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About the journal

Aims and scope

Journal of Molecular Biology (JMB) provides high quality, comprehensive and broad coverage in **all areas of molecular biology**. The journal publishes original scientific research papers that provide **mechanistic and functional insights** and report a significant advance to the field. The journal encourages the submission of multidisciplinary studies that use complementary experimental and computational approaches to address challenging biological questions.

Research areas include but are not limited to:

- Biomolecular interactions, signaling networks, systems biology
- Cell cycle, cell growth, cell differentiation
- Cell death, autophagy
- Cell signaling and regulation
- Chemical biology
- Computational biology, in combination with experimental studies
- DNA replication, repair, and recombination
- Development, regenerative biology, mechanistic and functional studies of stem cells

- Epigenetics, chromatin structure and function
- Gene expression
- Receptors, channels, and transporters
- Membrane processes
- Cell surface proteins and cell adhesion
- Methodological advances, both experimental and theoretical, including databases
- Microbiology, virology, and interactions with the host or environment
- Microbiota mechanistic and functional studies
- Nuclear organization
- Post-translational modifications, proteomics
- Processing and function of biologically important macromolecules and complexes
- Molecular basis of disease
- RNA processing, structure and functions of non-coding RNAs, transcription
- Sorting, spatiotemporal organization, trafficking
- Structural biology
- Synthetic biology
- Translation, protein folding, chaperones, protein degradation and quality control

Important benefits for authors

Since 1959, **JMB** is ensuring some basic principles in the services it provides to all authors:

- **Fast-track** option of time-sensitive research articles (please consult the [Guide for Authors](#) for details).
- **Anti-scooping policy:** if a competitor paper has been published while yours is under peer-review in *JMB*, that will not affect the editorial outcome.
- All editorial decisions are made by **active scientists** who are leading experts in the field.
- Manuscripts are **reviewed by leading experts** in the field. *JMB* also supports mentoring of early career researchers in peer-review (please consult our [VolunPeers](#) program).
- **Availability:** contact the Editor-in-Chief or the scientific editors via the [Editorial Board page](#) for any questions you may have.

- See the **impact, speed and readership** of *JMB* [here](#).
 - We provide upon request **free PDFs** to all authors who may not have access to their articles via their institution or library.
 - **Publication is free to authors** (no color or page charges)
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- Please click here for more information on more general [author services](#) Elsevier offers.

Language

Article types

Types of Paper

- **Articles:** Full -length papers, recommended to be no longer than 15 printed pages
- **Communications:** Brief papers with up to four figures/tables
- **Reviews:** By invitation only. Covering current challenges and advances, with a focus on molecular mechanisms. We encourage summary illustrations and a “perspectives” paragraph in the conclusion that proposes a direction for the field in the future.
- **Perspectives:** Brief reviews on rapidly advancing research areas, usually by invitation.
- **Brevia:** Single-page notes reporting specific results.
- **Methods Notes:** reports on novel methods, limited to 5 pages and 3 figures/tables. Preliminary enquiries about suitability of submission are encouraged.
- **Databases/Web Servers:** Descriptions of new or updated databases/servers, limited to 5000 words, 3 figures/tables and less than 50 references. Additional details required to implement the new method must be provided as Supplemental Material. The Title of the paper should start with the database/web server as the first words (where appropriate). Links to the database/Webserver should be included in both the abstract and the main text. Authors must identify in cover letter any previous publications reporting this or closely related database/web server and provide explanation for why this paper is an advancement on the previous. The database/web server must be freely accessible to the academic community. Code deposited for download, for example on GitHub, must include a ReadMe file with full details of how to use the program together with sample data and the results on the sample data set. *JMB* strongly encourages authors to deposit source code and data files for use by the community on an appropriate resource such as GitHub or Zenodo. The community prefers to access your algorithm/method/predictor if appropriate via a web server, rather than by local installation. A statement in your cover letter is required if there is a reason why a web server cannot be made available.

Editorial Policy

The Journal of Molecular Biology (*JMB*) publishes significant research in molecular genetics and structural biology. Manuscripts are initially reviewed by the Editorial Board, and only those meeting the journal's standards are sent for external review. Authors can suggest suitable editors, but the journal may reallocate manuscripts as needed.

