BIOCHIMICA ET BIOPHYSICA ACTA - MOLECULAR CELL RESEARCH
One of the 10 topical journals of BBA

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

- Description p.1
- Audience p.1
- Impact Factor p.1
- Abstracting and Indexing p.2
- Editorial Board p.2
- Guide for Authors p.5

DESCRIPTION

*BBA Molecular Cell Research* focuses on understanding the mechanisms of cellular processes at the molecular level. These include aspects of cellular signaling, signal transduction, cell cycle, apoptosis, intracellular trafficking, secretory and endocytic pathways, biogenesis of cell organelles, cytoskeletal structures, cellular interactions, cell/tissue differentiation and cellular enzymology. Also included are studies at the interface between Cell Biology and Biophysics which apply, for example, novel imaging methods for characterizing cellular processes.

Please note: We usually do not consider descriptive manuscripts dealing with the identification of transcripts regulated by single miRNAs or IncRNAs, unless substantial new mechanistic insight into their (patho)physiological activity is provided. Descriptive evaluation of natural compounds as potential drug candidates are generally not within the purview of BBA-MCR, unless novel targets or molecular mechanisms for these compounds are identified.

Please see our Guide for Authors for information on article submission. If you require any further information or help, please visit our Support Center

AUDIENCE

Cell biologists, Biochemists, Molecular biologists, Neurobiologists, Biophysicists

IMPACT FACTOR

2022: 5.100 © Clarivate Analytics Journal Citation Reports 2023
ABSTRACTING AND INDEXING

Science Citation Index
EMBiology
Sociedad Iberoamericana de Informacion Cientifica (SIIC) Data Bases
BIOSIS Citation Index
Chemical Abstracts
Current Contents - Life Sciences
Embase
Index Chemicus
PubMed/Medline
Scopus

EDITORIAL BOARD

Executive Editors
Diana Averill-Bates, University of Quebec in Montreal, Montréal, Quebec, Canada
Oxidative stress, Apoptosis, Cell signaling, Heat shock, Autophagy, Xenobiotic toxicity
Geert Bultynck, KU Leuven, Leuven, Belgium
Calcium signaling, intracellular &, , intercellular signaling, endoplasmic reticulum, mitochondria, cell death, Bcl-2 proteins &, , inhibitors, molecular pharmacology
M. Lienhard Schmitz, Justus Liebig University Giessen, Gießen, Germany
Signal transduction, posttranslational modification, gene expression, Biochemistry

Scientific Editor (Elsevier, Cambridge, MA, USA)
Shazia Khan

Editorial Board Members
Maria Bohnert, University of Münster, Münster, Germany
Cell organelles, lipid droplets, contact sites, membrane morphology, Saccharomyces cerevisiae, high-content screens
Martin Bootman, The Open University, Milton Keynes, United Kingdom
Cellular communication, calcium signaling, cardiac myocyte, mitochondria, cell death mechanisms
Guylain Boulay, University of Sherbrooke, Sherbrooke, Quebec, Canada
Calcium signaling, GPCR, cardiovascular cell signaling
Agnieszka Chacinska, International Institute of Molecular and Cell Biology in Warsaw, Warszawa, Poland
mitochondria, organelles, protein biogenesis, protein degradation, protein transport.

Alain Charest, Beth Israel Deaconess Medical Center, Boston, Massachusetts, United States of America
Glioblastoma, cancer signalling, extracellular RNA

Gang G. Chen, The Chinese University of Hong Kong - Shenzhen, Shenzhen, China
RNA editing, microRNA, rRNA, viral RNA, RNA structures, RNA triplex, RNA folding, RNA targeting

Shah Chishti, Tufts University School of Medicine, Boston, Massachusetts, United States of America
Erythrocyte and Platelet Cytoskeleton, Calcium Signaling, Scaffolding proteins, Malaria, Thrombosis

Yuh Min Chook, The University of Texas Southwestern Medical Center, Dallas, Texas, United States of America
Nuclear transport, structural biology, Karyopherins, Importins and Exportins, nuclear pore complex, NLS and NES

Shenhav Cohen, Technion Israel Institute of Technology, Haifa, Israel
Muscle biology, muscle atrophy, protein degradation, desmin intermediate filaments

Zoran Culig, Medical University of Innsbruck, Innsbruck, Austria
Prostate cancer, experimental models, androgens coactivators, steroid receptors cytokines

Ross Dalbey, The Ohio State University, Columbus, Ohio, United States of America
protein export, membrane protein insertion, proteolysis, Bacteria

Ron Dubreuil, University of Illinois Chicago, Chicago, Illinois, United States of America
spectrin cytoskeleton, ankyrin, lipoprotein, lipid droplet, periplin.

