

**How to write
better scientific
papers**
and
Published



**Chemistry
Europe**

European Chemical
Societies Publishing

WILEY-VCH

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Publisher's Note

So, you have finished your project and you are about to convert your lab book entries into a scientific publication. You realize however that you need a narrative for presenting your data and questions are floating around in your mind, such as: prior to submission, what needs to be thought about when preparing the manuscript? To ensure the paper gets published, how can the best case for publication be made to the editors, the referees and ultimately the targeted readership? What can be done to make sure that the work will be recognized after publication? Or perhaps questions even as basic as: Where to start?

Luckily for you, you've come across this guide! A brief look through shows that herein you will find answers to all these questions – and more. With the right tools, you can take care of many things yourself. You will find tips how to best present your work – clarity, simplicity and accuracy are key. There are other things you can entrust the publisher with.

The first section is about finding the right forum for sharing your research with your community and rest assured, it will never be a mistake if you choose a *Chemistry Europe* journal.

Chemistry Europe is a group of 16 chemical societies working in partnership across Europe. They represent over 75,000 chemists and support them at every stage of their careers. The mission of *Chemistry Europe* is to evaluate, publish, disseminate and amplify the scientific excellence of researchers from around the globe in high-quality publications.

Chemistry Europe values integrity, openness, diversity, cooperation and freedom of thought. It combines an extensive portfolio of publications with scientific and cultural diversity that cover all areas of chemistry.

I hope you will find this compendium a useful resource to help you get your paper published in the best possible way!

Dr. Haymo Ross

Publisher,
Chemistry Europe Journals

Find The Right Journal

Think about what kind of article you want to write and the audience you want to reach before you begin the process of writing your paper – this will provide a focus for the whole writing process and ultimately help you choose the right journal.

Identify your audience: Is your work aimed at the core participants in your specific field or does it have a broader interest for communities at interfaces between your discipline and other disciplines? If possible – think broad!

Ask questions: You can identify journals and possible target audiences by thinking about the following:

- Where do you read papers related to your research?
- What journals have you cited or intend to cite in your paper?
- What journal will reach the biggest portion of your target audience?

Step outside the office! Make good use of colleagues and supervisors who can be useful sources of information.



Find the right journal on wileyauthors.com/journalfinder



Think about article type and audience before you start to write – this will provide a focus for the whole writing process.



Are you writing a full research article, a short communication or a review-type article? Think about what audience would find the article type you have chosen most useful.

Next steps

After thinking about your target audience and asking yourself some simple questions you will have identified a handful of journals which may be appropriate for your work. The next step is to evaluate the target journals to form a submission plan. The following points are useful to look out for:

Review and publication timescales: This information may be available from the journal homepage or by contacting the Editorial Office.

Quality: Look at the papers published in the journal – are they of the high standard you adhere to?

Are there any costs: Are there costs or fees for submission and/or publication?

Most importantly

Look beyond the Impact Factor. Read the aims and scope for each journal carefully. Your article must be appropriate for the target readership.

Manuscript Preparation

Overview

A standard research article follows a basic structure. Each section is a building block within this overall structure and it is important to be aware of the purpose served by each section as your article builds to its conclusion. Adhering to this structure will help you to begin the writing process and make your article easier to review.

Here is the typical structure of a research article and the fundamental requirements for each section:

Title: Choose a title that best describes your work and is concise and free from jargon. Be mindful of search engine optimization by using the most relevant keywords. Remember that it should entice the reader.

Abstract: This is a concise summary of the entire article. It is the first part of an article that gets read and serves to encourage the reader to look into the whole article, so it's important to get it right.

Introduction: Why did you do the research? Demonstrate an expert understanding of prior work in this field, typically with a literature review, placing the significance of your research among the existing literature.

Methods/Experimental section: Think of this as a recipe; the aim here is to enable the reader to recreate the research with the same outcome. How you did it, what materials, tools and techniques you used.