Review Process

Editors consult two or more expert reviewers on the scientific content, significance, and clarity of papers. Authors must suggest up to six potential referees, excluding those with conflicts of interest. If revisions are needed, authors receive reviewer comments and editor recommendations. Minor revisions are to be returned within 30 days; major revisions within 60 days.

Manuscript submission

JMB discourages submitting multiple related manuscripts. Exceptions require prior editor approval. Manuscripts may be rejected without review if they lack originality, fall outside the journal's scope, or fail to meet technical standards. Authors must provide full copies of any related manuscripts that have been submitted to or are in press in another journal. Such manuscripts must be included with your initial submission to JMB or, if they were submitted during revision, with your revised JMB manuscript.

Specific Guidelines

- **Originality:** Papers must offer significant advances over existing work
- **Methodology Papers:** considered if they present broadly applicable methods with clear documentation. Please consult Methods Notes under "Types of Paper"
- **Sequences:** considered if they provide important insights into gene function or evolution. Papers describing cloning/sequencing of new genes will be considered only if there is experimental evidence for the gene function.
- **Structural studies:** Communications describing preliminary crystallographic data (crystallization conditions and diffraction pattern and space group) are generally beyond scope but will be considered if they offer significant biological insights. Preliminary data and low-resolution studies are generally not considered unless results are of exceptional interest and importance. Papers describing structures of mutant proteins are appropriate if the mutations have been successfully designed to provide new insights into structural principles or biological function. Similar criteria apply to structures of proteins from variant species
- **Modeled Structure:** considered if they provide novel biological insights and the reliability of the model is well-documented. Experimental validation is desirable.
- **Theory and Simulation:** considered if they have direct experimental applicability to experimental work in the field or are of interest to the broader biological community. Evidence must be presented that the accuracy of the method is consistent with the described application.
- **Database Papers:** considered if they report significant new findings or integrate biological information in novel ways. The biological principles used in the construction of the database must be clearly documented within the paper.

Data Sharing

Authors are encouraged to share reagents, data, algorithms, and protocols. Sequence and structural data must be deposited in public databases, with accession numbers provided in the manuscript.

Sequence Data

Papers dealing with amino acid sequences of proteins or with nucleotide sequences must carry a statement that the data have been deposited with an appropriate data bank, e.g., the European Molecular Biology Laboratory (EMBL) or GenBank Data Libraries. The database accession number must be given at the end of the Materials and Methods section of the manuscript under the separate heading 'Accession numbers'. For example: Coordinates and structure factors have been deposited in the Protein Data Bank with accession number 2XYZ. Lengthy nucleotide sequences will be published only if, in the judgement of the Editorial Board, these results are of general interest and importance.

Structural Data

For papers describing structures of biological macromolecules, atomic coordinates and related experimental data must be deposited at a Worldwide Protein Data Bank site (RCSB PDB, MSD-EBI, PDBj, or BMRB). Manuscripts must include a statement confirming this deposition, with accession numbers cited in the Materials and Methods section. Authors must release atomic coordinates and experimental data upon publication. Small angle scattering data and structural models must be deposited at SASBDB and electron microscopy 3D maps at EMBL-EBI or RCSB EMDB, with accession numbers cited in the manuscript.

For papers reporting structures determined by electron microscopy, the 3D map must be deposited at either the EMBL-EBI or RCSB EMDB site (<http://www.emdatabank.org>). The fitted atomic coordinates must be deposited at a member site of the Worldwide Protein Databank. The full PDB validation report must be submitted with all manuscripts reporting cryo-electron microscopy structures. The database accession numbers must be cited in the manuscript and authors must agree to release the atomic coordinates and experimental data immediately upon publication.

Authors should search the Protein Data Bank for related structures before submission and report the outcome. Prior deposition of related coordinates does not preclude publication if the structure provides novel insights. Optional 3D molecular models in PDB, PSE, or MOL/MOL2 format can be included for interactive viewing in online articles. These models must be uploaded separately via the “3D molecular models” submission category.

NMR Assignments

NMR data must be deposited in the BioMagResBank, with accession numbers cited in the manuscript. Resonance assignment tables should be included as supplemental data.