Ralf Erdmann, Ruhr University Bochum, Bochum, Germany
Peroxisomes, protein import, AAA type ATPases, protein transport, yeast, microorganisms

Christine Helen Foyer, University of Birmingham, Birmingham, United Kingdom
Plant Sciences particularly redox metabolism and stress tolerance

Nikolaos G. Frangogiannis, Albert Einstein College of Medicine, Bronx, New York, United States of America
Cardiac injury and repair

Yasushi Fujio, Osaka University, Suita, Japan
Molecular cardiology, cytokine, signal transduction
Volker Gerke, University of Münster, Münster, Germany
Membrane dynamics, membrane trafficking, cell cortex, calcium signalling, exocytosis

Michael Greenwood, Royal Military College of Canada, Kingston, Ontario, Canada
Humanized yeast, apoptosis, anti-apoptosis, cell survival

Vsevolod V Gurevich, Vanderbilt University, Nashville, Tennessee, United States of America
Metabolic regulation, peroxisome, fatty acid oxidation, coenzyme A (CoA), fatty acid, beta-oxidation, yeast, fatty acid metabolism, protein purification, adipose tissue metabolism, mitochondrial metabolism, gluconeogenesis, multifunctional protein, mitochondrial aconitase, enzyme purification

Joerg Hoehfeld, University of Bonn, Bonn, Germany
Ubiquitin, ubiquitin ligase, chaperones, Hsp70/Hsc70, DNA binding protein

Guo-Fu Hu, Tufts Medical Center, Boston, Massachusetts, United States of America
Cancer research, angiogenesis in cancer and neurologic disease

Pudur Jagadeeswaran, University of North Texas, Denton, Texas, United States of America
Genetics, Genetics of Blood Diseases, zebrafish, knockdowns, knockouts, blood coagulation disorders, platelet disorders, thrombopoiesis.

Andreas Janshoff, University of Göttingen, Göttingen, Germany
cell mechanics, atomic force microscopy, membrane mechanics, acoustic resonators, electric cell-substrate impedance sensing

Albert Jeltsch, University of Stuttgart, Department of Biochemistry, Stuttgart, Germany
Metastasis, Systems Biology, Phenotypic plasticity, Epithelial-mesenchymal transition, Cancer Stem cells, Mathematical Oncology, EMT

Christian Kaltschmidt, Bielefeld University, Bielefeld, Germany
NF-kappaB, nervous system, neural stem cells, signal transduction, neuroprotection

Ida van der Klei, University of Groningen, Groningen, Netherlands
Cell biology, peroxisome biology in yeast, biogenesis and dynamics

Lesek Kotula, SUNY Upstate Medical University, Syracuse, New York, United States of America
Cancer, prostate cancer, actin cytoskeleton in cancer, cell signaling (growth factor signaling), mouse model of cancer

Joachim Krebs, Max Planck Institute for Multidisciplinary Sciences, Department NMR-based Structural, Göttingen, Germany
Calcium signaling, membrane proteins, alternative splicing, structural biology, NMR

Shafi Kuchay, University of Illinois Chicago, Chicago, Illinois, United States of America
Membrane proteostasis, Ubiquitin ligases, cancer cell signal transduction

Markus Kunze, Medical University of Vienna Center for Brain Research, Vienna, Austria
Peroxisomes, protein transport, targeting signals, metabolism, protein-protein interactions, FRET, Brain disease

Roland Lill, University of Marburg, Marburg, Germany
Iron-sulfur protein biogenesis, mitochondrial function and transport, ABC transporters, cell biology of metals, iron-sulfur diseases

Guanghui Liu, State Key Laboratory of Membrane Biology, Beijing, China
Andreas Ludwig, RWTH Aachen University, Aachen, Germany
Lung inflammation, leukocyte recruitment, proteolytic shedding, metalloproteinases, chemokines

Alberto Maria Martelli, University of Bologna, Bologna, Italy
Cellular signaling in health and diseases, cancers, cellula signaling, drug-resistance, Akt, PI3K, mTOR, GSK3beta

Jean-Claude Martinou, University of Geneva, Genève, Switzerland
Apoptosis, Bcl2-family, mitochondrial gene expression, mitochondrial pyruvate carrier