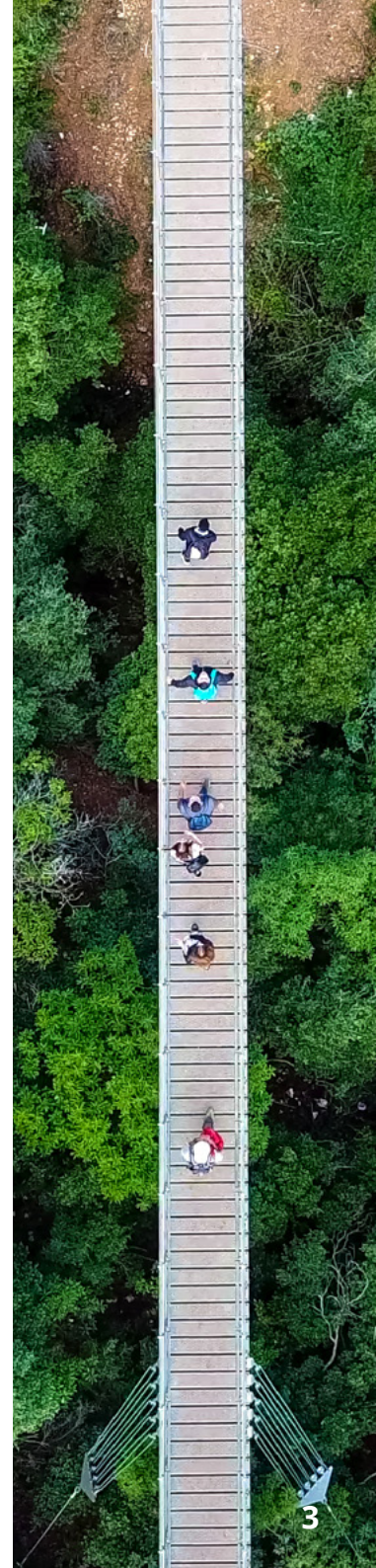
Results and Discussion: What was the result? What does it mean? Why does it make a difference? Where does it lead? Does it open other avenues for enquiry? Be careful not to summarize the entire article here, that is what the abstract is for.

Conclusion: What is the take-home message?



Read the author guidelines carefully.

Review what you have written and avoid writing too much – it makes it harder for readers and editors to get to the important bits.



Manuscript Preparation

In More Detail

Think abstract!

The abstract is one of the most important elements of your article. Why?

- Firstly, due to abstracting and indexing agencies, such as Web of Science, Scifinder, PubMed (the list goes on), more people are going to view your abstract than read your paper. If you can make it clear why your article is important it is more likely to be found and read.
- Secondly, providing a short and concise overview of the entire manuscript allows readers to see the relevance to their own research easily, and editors a good first insight as to if it fits the scope of the journal in question before they look into all the details.



Write backwards! Start with the data and end with the abstract:

1. Figures and Tables
2. Method, Results and Discussion
3. Conclusions and Introduction
4. Abstract and Title

Simple mistakes are very common and, although small, can slow the progress of your submission or cause disruption further down the line. Below we outline some of the key points to remember.

Authorship

The list of authors is very important. If you have a common name, you may want to add a middle initial to help distinguish yourself from others. You should sign up for an **ORCID ID** – this is a unique identifier that you can use for both submitted and published papers to help editors and readers identify you.

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It is essential to make sure that all of the authors are listed. The editor and referees need to know who has contributed BEFORE a paper is accepted. Changes in the authorship after acceptance may not be permitted.



Tables and information boxes are often great ways to organize and summarize important details without breaking up the main narrative of your writing.



Think of your article as a well-structured story.
Only include information that advances the plot.

References

- More mistakes are found in the references than in any other part of the manuscript. Sometimes an error in one paper is replicated in subsequent papers because authors simply copy the mistake into their list of references without checking the reference out in full.
- Be sure to cite all of the papers on which your work is based.
- Make sure your citations are relevant. Citing a range of irrelevant papers can be a hindrance to the editor and referees and does not work to your advantage.
- If you have published lots of papers before, try to avoid excessive self-citations.
- Remember to format your references in accordance to the journal guidelines and to keep the formatting consistent throughout the entire reference list.

Artwork

- When preparing images, try to keep them as simple as possible and use a single font.
- If the journal has a layout template available online, make sure to size your graphics according to the guidelines to assure easy readability.
- Try to avoid needless shading effects, which will make them appear blurry if they get printed.
- Check the journal's colour policy. Some journals charge for colour printing.