Machine Learning in Bioinformatics

- Artificial Intelligence/Machine Learning: We do not consider that machine learning, even deep learning, is artificial intelligence. Please only use the term artificial intelligence if there is more than machine learning.
- Algorithms using supervised machine: Authors must ensure that algorithms using supervised machine learning do not overestimate the accuracy of the approach as a result of an inappropriate selection of examples in the training and testing sets.
- Protein or RNA modelling: The default position is that one must ensure that even remote homologues are either in a training or a testing set but cannot span both sets.
 - o Low percent sequence identity is insufficient to identify remote homologies.
 - o Authors should identify protein homologues based on a structure-based classification such as the superfamily classification of the SCOP, CATH or homology (or even better possible homology) in ECOD. For non-coding RNAs the Rfam classification can be used for the same purpose.
- Prediction of the impact of missense variants: Variants from a particular protein must be in either the training or the testing data set and the authors need to consider the extent to which homology could also confound their study. Similar considerations and approaches are required for other studies.
- Parameterisation: On no account must the test data be used for parameterisation including deciding on the learning algorithm, for example a network architecture. If such parameterisation is required, then training, validation and test sets must be used.
- Approach: Authors should fully explain their approach in the paper and, if they do not follow the above guidelines, should provide a detailed justification for this in the publication.

Cell Lines

Cell lines should be authenticated, and methods used should be described in the manuscript. Authors must ensure cell lines are free from mycoplasma infections.

Submission Process

Manuscripts should be submitted via the journal's website. Authors unable to submit electronically should contact the Editorial Office.

Peer review

This journal follows a single anonymized review process. Your submission will initially be assessed by our editors to determine suitability for publication in this journal. If your submission is deemed suitable, it will typically be sent to a minimum of two reviewers for an independent expert assessment of the scientific quality. The decision as to whether your article is accepted or rejected will be taken by our editors.

Read more about [peer review](#).

Our editors are not involved in making decisions about papers which:

- they have written themselves.
- have been written by family members or colleagues.
- relate to products or services in which they have an interest.

Any such submissions will be subject to the journal's usual procedures and peer review will be handled independently of the editor involved and their research group. Read more about [editor duties](#).

Authors may submit a formal appeal request to the editorial decision, provided the it meets the requirements and follows the procedure outlined in [Elsevier's Appeal Policy](#). Only one appeal per submission will be considered and the appeal decision will be final.

Special issues and article collections

The peer review process for special issues and article collections follows the same process as outlined above for regular submissions, except, a guest editor may send the submissions out to the reviewers and may recommend a decision to the journal editor. The journal editor oversees the peer review process of all special issues and article collections to ensure the high standards of publishing ethics and responsiveness are respected and is responsible for the final decision regarding acceptance or rejection of articles.

Open access

We refer you to our [open access information page](#) to learn about open access options for this journal.

Ethics and policies

Ethics in publishing

Authors must follow ethical guidelines stated in [Elsevier's Publishing Ethics Policy](#).

Submission declaration

When authors submit an article to an Elsevier journal it is implied that:

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- the article is not under consideration for publication elsewhere.
- the article's publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out.
- if accepted, the article will not be published elsewhere in the same form, in English or in any other language, including electronically, without the written consent of the copyright-holder.

To verify compliance with our journal publishing policies, we may check your manuscript with our screening tools.

Authorship

All authors should have made substantial contributions to all of the following:

1. The conception and design of the study, or acquisition of data, or analysis and interpretation of data.

2. Drafting the article or revising it critically for important intellectual content.

3. Final approval of the version to be submitted.

Authors should appoint a corresponding author to communicate with the journal during the editorial process. All authors should agree to be accountable for all aspects of the work to ensure that the questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Changes to authorship

The editors of this journal generally will not consider changes to authorship once a manuscript has been submitted. It is important that authors carefully consider the authorship list and order of authors and provide a definitive author list at original submission.

The policy of this journal around authorship changes:

- All authors must be listed in the manuscript and their details entered into the submission system.
- Any addition, deletion or rearrangement of author names in the authorship list should only be made prior to acceptance, and only if approved by the journal editor.
- Requests to change authorship should be made by the corresponding author, who must provide the reason for the request to the journal editor with written confirmation from all authors, including any authors being added or removed, that they agree with the addition, removal or rearrangement.
- All requests to change authorship must be submitted using [this form](#). Requests which do not comply with the instructions outlined in the form will not be considered.
- Only in exceptional circumstances will the journal editor consider the addition, deletion or rearrangement of authors post acceptance.
- Publication of the manuscript may be paused while a change in authorship request is being considered.
- Any authorship change requests approved by the journal editor will result in a corrigendum if the manuscript has already been published.
- Any unauthorised authorship changes may result in the rejection of the article, or retraction, if the article has already been published.

