Style and formatting checklist
Primary Research Articles

communications journals

Manuscripts must be formatted as below at the point of acceptance. Manuscripts do not need to be formatted at submission or during revision.

Main manuscript		
Author list	The author list provided in your article must match that provided on our manuscript tracking system.	☐
Author list	Job titles must not be included in the affiliations or author list.	☐
Author list	Affiliations must be numbered in the order of their first appearance in the author list.	☐
Author list	Each affiliation must contain only one address.	☐
Author list	Author affiliations must include institution, city and country.	☐
Author list	Author tagging statements are limited to the following two options: "These authors contributed equally" and "These authors jointly supervised this work", with no more than one of each tag permitted. Where relevant, 'present address' must be provided separately as the final affiliation.	☐
Author list	At least one corresponding author must be designated.	☐
Author list	An e-mail address must be provided for each corresponding author, and only one e-mail address is permitted per corresponding author.	☐
Author list	For each corresponding author, and for any author who wishes for their ORCID to be included in the final article, an ORCID should be included in their author profile in our manuscript tracking system prior to formal acceptance. ORCIDs cannot be added at the proof stage.	☐
Abstract	An abstract must be provided and must begin with the heading 'Abstract'. The abstract must contain background information and a summary of the present work. It must not contain references.	☐
Abstract	Graphical abstracts are not supported and should not be supplied.	☐
Introduction	An introduction must be provided and must begin with the heading 'Introduction'. The introduction should include the background and rationale for the work. The final paragraph should be a brief summary of the major results and conclusions.	☐
Language and style	Text must not be copied directly from published work (even your own) without clear attribution, including one or more references.	☐
Language and style	Acronyms should be defined upon first use. Non-standard two letter abbreviations should be avoided. Acronyms and abbreviations should be used only if they appear three or more times in the text. No list or table of abbreviations/definitions is permitted.	☐
Language and style	Mathematical terms should conform to the following guidelines: ➢ Scalar variables (e.g. x, V, χ) should be typeset in italics. ➢ Multi-letter variables should be formatted in Roman. ➢ Constants (e.g. $\hbar$, G, c) should be typeset in italics (the only exceptions being e, i, π, which should be typeset in Roman) and vectors (such as r, the wavevector k, or the magnetic field vector B) should be typeset in bold without italics. ➢ In contrast, subscripts and superscripts should only be italicised if they too are variables or constants. Those that are labels (such as the 'c' in the critical temperature, T_c, the 'F' in the Fermi energy, E_F, or the 'crit' in the critical current, I_{crit}) should be typeset in Roman. ➢ To avoid doubt, unit dimensions should be expressed using negative integers (e.g. $kg\ m^{-1}\ s^{-2}$, not kg/ms^2) or the word 'per'.	☐
Results	A section titled 'Results' or 'Results and Discussion' must be provided. This section must	☐