Satyajit Mayor, National Centre for Biological Sciences, Bangalore, India
Cell Biology, Membrane Trafficking, Membrane Biophysics

Rachid Mazroui, Laval University, Québec, Quebec, Canada
Posttranscriptional mRNA regulation during stress, RNA stress granules, RNA-binding proteins

Barbara A. Niemeyer, Saarland University, Saarbrücken, Germany
Dr. Barbara Niemeyer is a biologist interested in the regulation of calcium selective ion channels on a molecular and cell physiological level. How Ca^{2+} signatures are regulated by their environment and by other intracellular signalling cascades to confer cell type specific responses is investigated by molecular biology, biochemistry, Ca^{2+} imaging analysis, electrophysiology (patch-clamp) and high resolution microscopy (live cell imaging, TIRF and electron microscopy).

John O’Brien, Medical University of South Carolina, Charleston, South Carolina, United States of America
signal transduction, compartmentalized signaling, ubiquitylation, endocytosis, oncogenesis, and Ras GTPases.
Yasuko Ono, Tokyo Metropolitan Institute of Medical Science, Setagaya-Ku, Japan
Protease, calpain, muscle biology, muscular dystrophy

Nikolaus Pfanner, University of Freiburg Institute of Biochemistry and Molecular Biology, Freiburg, Germany
Cell organelles, biogenesis of mitochondria, protein sorting, membrane proteins, protein assembly

Paola Pizzo, University of Padua, Department of Biomedical Sciences, Padova, Italy
Calcium homeostasis, mitochondria, Alzheimer’s disease, presenilin, MAM, ,

Tassula Proikas-Cezanne, University of Tübingen, Tübingen, Germany
Autophagy, cancer, high-throughput/content imaging

Lawrence Quilliam, Indiana University School of Medicine, Indianapolis, Indiana, United States of America
Ras family GTPases, mTOR, signal transduction

Fulvio Mario Reggiori, Aarhus University, Aarhus, Denmark
Cell biology, biochemistry, autophagy

Des R. Richardson, Griffith University, Nathan, Queensland, Australia
Iron, Copper, Melanoma, Copper transport, Zinc, Frataxin, Metal, Transferrin, Iron-sulfur protein, Metal ion-protein interaction, Tumor therapy, Iron metabolism, Metal homeostasis, Metalloenzyme, Transport metal

Juan Rosado, University of Extremadura, Badajoz, Spain
Calcium signalling, store-operated calcium entry, TRP channels, Orai, STIM

Stefan Rose-John, Kiel University, Kiel, Germany
Structural aspects of cytokines and cytokine receptor complexes, Interleukin-6

Heide Schatten, University of Missouri, Columbia, Missouri, United States of America
Cancer biology, cell biology, reproductive biology, cell cycle, cell organelles, mitochondria, cytoskeleton, microtubules, centrosomes, meiosis, mitosis, cell division, microscopy

Maya Schuldiner, Weizmann Institute of Science, Rehovot, Israel
Saccharomyces cerevisiae, Organelles, Contact sites, Targeting and translocation, High content screens

Klaus Schulze-Osthoff, University of Tübingen, Tübingen, Germany
Cancer biology, cell death, NF-kappaB, senescence, signal transduction

Thomas Simmen, University of Alberta, Department of Cell Biology, Edmonton, Alberta, Canada
Parco Siu, The University of Hong Kong Division of Kinesiology, Hong Kong, Hong Kong
Molecular and integrative exercise physiology

Jianlong Sun, ShanghaiTech University, Shanghai, China
Stem cells, transcription regulation, breast cancer, Hematopoietic stem cell, leukemia

Johan Thevelein, KU Leuven Association, Leuven, Belgium
Yeast, nutrient sensing and signaling, nutrient receptors, nutrient transporters, stress tolerance, stress response

Leann Tilley, The University of Melbourne, Department of Biochemistry and Pharmacology, Parkville, Australia
Malaria, erythroocyte, super-resolution light microscopy, electron microscopy, drug development

Mark Turner, Nottingham Trent University, Nottingham, United Kingdom
Metabolic Stress, Insulin secretion, Inflammation, Cytokine signalling, NF-kappaB

Rebecca M. Voorhees, California Institute of Technology, Pasadena, California, United States of America
Protein Biogenesis, Structural Biology, Quality Control, Membrane Proteins, ,

Raghunatha (Raghu) Yammani, Wake Forest University, Winston-Salem, North Carolina, United States of America
ER stress, Unfolded Protein Response (UPR) Signaling , S100 proteins, Cell signaling, Cartilage.