Declaration of competing interests

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence or bias their work. Examples of potential competing interests include:

- Employment
- Consultancies
- Stock ownership
- Honoraria
- Paid expert testimony

- Patent applications or registrations
- Grants or any other funding

The [declarations tool](#) should always be completed.

Authors with no competing interests to declare should select the option, "I have nothing to declare".

The resulting Word document containing your declaration should be uploaded at the "attach/upload files" step in the submission process. It is important that the Word document is saved in the .doc/.docx file format. Author signatures are not required.

Funding sources

Authors must disclose any funding sources who provided financial support for the conduct of the research and/or preparation of the article. The role of sponsors, if any, should be declared in relation to the study design, collection, analysis and interpretation of data, writing of the report and decision to submit the article for publication. If funding sources had no such involvement this should be stated in your submission.

List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants, scholarships and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, it is recommended to include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declaration of generative AI in scientific writing

Authors must declare the use of generative AI in scientific writing upon submission of the paper. The following guidance refers only to the writing process, and not to the use of AI tools to analyse and draw insights from data as part of the research process:

- Generative AI and AI-assisted technologies should only be used in the writing process to improve the readability and language of the manuscript.
- The technology must be applied with human oversight and control and authors should carefully review and edit the result, as AI can generate authoritative-sounding output that can be incorrect, incomplete or biased. Authors are ultimately responsible and accountable for the contents of the work.
- Authors must not list or cite AI and AI-assisted technologies as an author or co-author on the manuscript since authorship implies responsibilities and tasks that can only be attributed to and performed by humans.

The use of generative AI and AI-assisted technologies in scientific writing must be declared by adding a statement at the end of the manuscript when the paper is first submitted. The statement will appear in the published work and should be placed in a new section before the references list. An example:

- Title of new section: Declaration of generative AI and AI-assisted technologies in the writing process.
- Statement: During the preparation of this work the author(s) used [NAME TOOL / SERVICE] in order to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the published article.

The declaration does not apply to the use of basic tools, such as tools used to check grammar, spelling and references. If you have nothing to disclose, you do not need to add a statement.

Please read Elsevier's author policy on the use of generative AI and AI-assisted technologies, which can be found in our [GenAI Policies for journals](#).

Please note: to protect authors' rights and the confidentiality of their research, this journal does not currently allow the use of generative AI or AI-assisted technologies such as ChatGPT or similar services by reviewers or editors in the peer review and manuscript evaluation process, as is stated in our [GenAI Policies for journals](#). We are actively evaluating compliant AI tools and may revise this policy in the future.

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Authors may share preprints in line with Elsevier's [article sharing policy](#). Sharing preprints, such as on a preprint server, will not count as prior publication.

We advise you to read our policy on [multiple, redundant or concurrent publication](#).

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In support of [open science](#) this journal offers authors a free preprint posting service on [SSRN](#) to ensure early registration and dissemination of research and facilitate early citations and collaboration. Posting to SSRN is subject to SSRN's standard checks.

You will be provided with the option to release your manuscript on SSRN during the submission process. Agreeing to this option will have no effect on the editorial process or outcome, and your manuscript will remain publicly available and free to read on SSRN whether our editors accept or reject your manuscript.

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Use of inclusive language

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Authors should ensure their work uses inclusive language throughout and contains nothing which might imply one individual is superior to another on the grounds of:

- age
- gender

- race
- ethnicity
- culture
- sexual orientation
- disability or health condition

We recommend avoiding the use of descriptors about personal attributes unless they are relevant and valid. Write for gender neutrality with the use of plural nouns ("clinicians, patients/clients") as default. Wherever possible, avoid using "he, she," or "he/she."

No assumptions should be made about the beliefs of readers and writing should be free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions.

These guidelines are meant as a point of reference to help you identify appropriate language but are by no means exhaustive or definitive.

Reporting sex- and gender-based analyses

There is no single, universally agreed-upon set of guidelines for defining sex and gender. We offer the following guidance:

- Sex and gender-based analyses (SGBA) should be integrated into research design when research involves or pertains to humans, animals or eukaryotic cells. This should be done in accordance with any requirements set by funders or sponsors and best practices within a field.
- Sex and/or gender dimensions of the research should be addressed within the article or declared as a limitation to the generalizability of the research.
- Definitions of sex and/or gender applied should be explicitly stated to enhance the precision, rigor and reproducibility of the research and to avoid ambiguity or conflation of terms and the constructs to which they refer.