Language

- Keep the language as clear and simple as possible.
- If English isn't your first language, then there are services available to edit or completely translate the text of your paper.



Consider using professional formatting and editing services so you can present your work in the best way possible. More information can be found at wileyeditingservices.com



Think about search engine optimization (SEO)

SEO is the practice of increasing the quantity and quality of traffic to your paper through organic search engine results. When you are writing your article, you need to think about it. More than 50% of traffic to Wiley Online Library comes directly from Google, Google Scholar, and other search engines. Wiley does everything possible to ensure that all research content is visible and high ranking in the search results of Google and other engines.

You can also play a crucial role in optimizing the search results for your article – helping people to find, read, and cite your work.

Five tips for increasing your article's search engine discoverability:



Tip 1: Create a search-engine-friendly title

- Include 1–2 keywords related to your topic. Place your keywords within the first 65 characters of your title.
- Keep your title short (50–100 characters)
- Avoid “empty phrases” (e.g. ‘A study of...’), over-used buzzwords (e.g. ‘novel’), and uncommon abbreviations.



Tip 2: Optimize your abstract

- Place essential findings and keywords in the first two sentences of your abstract. Only the first two sentences normally display in search engine results.
- Repeat your keywords 3–6 times. Don't forget the purpose of your abstract is to clearly and concisely express the key points of your research.



It is vitally important to think about search engine optimization (SEO) keywords at the beginning of the writing process.



Tip 3: Be consistent

- Refer to author names and initials in a consistent manner throughout the paper. Remember to be consistent with any previous online publications.



Tip 4: Use keywords throughout your article

- Include keywords in your title (1–2), abstract (2–3), and fields (5–7). Keywords may be phrases rather than just single words.
- Incorporate keywords in your headings too. Headings tip off search engines to the structure and content of your article.
- Find specific keywords on journal websites, in Google Trends and Google Adwords keyword tools. Remember that keywords are important for abstracting and indexing services as well as SEO.
- Use keywords consistent with your field. If you're unsure, check the words used in your field's major papers.



Tip 5: Build links

- Link to your article across your social media, networking, and institutional sites. The more in bound links to your article, the more search engines like Google will value and highlight your content.
- Encourage colleagues to link to your article. The more links from respected individuals/trusted sites the more powerful the effect. Don't forget to do the same for them.



Submission

You have written your article to the specifications identified when researching your target journals. Now it is time to finalize the submission. The following are the key points to remember when submitting your manuscript to a journal.

Cover letter

Along with the title and abstract, the cover letter is one of the first things that editors see. It is a great way to communicate directly with the editor and gives you an opportunity to highlight the novelty of your paper.

Don't just rewrite the abstract but try to explain in clear terms why the editor should consider your paper further.

Keep it short and direct; the longer it is, the easier it is to miss something important.

Submitting your paper

Most journals have an electronic editorial office supported by **Editorial Manager** or **ScholarOne**.



Read the submission instructions carefully as you progress through each step and ensure that your manuscript files are clearly labelled when you upload them.

Very occasionally you will submit directly to the editor.

Initial steps after submission

The first step in the process for a submitted paper is to undergo an initial assessment by an editor. They will check that the paper is appropriate for the journal and ready for further consideration. There are generally three things that may happen at this stage:

1. The paper is deemed not suitable and is rejected.

Rejections at this stage depend on the journal but are often related to whether it is within the journal's scope or how novel the research is judged to be.

2. The paper is sent back to the author for revision.

This can mean that the editor believes the paper has potential but it is not ready for further consideration in its existing form. Requested changes will often be to improve the English language or change the format to match that requested by the journal.

