been added to the existing guide for authors:

- First, no LLM tool will be accepted as a credited author on a research paper. That is because any attribution of authorship carries with it accountability for the work, and AI tools cannot take such responsibility.
- Second, researchers using LLM tools should document this use in the methods or acknowledgements sections. If a paper does not include these sections, the introduction or another appropriate section can be used to document the use of the LLM.

Other publishers have also implemented meanwhile similar rules.

Further reading for those interested:

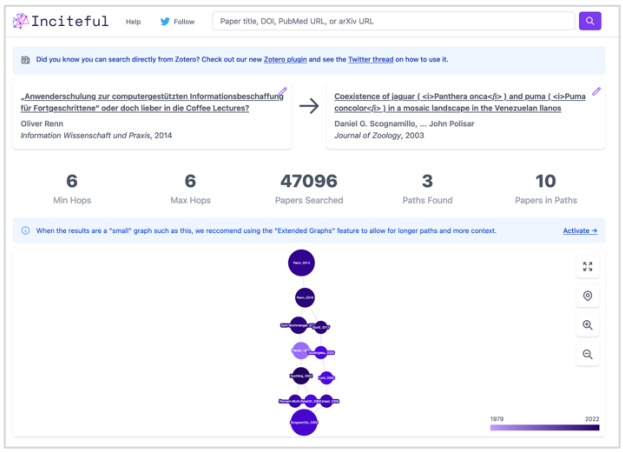
- *Tools such as ChatGPT threaten transparent science; here are our ground rules for their use*
- *ChatGPT listed as author on research papers: many scientists disapprove*

29th Series of Coffee Lectures

On June 13, 2023, the 28th series of our Coffee Lectures will begin. For three weeks, each Tuesday, Wednesday and Thursday, from 1:00 p.m., you will learn in ten minutes about databases, tools, and new developments in information and knowledge management. Save the date, the final announcement will be made in due course on our website and through our social media channels. The nine lectures will again take place over coffee and chocolate in HCI G2. In addition, we plan to record the lectures and make them available on our YouTube channel.

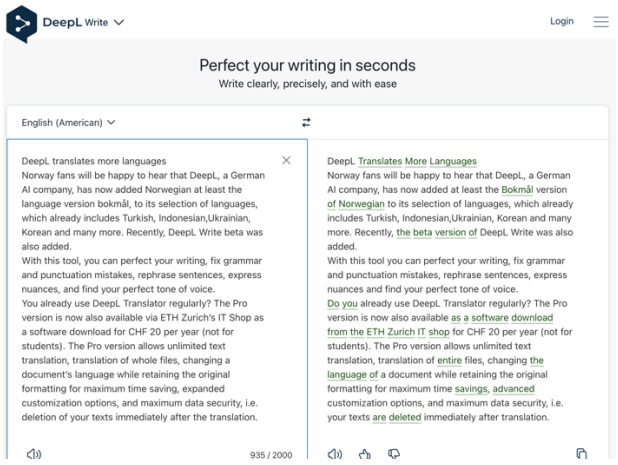
From Coffee Lectures to South American fauna

Another great tool that visualizes networks of scientific articles is Inciteful. It includes a function that displays the shortest citation path between two publications, aimed to provide inspiration for interdisciplinary research. Here is the shortest link between a paper on Coffee Lectures and one on South American fauna:



DeepL translates more languages

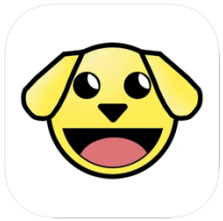
Fans of Norway will be happy to hear that DeepL, a German AI company, has now added Norwegian – at least the language version bokmål –, to its selection of languages, which already includes Turkish, Indonesian, Ukrainian, Korean and many more. Recently, DeepL Write beta was also added.



With this tool, you can perfect your writing, fix grammar and punctuation mistakes, rephrase sentences, express nuances, and find an adequate tone of voice.

You already use DeepL Translator regularly? The Pro version is now also available via ETH Zurich's IT Shop as a software download for CHF 20 per year (not for students). The Pro version allows unlimited text translation, translation of whole files, changing a document's language while retaining the original formatting for maximum time saving, expanded customization options, and maximum data security, through deletion of your texts from DeepL servers immediately after the translation.