Xiangjian Zheng, Tianjin Medical University, Tianjin, China
Vascular Biology, Kidney development, Lipid metabolism, Kinase regulation

Wei-Guo Zhu, Department of Biochemistry and Molecular Biology Shenzhen University School of Medicine, Shenzhen, China
Histone modifications, DNA damage repair, Epigenetics, Tumor Suppressor

BBA Editor-in-Chief

Ulrich Brandt, Radboud University Radboud Institute for Molecular Life Sciences, Nijmegen, Netherlands
Mitochondria, Membrane Proteins, Bioenergetics, Complex I, Proteomics
Your Paper Your Way

We now differentiate between the requirements for new and revised submissions. You may choose to submit your manuscript as a single Word or PDF file to be used in the refereeing process. Only when your paper is at the revision stage, will you be requested to put your paper in to a 'correct format' for acceptance and provide the items required for the publication of your article.

To find out more, please visit the Preparation section below.

*BBA Molecular Cell Research* focuses on understanding and elucidating the mechanisms of cellular processes at the molecular level in all living organisms. These include aspects of cellular signaling, signal transduction, cellular transport systems, cell cycle, regulated cell death, autophagy, intracellular trafficking, secretory and endocytic pathways, organelar biogenesis and function, cytoskeletal structures, cellular interactions, cell/tissue differentiation, protein function and cellular enzymology. Also included are studies at the interface between Cell Biology and Biophysics which apply, for example, novel imaging methods for characterizing cellular processes. Please note: We usually do not consider descriptive manuscripts dealing with the identification of transcripts regulated by single miRNAs or lncRNAs, unless substantial new mechanistic insight into their (patho)physiological activity is provided. Descriptive evaluation of natural compounds as potential drug candidates is generally not within the purview of BBA-MCR, unless novel targets or molecular mechanisms for these compounds are identified. Manuscripts focused on bioinformatic analysis of data require experimental validation, unless new bioinformatics programs or methods are being developed. We only consider "Omics" data that were derived from more than one biological replicate. Studies should establish causative relationships between phenomena and thus transcend the correlation level. Please see our Guide for Authors for information on article submission. If you require any further information or help, please visit our Support Center.

Reporting Standards

Authors of reports of original research should present an accurate account of the work performed as well as an objective discussion of its significance but also its limitations. Underlying data should be represented accurately in the paper. A paper should contain sufficient methodological and experimental detail and references to permit others to replicate the work. Manipulation of data and figures as well as fraudulent or knowingly inaccurate statements constitute unethical behaviour and are unacceptable.

Review articles should be timely, accurate, objective, balanced and authoritative written by researchers with proven track record on the topic. Editorial 'opinion' works should be clearly identified as such.

Types of papers

Full-length research articles (Regular paper), brief reports (BBA Research Letters), review articles and mini-reviews

Reviews and mini-reviews are typically commissioned by the Editors. All Review Articles should be authoritative, state-of-the-art accounts of the selected research field, be of high interest, balanced and accurate. Beyond summaries of important scientific developments and ideas, authors are encouraged to identify and discuss how the field may be impacted or develop in the future, including insights that may be of significance to the scientific community. All BBA Review Articles undergo rigorous and full peer review, in the same way as regular research papers, and publication cannot be guaranteed. The number of co-authors of review articles is limited to five and each author is expected to make a substantial contribution to the writing of the manuscript.

Unsolicited reviews will be considered only in exceptional cases. The prospective author should be a recognized expert in the field of the proposed article. When submitting an unsolicited review article, authors need to include the following additional information in the cover letter: a list of the author(s)' most recent publication contributions (up to 5) which are relevant to the field of the proposed review and an explanation of the current interest and significance to the broad readership of the journal, that is, compelling reasons why the review should be considered.
Reviews (full-length) should provide a comprehensive analysis on topics of broad interest to the journal's readership. Reviews should be thorough, sufficiently critical and accommodate different points of view. They should stand out from other recently published reviews on the same theme. Although Reviews are not of any fixed length, they are usually 6,000 to 10,000 words in length (excluding references and figure legends), include an abstract that is no more than 150 words, up to 100 references (should include titles), and a minimum of three figures/illustrations.