3. It is sent out for peer review.

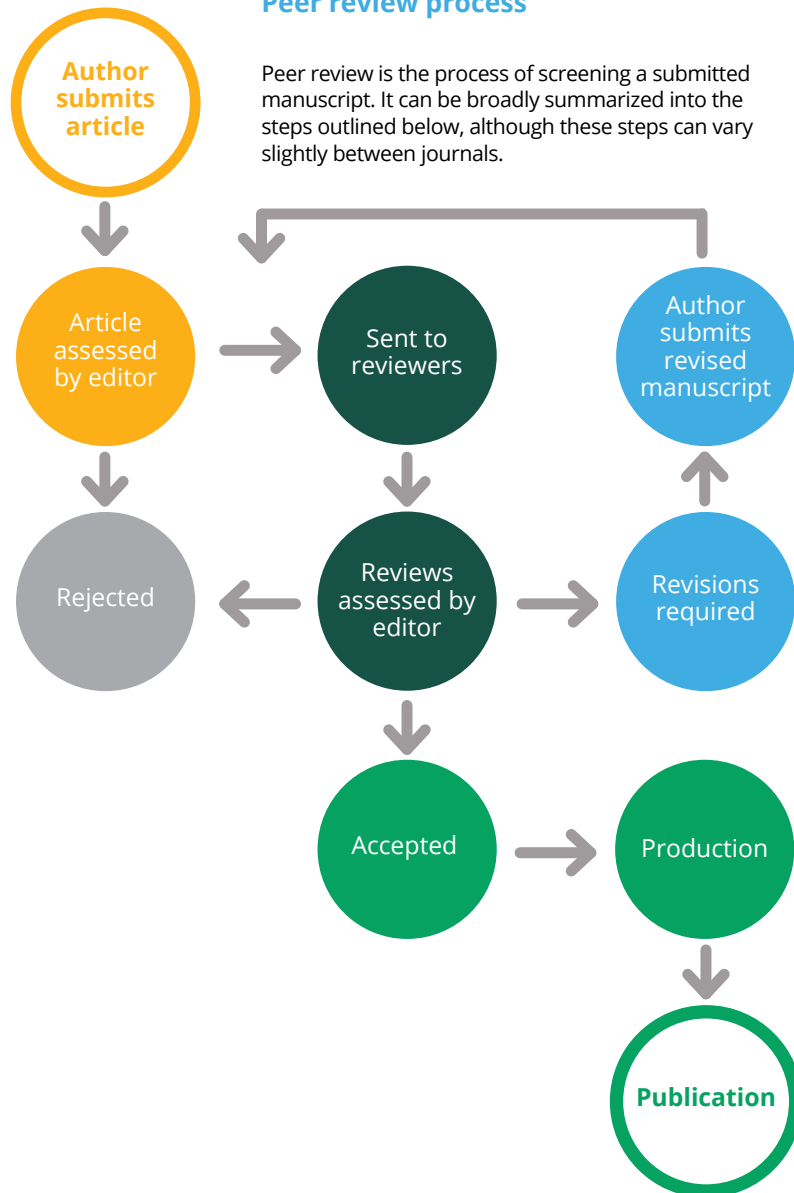
If you have written your article in line with the journal guidelines, provided a suitable cover letter and followed the submission instructions closely, there will be a much higher chance that your paper will go through to peer review.



Peer Review

Peer review process

Peer review is the process of screening a submitted manuscript. It can be broadly summarized into the steps outlined below, although these steps can vary slightly between journals.



The paper is reviewed by professionals in the same field to assess the quality, validity and novelty of the article under consideration for publication. The ultimate purpose is to maintain the integrity of science by filtering out poor or invalid articles. Journal editors will identify and invite reviewers to assess your paper. The editor will make the final decision based on their own assessment alongside the comments provided by the reviewers.

Peer review decisions

These are the possible outcomes for your submission following peer review:

- **Major revision:** Your article is within scope for the journal but needs extensive work before it can be reconsidered.
- **Minor revision:** Your article is close to being ready but there is still work to be done to make it acceptable. Be mindful that your paper could still be rejected at this point!
- **Accept:** Acceptance means that your submission has now met the requirements of the editor and reviewers and is ready for publication.



Rejection

Your article may not be accepted following initial review or following revision and further review. Reasons for rejection can vary but these are some of the most frequent:

- **Not within scope:** The paper has been found to be outside the scope of the journal.
- **Not scientifically sound:** The data does not support the conclusion.
- **Novelty:** The paper does not demonstrate sufficient novelty for further consideration.

Remember that rejection happens to everyone and editors always make decisions on a case-by-case basis, so don't take a negative decision personally. Even the most well-known academics have had manuscripts rejected in their career

Some Wiley journals offer in-house transfer options to a range of sister journals when the editors find it appropriate to do so. This makes submission to a more appropriate journal much easier than starting a new submission process.