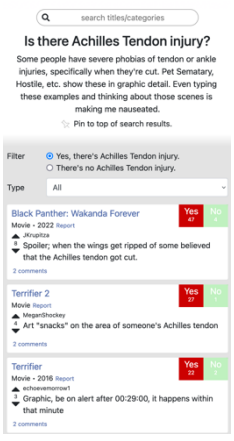
App Tip (3)



Does the dog die?

Does the dog die is a website and an app that is aimed to protect sensitive people from emotional turmoil by listing which of their triggers appear in movies, TV shows or books. You can pin your triggers so they are always at the top. You can also request new triggers and vote on suggestions by other users. Among the 120+ categories are e.g., "Achilles Tendon injury" or "the ending is sad".

At least, the author of this article did not suffer from such a trauma after his Achilles tendon injury.



Free for Android and iOS.

Newspapers now on newspaper racks

Since recently, you will find the daily and weekly newspapers to which the Information Center subscribes for the reading lounge (NZZ, Tagesanzeiger, WOZ, Le Monde Diplomatique,) hanging to the right of the Infodesk, mounted on wooden newspaper sticks. You can read the newspaper wherever you like in the Info Center – but please bring it back to the Infodesk so that others can read the newspaper as well. If you want to read the newspaper outside the Info Center, e.g., in the cafeteria, it is also possible to borrow the newspaper for a day via swisscovery.

ETH Zurich in the media

You can now find a regularly updated selection of media reports about ETH Zurich and its members in Swiss newspapers and magazines in the information boxes next to the left of the entrance to the Information Center on the G-floor. These are based on the weekly media reviews of ETH Zurich's Corporate Communications. The selection for the Information Center is curated by our apprentice Olisa Jashanica.

Scientific writing support

In all career stages, the ability to express ideas clearly and concisely contributes to success. For this reason, Dr. Gina Cannarozzi, a researcher, ETH lecturer, and Information Consultant Life Scinces at the Chemistry | Biology | Pharmacy Information Center is offering two forums for writing support. First, during the semester the **Scientific Writing Lab** takes place on Wednesdays from 16:00 – 19:00 in HCI G2. Drop by or make an appointment for help in all phases of the writing process: preparation, writing, revising, and publishing. Secondly, she is offering a 1-ECTS course entitled "**Scientific Writing for the Life Sciences and Chemistry**" in the spring semester. Topics covered include constructing sentences and paragraphs, writing articles in the IMRaD format, revising, publishing, and good scientific practices. For more information, contact cgina@ethz.ch.

Databases and tools

The intuitive access to databases and tools via our website is unique. Other libraries usually only offer a simple A–Z list of databases and tools. To make sure all the information we display through this dynamic module is correct, we will soon update the system, correct information and add new databases and tools. These additions come from our ongoing scouting of new tools and information resources as well as from essays written by participants of the course Scientific Information Retrieval & Management in Life Sciences and Chemistry (529-0195-00L), which could not be held in Fall 2022, but will be offered again in the Fall 2023 semester.

Checking with ZeroGPT

All articles in this Infozine issue were written by real humans, with one exception. The editorial on page 1 was written by ChatGPT-4. If you are sceptical whether a text is "real", you can check this with another software, ZeroGPT (www.zerogpt.com). The tool is labeled as "the most Advanced and Reliable Chat GPT and GPT-4 detector tool".

We have tested ZeroGPT with our editorial from page 1 (which was generated by ChatGPT) and with the prompt used to generate the text.
ZeroGPT correctly states that the prompt was written by a human, but the editorial (69.78%) by GPT-4. With this tool, you can conveniently check if texts handed in by students were generated with support by ChatGPT. It is also advisable to be careful with literature references found in AI-generated text. Libraries now already receive requests for literature that does not actually exist, because ChatGPT simply invented these references. ZeroGPT identified our German editorial as human-written text only. However, this text was further machine-optimized using DeepL Write (see p. 7).

Imprint

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