Mini-reviews are succinct, focused updates of the literature related to a question of current interest in the scientific community (typically from the last 2-3 years). Subjects covered in Mini-reviews are generally narrower, either in scope or depth, than those covered in full-length Reviews. They should highlight/analyze/discuss recent and important findings and include the author's viewpoint on how the subject relates to the current state of the field. Mini-reviews are usually 2000 to 4000 words in length (excluding references and figure legends), include an abstract that is no more than 100 words, up to 50 references (should include titles), and one to three figures/illustrations.

**BBA Research Letters**

*BBA Research Letters* briefly report on original scientific observations that are either limited in scope or preliminary in nature. The findings should be timely and of high significance for the relevant field of research. With a focus on simple and succinct communication, *BBA Research Letters* do not include headings or extensive introduction, nor do they include an abstract. They are limited to 1,500 words (not including figure legends or references) and no more than 1 key figure or table; the reference list should not exceed 15 entries. Up to 3 additional figures or tables may be included as supplemental materials. The author name(s) and affiliation(s) should be placed at the end of the text.

*BBA Research Letters* are subject to review and must adhere to the quality standards and ethical guidelines outlined in the general Guide for Authors.

Papers should be submitted using the BBA Molecular Cell Research online submission system, [https://www.editorialmanager.com/bbamcr](https://www.editorialmanager.com/bbamcr). For questions on the submission and reviewing process, please contact the Editorial Office at bbamcr@elsevier.com.

**BEFORE YOU BEGIN**

**Ethics in publishing**

Please see our information on Ethics in publishing.

**Studies in humans and animals**

If the work involves the use of human subjects, the author should ensure that the work described has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans. The manuscript should be in line with the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals and aim for the inclusion of representative human populations (sex, age and ethnicity) as per those recommendations. The terms sex and gender should be used correctly.

Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

All animal experiments should comply with the ARRIVE guidelines and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, EU Directive 2010/63/EU for animal experiments, or the National Research Council's Guide for the Care and Use of Laboratory Animals and the authors should clearly indicate in the manuscript that such guidelines have been followed. The sex of animals must be indicated, and where appropriate, the influence (or association) of sex on the results of the study.

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors should complete the declaration of interest statement using [https://www.elsevier.com/declaration-of-competing-interests](https://www.elsevier.com/declaration-of-competing-interests) and upload to the submission system at the Attach/Upload Files step. **Note:** Please do not convert the .docx template to another file type. Author signatures are not required. If there are no interests to declare, please choose: 'Declarations of interest: none' in the template. More information.
Declaration of interest
All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double anonymized) or the manuscript file (if single anonymized). If there are no interests to declare then please state this: 'Declarations of interest: none'. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. More information.

Declaration of generative AI in scientific writing
The below guidance only refers 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.

Where authors use generative artificial intelligence (AI) and AI-assisted technologies in the writing process, authors should only use these technologies to improve readability and language. Applying the technology should be done 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. AI and AI-assisted technologies should not be listed as an author or co-author, or be cited as an author. Authorship implies responsibilities and tasks that can only be attributed to and performed by humans, as outlined in Elsevier's AI policy for authors.

Authors should disclose in their manuscript the use of AI and AI-assisted technologies in the writing process by following the instructions below. A statement will appear in the published work. Please note that authors are ultimately responsible and accountable for the contents of the work.

Disclosure instructions
Authors must disclose the use of generative AI and AI-assisted technologies in the writing process by adding a statement at the end of their manuscript in the core manuscript file, before the References list. The statement should be placed in a new section entitled '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 publication.

This declaration does not apply to the use of basic tools for checking grammar, spelling, references etc. If there is nothing to disclose, there is no need to add a statement.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it 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, your article may be checked by Crossref Similarity Check and other originality or duplicate checking software.

Preprints
Please note that preprints can be shared anywhere at any time, in line with Elsevier's sharing policy. Sharing your preprints e.g. on a preprint server will not count as prior publication (see 'Multiple, redundant or concurrent publication' for more information).