Check with the Editorial Office to see if this option is available.

Reading and responding to reviews

You will be given access to the comments from the reviewers who have assessed your paper. It is rare not to be asked to make revisions – any feedback should be treated as an opportunity to improve.

Key points to remember

- The reviewers have taken the time to read and comment on your manuscript, therefore you should take the time to respond to all comments.
- Be scientific and use clear evidence to demonstrate your arguments or to illustrate the revisions you have made.
- Be polite. You may not agree with the comments but it is important that you respond in a professional and scientific manner.



It's never easy when your manuscript is not accepted by your choice journal, but it happens. Try viewing it as an opportunity to improve your paper.

Appeals

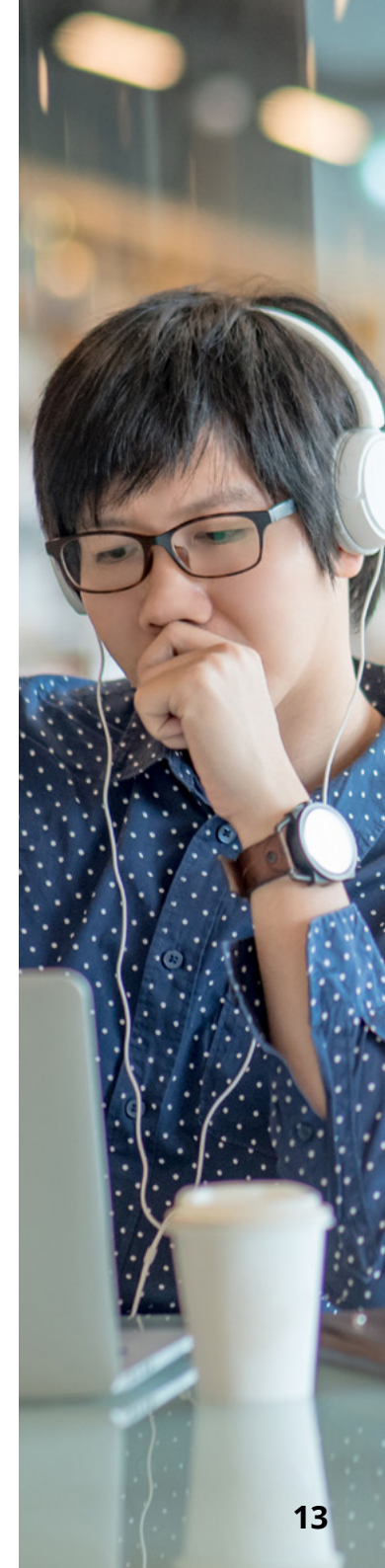
It is possible to appeal a reject decision, but it should only be done in very specific circumstances in which there is a clear scientific or technical reason to do so, such as misinterpretation or where clear errors were made by a reviewer.

An appeal should be made in writing to the editor and should always be polite and professional. You should support your appeal with data and/or clear evidence to back up your argument.

- **But remember:** The editor knows the journal and the subject area very well and their judgement should be respected. The editor makes the final decision with assistance from the reviewers – but the editor ultimately has the final call.
- **And think carefully** Appealing a decision will not change the result in the majority of cases. Be aware that the process will slow down the possibility of submitting your paper to another journal where it might be accepted. An appeal may not be the right option in the long run.
- **Consider your transfer options** Should your manuscript be rejected, in most cases for *Chemistry Europe* journals (ca. 75%) a transfer to a sister journal is offered. This allows a quick and easy resubmission to another journal in the family with the link provided in the email. These offers are usually made after the handling editor for the rejecting journal has been in direct contact with the editors for the journal to which the transfer is offered, so that the most appropriate outcome can be arranged and offered to the authors. Should you receive such an offer upon rejection, consider it carefully before appealing to the handling editor for a different outcome as they will have read into the case thoroughly and together with team members, tried to find the best solution for your manuscript.



Find support and guidance for navigating the complicated world of publishing ethics at wileyauthors.com/ethics



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There are a number of ways you can make your research open access:

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- Wiley OnlineOpen: Publish open access in a subscription journal. Most of Wiley's subscription journals offer this option.