We advise you to read the [Sex and Gender Equity in Research \(SAGER\) guidelines](#) and the [SAGER checklist \(PDF\)](#) on the EASE website, which offer systematic approaches to the use of sex and gender information in study design, data analysis, outcome reporting and research interpretation.

For further information we suggest reading the rationale behind and recommended [use of the SAGER guidelines](#).

Definitions of sex and/or gender

We ask authors to define how sex and gender have been used in their research and publication. Some guidance:

- Sex generally refers to a set of biological attributes that are associated with physical and physiological features such as chromosomal genotype, hormonal levels, internal and external anatomy. A binary sex categorization (male/female) is usually designated at birth ("sex assigned at birth") and is in most cases based solely on the visible external anatomy of a newborn. In reality, sex categorizations include people who are intersex/have differences of sex development (DSD).

- Gender generally refers to socially constructed roles, behaviors and identities of women, men and gender-diverse people that occur in a historical and cultural context and may vary across societies and over time. Gender influences how people view themselves and each other, how they behave and interact and how power is distributed in society.

Jurisdictional claims

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- Maps: Readers should be able to locate any study areas shown within maps using common mapping platforms. Maps should only show the area actually studied and authors should not include a location map which displays a larger area than the bounding box of the study area. Authors should add a note clearly stating that "*map lines delineate study areas and do not necessarily depict accepted national boundaries*". During the review process, Elsevier's editors may request authors to change maps if these guidelines are not followed.
- Institutional affiliations: Authors should use either the full, standard title of their institution or the standard abbreviation of the institutional name so that the institutional name can be independently verified for research integrity purposes.

Writing and formatting

File format

We ask you to provide editable source files for your entire submission (including figures, tables and text graphics). Some guidelines:

- Save files in an editable format, using the extension .doc/.docx for Word files and .tex for LaTeX files. A PDF is not an acceptable source file.
- Lay out text in a single-column format.
- Remove any strikethrough and underlined text from your manuscript, unless it has scientific significance related to your article.
- Use spell-check and grammar-check functions to avoid errors.

We advise you to read our [Step-by-step guide to publishing with Elsevier](#).

Title page

You are required to include the following details in the title page information:

- Article title. Article titles should be concise and informative. Please avoid abbreviations and formulae, where possible, unless they are established and widely understood, e.g., DNA).
- Author names. Provide the given name(s) and family name(s) of each author. The order of authors should match the order in the submission system. Carefully check that all names are accurately spelled. If needed, you can add your name between parentheses in your own script after the English transliteration.
- Affiliations. Add affiliation addresses, referring to where the work was carried out, below the author names. Indicate affiliations using a lower-case superscript letter immediately after the author's name and in front of the

corresponding address. Ensure that you provide the full postal address of each affiliation, including the country name and, if available, the email address of each author.

- Corresponding author. Clearly indicate who will handle correspondence for your article at all stages of the refereeing and publication process and also post-publication. This responsibility includes answering any future queries about your results, data, methodology and materials. It is important that the email address and contact details of your corresponding author are kept up to date during the submission and publication process.
- Present/permanent address. If an author has moved since the work described in your article was carried out, or the author was visiting during that time, a "present address" (or "permanent address") can be indicated by a footnote to the author's name. The address where the author carried out the work must be retained as their main affiliation address. Use superscript Arabic numerals for such footnotes.

Abstract

You are required to provide a concise and factual abstract which does not exceed 250 words. The abstract should briefly state the purpose of your research, principal results and major conclusions. Some guidelines:

- Abstracts must be able to stand alone as abstracts are often presented separately from the article.
- Avoid references. If any are essential to include, ensure that you cite the author(s) and year(s).
- Avoid non-standard or uncommon abbreviations. If any are essential to include, ensure they are defined within your abstract at first mention.

Keywords

You are required to provide 1 to 7 keywords for indexing purposes. Keywords should be written in English. Please try to avoid keywords consisting of multiple words (using "and" or "of").

We recommend that you only use abbreviations in keywords if they are firmly established in the field.

Highlights

You are required to provide article highlights at submission.