Use of inclusive language
Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek
gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. When coding terminology is used, we recommend to avoid offensive or exclusionary terms such as "master", "slave", "blacklist" and "whitelist". We suggest using alternatives that are more appropriate and (self-) explanatory such as "primary", "secondary", "blocklist" and "allowlist". These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

**Reporting sex- and gender-based analyses**

**Reporting guidance**

For research involving or pertaining to humans, animals or eukaryotic cells, investigators should integrate sex and gender-based analyses (SGBA) into their research design according to funder/sponsor requirements and best practices within a field. Authors should address the sex and/or gender dimensions of their research in their article. In cases where they cannot, they should discuss this as a limitation to their research's generalizability. Importantly, authors should explicitly state what definitions of sex and/or gender they are applying to enhance the precision, rigor and reproducibility of their research and to avoid ambiguity or conflation of terms and the constructs to which they refer (see Definitions section below). Authors can refer to the Sex and Gender Equity in Research (SAGER) guidelines and the SAGER guidelines checklist. These offer systematic approaches to the use and editorial review of sex and gender information in study design, data analysis, outcome reporting and research interpretation - however, please note there is no single, universally agreed-upon set of guidelines for defining sex and gender.

**Definitions**

Sex generally refers to a set of biological attributes that are associated with physical and physiological features (e.g., chromosomal genotype, hormonal levels, internal and external anatomy). A binary sex categorization (male/female) is usually designated at birth ("sex assigned at birth"), most often based solely on the visible external anatomy of a newborn. 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. Sex and gender are often incorrectly portrayed as binary (female/male or woman/man) and unchanging whereas these constructs actually exist along a spectrum and include additional sex categorizations and gender identities such as people who are intersex/have differences of sex development (DSD) or identify as non-binary. Moreover, the terms "sex" and "gender" can be ambiguous—thus it is important for authors to define the manner in which they are used. In addition to this definition guidance and the SAGER guidelines, the resources on this page offer further insight around sex and gender in research studies.

**Author contributions**

For transparency, we require corresponding authors to provide co-author contributions to the manuscript using the relevant CRediT roles. The CRediT taxonomy includes 14 different roles describing each contributor’s specific contribution to the scholarly output. The roles are: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; and Writing - review & editing. Note that not all roles may apply to every manuscript, and authors may have contributed through multiple roles. More details and an example.

**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.

**Changes to authorship**

Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason
for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.

Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

**Article transfer service**

This journal uses the Elsevier Article Transfer Service to find the best home for your manuscript. This means that if an editor feels your manuscript is more suitable for an alternative journal, you might be asked to consider transferring the manuscript to such a journal. The recommendation might be provided by a Journal Editor, a dedicated Scientific Managing Editor, a tool assisted recommendation, or a combination. If you agree, your manuscript will be transferred, though you will have the opportunity to make changes to the manuscript before the submission is complete. Please note that your manuscript will be independently reviewed by the new journal. More information.

**Copyright**

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete a 'License Agreement' (more information). Permitted third party reuse of gold open access articles is determined by the author's choice of user license.

**Author rights**

As an author you (or your employer or institution) have certain rights to reuse your work. More information.

Elsevier supports responsible sharing

Find out how you can share your research published in Elsevier journals.

**Role of the funding source**

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement, it is recommended to state this.

Elsevier journals comply with current NIH public access policy

**Open access**

Please visit our Open Access page for more information about open access publishing in this journal.

**Elsevier Researcher Academy**

Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.
Language (usage and editing services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the Language Editing service available from Elsevier's Language Services.

Submission
Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

Referees
Please submit the names, addresses, and e-mail addresses of 4 potential referees, as well as a brief description of their expertise relevant to your manuscript. Suggested reviewers should be individuals qualified to evaluate the work you have submitted. Editorial Board members who do not have relevant expertise on the topic of your article should not be suggested. Please note that the reviewers suggested may not be current, recent or extensive collaborators of yours, and cannot have been involved in the preparation of the manuscript.

Please note that the editor retains the sole right to decide whether or not the suggested reviewers are used. Failure to provide appropriate reviewer suggestions as noted above may result in your manuscript being returned to you without review.

Authors may request exclusion of certain referees if conflicts of interest are anticipated. However, no more than 3 such names should be given. Entire groups, institutions or countries cannot be specified for exclusion.

PREPARATION
NEW SUBMISSIONS
Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts your files to a single PDF file, which is used in the peer-review process.

As part of the Your Paper Your Way service, you may choose to submit your manuscript as a single file to be used in the refereeing process. This can be a PDF file or a Word document, in any format or layout that can be used by referees to evaluate your manuscript. It should contain high enough quality figures for refereeing. If you prefer to do so, you may still provide all or some of the source files at the initial submission. Please note that individual figure files larger than 10 MB must be uploaded separately.

References
There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct.

Formatting requirements
There are no strict formatting requirements but all manuscripts must contain the essential elements needed to convey your manuscript, for example Abstract, Keywords, Introduction, Materials and Methods, Results, Conclusions, Artwork and Tables with Captions.