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You can self-archive non-final versions of your subscription article in an online repository, or on a personal or institutional website.

- The submitted (preprint) version of your article can be archived on acceptance.
- The accepted (peer-reviewed) version of your article can be archived after a 12–24 month embargo period.

Publication

Production

Your manuscript now enters the production phase of the publishing process. The main steps in this process are:

- **Copyediting:** The written content of your manuscript is adjusted to adhere to the journal style guidelines and minor changes to grammar and English language may be made.
- **Typesetting:** The source files you provided during submission are now formatted according to the journal style.
- **Proofing:** Once a final version of your manuscript is ready the proof will be sent to you for checking. At this stage you should highlight any minor errors or adjustments you would like made before final publication. You cannot change the scientific content at this stage.



Check your proof carefully but ensure that you return it as quickly as possible. Being slow to return your proofs can severely delay the publication of your paper.

- **Publication:** Once you have returned your proof and confirmed that it is ready, your manuscript will first be published online in an Early View or pre-print queue to await assignment to an issue.

Accepted Article feature

Some Wiley journals provide an Accepted Article option for their authors. Immediately upon acceptance after peer review, prior to editing and typesetting the manuscript can be uploaded online and is citable using the DOI.

The final typeset version of record will replace this version when available. Check with the Editorial Office when submitting to find out if this is available with the journals you publish with if it is unclear.



Promotion

Maximize the impact of your published research

Your article has been accepted for publication and is now online – but you have no time to rest! In the current publishing environment it is important for authors to actively promote their work; this can improve citation rates and online usage for the article, but can also have career benefits by helping to build your network of contacts.

Nine promotional tools to help you ensure your work gets seen, read and cited:



SEO

- Are your title and abstract clear and searchable? Have you used the most relevant keywords?
- Have you looked at off-page SEO strategies, such as link building, to promote your article?



Conferences

Think about simple messages to promote your article at your next conference – whether networking with colleagues, or presenting formally.



Publicity

- Is your latest research newsworthy? Have you shared it with your local press office?
- If sending a press release, wait until the article is published online, refer to the journal in the first paragraph, and link to the final published article on Wiley Online Library. Some Wiley journals offer press reports with their online news and views magazines, which are great ways of highlighting your manuscript across a broader range of your target audience. Check with the journal editors if this option is available for you after acceptance.



Networking

- If you run a blog, post about your article.
- Join academic social networking sites such as [Mendeley.com](https://www.mendeley.com) and [Academia.edu](https://www.academia.edu).



The wider web

- Update your faculty or professional website with an entry about your article.
- Register for your unique ORCID ID and add your article details to your profile.
- Find a Wikipedia page on a topic related to your article and add a reference to your paper



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- Add a link to your email signature.
- Send a link to your article to fellow researchers, colleagues, and friends.



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- English language editing
- Translation service
- Manuscript formatting
- Figure preparation

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Wiley has partnered with **Overleaf** – a collaborative, cloud-based authoring tool to offer you a direct link to submit to a number of Wiley journals. With **Overleaf Link**, you have a dedicated article submission template, in which you can write and edit your article in Overleaf and then submit directly to the journal editorial office without charge or further work.

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There are also options in which you and your co-authors can use an online or collaborative authoring tool to write and edit your article together, making the proofing process easier and less prone to errors so you can submit sooner. We recommend **Authorea** or **Manuscripts**.

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Publication

ReadCube is a next-generation article reader and citation manager. Whilst keeping the clear layout and simple design of the standard PDF, PDFs opened in the ReadCube Enhanced PDF format, feature hyperlinked in-line citations and clickable author details, allowing quick look up and cross reference. Supplementary information, figures and other valuable article data, are always just a click away, making it easier for you to discover, access and interact with authors scientific literature.