Highlights are a short collection of bullet points that should capture the novel results of your research as well as any new methods used during your study. Highlights will help increase the discoverability of your article via search engines. Some guidelines:

- Submit highlights as a separate editable file in the online submission system with the word "highlights" included in the file name.
- Highlights should consist of 3 to 5 bullet points, each a maximum of 85 characters, including spaces.

We encourage you to view example [article highlights](#) and read about the benefits of their inclusion.

Graphical abstract

You are required to provide a graphical abstract at submission.

The graphical abstract should summarize the contents of your article in a concise, pictorial form which is designed to capture the attention of a wide readership. A graphical abstract will help draw more attention to your online article and support readers in digesting your research. Some guidelines:

- Submit your graphical abstract as a separate file in the online submission system.
- Ensure the image is a minimum of 531 x 1328 pixels (h x w) or proportionally more and is readable at a size of 5 x 13 cm using a regular screen resolution of 96 dpi.
- Our preferred file types for graphical abstracts are TIFF, EPS, PDF or MS Office files.

We encourage you to view example [graphical abstracts](#) and read about the benefits of including them.

Tables

Tables must be submitted as editable text, not as images. Some guidelines:

- Place tables next to the relevant text or on a separate page(s) at the end of your article.
- Cite all tables in the manuscript text.
- Number tables consecutively according to their appearance in the text.
- Please provide captions along with the tables.
- Place any table notes below the table body.
- Avoid vertical rules and shading within table cells.

We recommend that you use tables sparingly, ensuring that any data presented in tables is not duplicating results described elsewhere in the article.

Figures, images and artwork

Figures, images, artwork, diagrams and other graphical media must be supplied as separate files along with the manuscript. We recommend that you read our detailed [artwork and media instructions](#). Some excerpts:

When submitting artwork:

- Cite all images in the manuscript text.
- Number images according to the sequence they appear within your article.
- Submit each image as a separate file using a logical naming convention for your files (for example, Figure_1, Figure_2 etc).
- Please provide captions for all figures, images, and artwork.
- Text graphics may be embedded in the text at the appropriate position. If you are working with LaTeX, text graphics may also be embedded in the file.

Artwork formats

When your artwork is finalized, "save as" or convert your electronic artwork to the formats listed below taking into account the given resolution requirements for line drawings, halftones, and line/halftone combinations:

- Vector drawings: Save as EPS or PDF files embedding the font or saving the text as "graphics."

- Color or grayscale photographs (halftones): Save as TIFF, JPG or PNG files using a minimum of 300 dpi (for single column: min. 1063 pixels, full page width: 2244 pixels).
- Bitmapped line drawings: Save as TIFF, JPG or PNG files using a minimum of 1000 dpi (for single column: min. 3543 pixels, full page width: 7480 pixels).
- Combinations bitmapped line/halftones (color or grayscale): Save as TIFF, JPG or PNG files using a minimum of 500 dpi (for single column: min. 1772 pixels, full page width: 3740 pixels).

Please do not submit:

- files that are too low in resolution (for example, files optimized for screen use such as GIF, BMP, PICT or WPG files).
- disproportionately large images compared to font size, as text may become unreadable.

Figure captions

All images must have a caption. A caption should consist of a brief title (not displayed on the figure itself) and a description of the image. We advise you to keep the amount of text in any image to a minimum, though any symbols and abbreviations used should be explained.

Provide captions in a separate file.

Color artwork

If you submit usable color figures with your accepted article, we will ensure that they appear in color online.

Please ensure that color images are accessible to all, including those with impaired color vision. Learn more about [color and web accessibility](#).

Generative AI and Figures, images and artwork

Please read our policy on the use of generative AI and AI-assisted tools in figures, images and artwork, which can be found in Elsevier's [GenAI Policies for Journals](#). This policy states:

- We do not permit the use of Generative AI or AI-assisted tools to create or alter images in submitted manuscripts.
- The only exception is if the use of AI or AI-assisted tools is part of the research design or methods (for example, in the field of biomedical imaging). If this is the case, such use must be described in a reproducible manner in the methods section, including the name of the model or tool, version and extension numbers, and manufacturer.
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[3] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

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[4] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2020, pp. 281 - 304.

Reference to a website:

[5] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2023 (accessed 13 March 2023).

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[6] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions [dataset], Mendeley Data, v1, 2015. <https://doi.org/10.1234/abc12nb39r.1>.

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