If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes.
Divide the article into clearly defined sections.

Please ensure your paper includes page numbers - this is an essential peer review requirement.

Figures and tables embedded in text
Please ensure the figures and the tables included in the single file are placed next to the relevant text in the manuscript, rather than at the bottom or the top of the file. The corresponding caption should be placed directly below the figure or table.


**Peer review**

This journal operates a single anonymized review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. Editors are not involved in decisions about papers which they have written themselves or have been written by family members or colleagues or which relate to products or services in which the editor has an interest. Any such submission is subject to all of the journal's usual procedures, with peer review handled independently of the relevant editor and their research groups. More information on types of peer review.

**REVISED SUBMISSIONS**

**Use of word processing software**

Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

**Article structure**

**Subdivision - numbered sections**

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

**Introduction**

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

**Material and methods**

To enable reproducibility of the research, we encourage authors to submit a Key Resources Table, which helps make the resources clear to readers. The Key Resources Table highlights the genetically modified organisms and strains, cell lines, reagents and other resources essential to reproduce the results presented in a paper. More information is available here https://www.elsevier.com/authors/author-resources/key-resources-table. Descriptions of the statistical analysis must be reported in the Materials and Methods section and/or figure legends. It is also required to provide information about the number of biological and technical replicates and the statistical test that was used. Authors are encouraged to indicate individual data points as scatter plots, where applicable.

**Results**

Results should be clear and concise.

**Discussion**

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

**Conclusions**

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

**Appendices**

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

**Essential title page information**

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. Present the authors' affiliation
addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.

• **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. This responsibility includes answering any future queries about Methodology and Materials. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.

• **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

**Highlights**
Highlights are mandatory for this journal as they help increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

**Abstract**
A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

A Regular paper should have a Summary of 100-250 words.

**Graphical abstract**
Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.

**Keywords**
Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

**Abbreviations**
Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

**Acknowledgements**
Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

** Formatting of funding sources**
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 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.

Standards for Reporting Enzymology Data (STRENDA)

This journal follows the recommendations of the STRENDA (Standards for Reporting Enzymology Data) Commission of the Beilstein-Institut for the reporting of kinetic and equilibrium binding data. Detailed guidelines can be found at (http://www.strenda.org/documents.html) or in this pdf file.

All reports of kinetic and binding data must include a description of the identity of the catalytic or binding entity (enzyme, protein, nucleic acid or other molecule). This information should include the origin or source of the molecule, its purity, composition, and other characteristics such as post-translational modifications, mutations, and any modifications made to facilitate expression or purification. The assay methods and exact experimental conditions of the assay must be fully described if it is a new assay or provided as a reference to previously published work, with or without modifications. The temperature, pH and pressure (if other than atmospheric) of the assay must always be included, even if previously published. In instances where catalytic activity or binding cannot be detected, an estimate of the limit of detection based on the sensitivity and error analysis of the assay should be provided. Ambiguous terms such as "not detectable" should be avoided. A description of the software used for data analysis should be included along with calculated errors for all parameters.

First-order and second-order rate constants: see pdf for full instructions.

Math formulae

Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Footnotes

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article.

Artwork

Image manipulation

While it is accepted that authors sometimes need to adjust images for clarity, manipulation for purposes of deception or fraud will be considered as scientific ethical abuse and will be dealt with accordingly. For graphical images, this journal is applying the following policy: no specific feature within an image may be enhanced, obscured, moved, removed, or introduced. Adjustments of brightness, contrast, and/or color balance are acceptable as long as they are applied to the entire image and do not obscure or eliminate any information present in the original image. Nonlinear adjustments (e.g., changes to gamma settings) must be disclosed in the figure legend. The figure legend must also include a statement on the number of biological replicates, as appropriate for the data presented. Legends should also indicate the statistical method used to calculate the error bars in any graph (e.g., SD, SE, SEM).

Digital images in manuscripts nearing acceptance for publication may be scrutinized for any indication of improper manipulation. BBA Molecular Cell Research reserves the right to ask for original data or images and, if these are not satisfactory, we may decide not to accept the manuscript.