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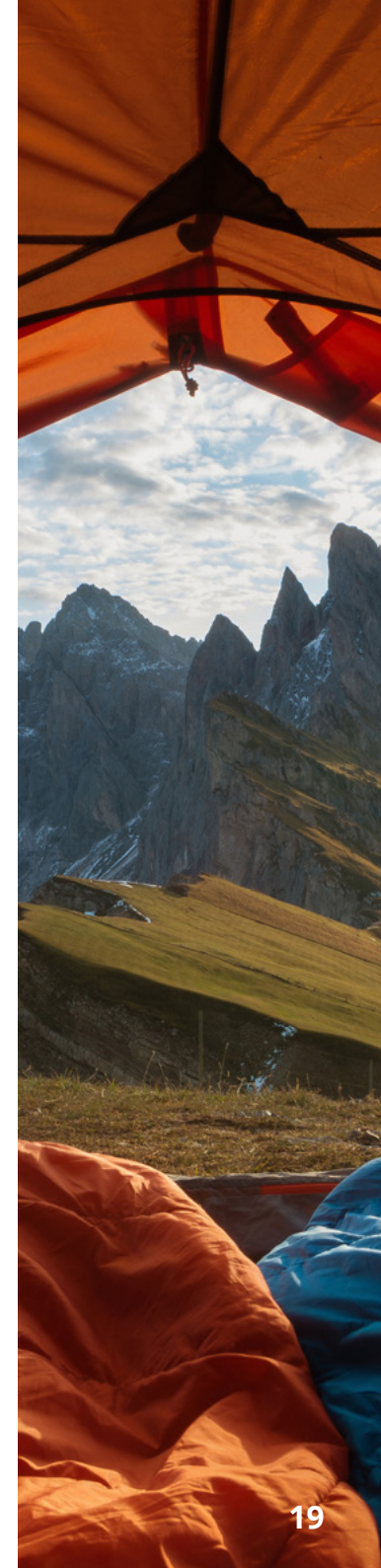


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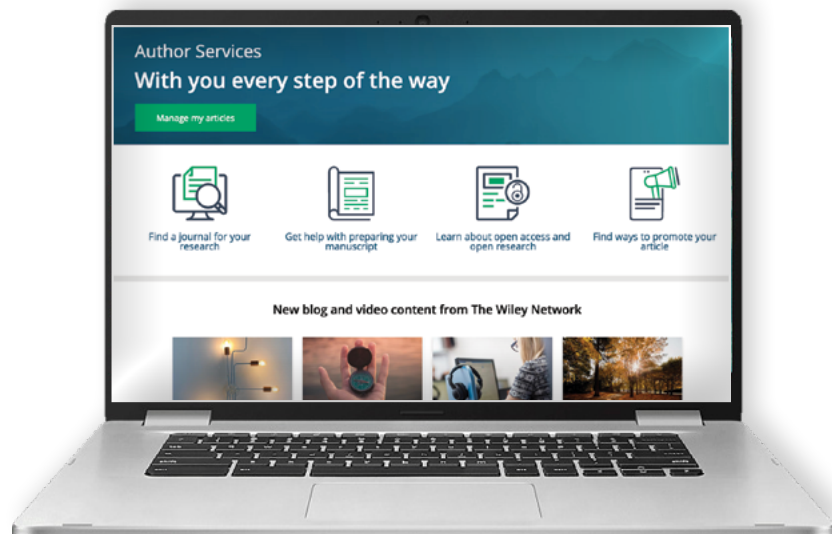
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Supporting you at every stage of your publishing journey



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An improved experience:

1. Author, reviewer and editor resource centers

The Resource Centers contain resources to assist authors, reviewers and editors with all steps of the publishing process including:

- Journal finder
- Links to editing and translation services
- Links to submission sites
- Promotional toolkits for authors
- Peer-review training tools
- Support for editors

2. Author dashboard

The dashboard makes it easier for authors to access all relevant information around their publication through an intuitive and comprehensive dashboard.

- More detailed production tracking
- OnlineOpen ordering
- Open access payments
- Article citation metrics

3. Online licensing service

Wiley Author Licensing Service (WALS) provides a streamlined online licensing solution for authors.

- Automatic, online, fast license signing
- Authors can change and edit licenses themselves
- Licenses are stored in a repository for easy viewing and retrieval
- Creative Commons license of choice for open access

4. Article citation metrics

Authors receive and can view quarterly updates about their article citation metrics, which contain the following:

- Journal and article title
- Digital Object Identifier (DOI)
- Link to published article online
- Number of citations

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ChemElectroChem

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