Electronic Artwork

General points

- Make sure you use uniform lettering and sizing of your original artwork.
- Preferred fonts: Arial (or Helvetica), Times New Roman (or Times), Symbol, Courier.
• Display immunoblot and gel data by including the position of at least one molecular weight marker, and include a dividing line at the splice sites of blots and gels.
• Microscopy images must include a scale bar.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Indicate per figure if it is a single, 1.5 or 2-column fitting image.
• For Word submissions only, you may still provide figures and their captions, and tables within a single file at the revision stage.
• Please note that individual figure files larger than 10 MB must be provided in separate source files.

A detailed guide on electronic artwork is available. You are urged to visit this site; some excerpts from the detailed information are given here.

Formats
Regardless of the application used, when your electronic artwork is finalized, please 'save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):
EPS (or PDF): Vector drawings. Embed the font or save the text as 'graphics'.
TIFF (or JPG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.
TIFF (or JPG): Bitmapped line drawings: use a minimum of 1000 dpi.
TIFF (or JPG): Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

Please do not:
• Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low.
• Supply files that are too low in resolution.
• Submit graphics that are disproportionately large for the content.

Color artwork
Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF) or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) in addition to color reproduction in print. Further information on the preparation of electronic artwork.

Tables
Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

References
Citation in text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication and a copy of the title page of the relevant article must be submitted.

Web references
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.
Preprint references
Where a preprint has subsequently become available as a peer-reviewed publication, the formal publication should be used as the reference. If there are preprints that are central to your work or that cover crucial developments in the topic, but are not yet formally published, these may be referenced. Preprints should be clearly marked as such, for example by including the word preprint, or the name of the preprint server, as part of the reference. The preprint DOI should also be provided.

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference management software
Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal’s style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Reference formatting
There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct. If you do wish to format the references yourself they should be arranged according to the following examples:

Reference style
Text: Indicate references by number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.
Example: '..... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result ....'
List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.
Examples:
Reference to a journal publication:
Reference to a journal publication with an article number:
Reference to a book:
Reference to a chapter in an edited book:
Reference to a website:
Reference to a dataset:
Reference to software:
**Journal abbreviations source**

Journal names should be abbreviated according to the [List of Title Word Abbreviations](#).

**Video**

Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including [ScienceDirect](#). Please supply 'stills' with your files; you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our [video instruction pages](#). Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

**Data visualization**

Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions [here](#) to find out about available data visualization options and how to include them with your article.

**Supplementary material**

Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

**Research data**

This journal requires and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings, which may also include software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. When sharing data in one of these ways, you are expected to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the [research data page](#).

**Data linking**

If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on [ScienceDirect](#) with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the [database linking page](#).

For supported data repositories a repository banner will automatically appear next to your published article on [ScienceDirect](#).

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).
**Research Elements**
This journal enables you to publish research objects related to your original research – such as data, methods, protocols, software and hardware – as an additional paper in a Research Elements journal.

Research Elements is a suite of peer-reviewed, open access journals which make your research objects findable, accessible and reusable. Articles place research objects into context by providing detailed descriptions of objects and their application, and linking to the associated original research articles. Research Elements articles can be prepared by you, or by one of your collaborators.

During submission, you will be alerted to the opportunity to prepare and submit a manuscript to one of the Research Elements journals.

More information can be found on the Research Elements page.

**Data statement**
To foster transparency, we require you to state the availability of your data in your submission if your data is unavailable to access or unsuitable to post. This may also be a requirement of your funding body or institution. You will have the opportunity to provide a data statement during the submission process. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

**Submission checklist**
The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

**Ensure that the following items are present:**
One author has been designated as the corresponding author with contact details:
- E-mail address
- Full postal address
- Telephone
All necessary files have been uploaded, and contain:
- Keywords
- All figure captions
- All tables (including title, description, footnotes)
Further considerations:
- Manuscript has been 'spell-checked' and 'grammar-checked'
- All references mentioned in the Reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Web)
For any further information please visit our customer support site at https://service.elsevier.com.

**AFTER ACCEPTANCE**

**Online proof correction**
To ensure a fast publication process of the article, we kindly ask authors to provide us with their proof corrections within two days. Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.
If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.
We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Offprints**
The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra
charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**AUTHOR INQUIRIES**

Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch.

You can also check the status of your submitted article or find out when your accepted article will be published. For *presubmission queries* regarding article suitability for the Journal, contact bos4@elsevier.com using the template. For *presubmission technical queries*, contact bbamcr@elsevier.com using the template.

*Figure Captions*

Ensure that each illustration has a caption. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used. Descriptions of the statistical analysis must be reported in figure legends. It is also required to provide information about the number of biological and technical replicates and the statistical test that was used.