		include no more than two levels of subheadings.	☐
Results		All data that support the conclusions drawn must be presented in the manuscript unless they are published elsewhere. We do not allow statements of "data not shown".	☐
Results		References to "personal communication" in the text require written permission from cited person.	☐
Results		Supplementary items must be cited in a consistent format throughout the manuscript, and in line with the labels used in the Supplementary Information. We recommend using the following formats: Supplementary Figure 1, Supplementary Table 1, Supplementary Methods, Supplementary Note 1, Supplementary Discussion, Supplementary References, Supplementary Movie 1, Supplementary Audio 1, Supplementary Data 1 and Supplementary Software 1.	☐
Results		All Supplementary items should be cited in the main manuscript.	☐
Results		Equations must be supplied in an editable format, and not as images.	☐
Results		Where numbered equations are provided, they must appear in sequential order.	☐
Display items		Schemes are not permitted and must be labelled as Figures instead.	☐
Display items		Chemical reactions must be labelled as Equations if displayed as text, or as Figures if displayed as images.	☐
Display items		Figure captions must start with a brief title that describes the Figure as a whole and does not contain reference to specific figure panels.	☐
Display items		Figure captions must also have a legend that defines each Figure panel individually. Figure panels must be labelled with lower case letters, and all panels must be defined in order in the legend.	☐
Display items		Abbreviations, symbols, colours and shading must be defined, even if previously defined in the main text. Where error bars are used, they must also be defined. Microscopy images and photographs must be accompanied by scale bars.	☐
Display items		Tables must have a caption. Abbreviations and symbols/variables listed in Tables must be defined in the Table caption.	☐
Display items		Data in Tables must be free from bold/italic formatting unless this has been clearly defined in the footnote. Tables must only contain black and white text, with no colours or shading.	☐
Display items		Where Tables contain images, each image should appear in its own cell in the absence of any text.	☐
Display items		All Figures and Tables must be cited in the text in numerical order.	☐
Methods		A Methods section must be provided (except for purely theoretical work).	☐
Methods		The Methods and Supplementary Methods must together include sufficient detail such that the work could be reproduced.	☐
Methods		For studies using live vertebrates, a statement affirming that you have complied with all relevant ethical regulations for animal testing and research is necessary. A statement explicitly confirming if the study received ethical approval, including the name of the board and institution that approved the study protocol is also required. The species, strain, sex and age of animals should be included.	☐
Methods		Details of geological samples and palaeontological specimens that include clear provenance information are needed. Information regarding the requisite permission obtained is required. Palaeontological and type specimens should be deposited in a recognised museum or collection.	☐
Data		A "Data Availability" section must be provided.	☐
Data		*For Communications Earth and Environment*: At the time of publication, the minimal dataset necessary to interpret, replicate and build upon the methods or findings reported in the article should be placed in a publically available repository. If this is not possible, for example, for legal or ethical concerns, this must be clearly stated in the Data Availability statement.	☐

Data	Small molecule crystallographic data must be deposited with the CCDC or the ICSD. Please provide the relevant accession codes in this section, e.g. "The X-ray crystallographic coordinates for structures reported in this study have been deposited at the Cambridge Crystallographic Data Centre (CCDC), under deposition numbers XXXXXXX-YYYYYYY. These data can be obtained free of charge from The Cambridge Crystallographic Data Centre via www.ccdc.cam.ac.uk/data_request/cif." Please also supply CIFs as Supplementary Data files.	☐
Data	For novel protein structures, a stereo image of a portion of the electron density map (including contour level and type of map) must be provided for crystallographic structures, or the superimposed lowest energy structures (>10) for NMR structures. Structural data must be deposited in the relevant publicly accessible database, and accession codes must be provided in the data availability section.	☐
Data	Extended data items are not permitted and must be placed in the Supplementary Information instead.	☐
Code	For all studies developing new software or using custom code that is deemed central to the conclusions, a Code Availability section must be included indicating whether and how the code can be accessed, including any restrictions to access. This section should also include information on the versions of any software used, if relevant, and any specific variables or parameters used to generate, test, or process the current dataset.	☐
References	References must be listed by number and should be given in the order of appearance in the text, then tables, figures and finally boxes.	☐
References	Each reference must contain only one item; compound references are not permitted.	☐
References	Manuscript citations must include journal title; article title; volume number; start and end page or article number or DOI; and year of publication, in this order.	☐
References	No publication can be present more than once in the reference list.	☐
References	No footnotes are permitted in the references or elsewhere. Text must instead be incorporated into the main text, the Methods section, or the Supplementary Information.	☐
References	Only articles that have been published or accepted by a named publication or recognised preprint server can be listed in the References. Other persistent and recognised sources such as books and monographs are also permitted. Websites should only be cited if they are in common use or curated.	☐
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Author contributions	An author contributions statement that individually lists the specific contributions of each author to the work must be provided. All authors must be referred to by name or initials in this statement. All authors must be clearly disambiguated from one another.	☐
Competing interests	A competing interests statement that includes both financial and non-financial interests must be provided. All authors must be accounted for within the statement, e.g. with use of 'all other authors declare no competing interests' where relevant.	☐

Supplementary Information

We do not edit Supplementary Information files; they will be uploaded with the published article as they are submitted with the final version of your manuscript. Any tracked changes should be removed from the file.	☐
Any information provided on the cover/title page of the Supplementary Information must match the title and author list in the main manuscript.	☐
We recommend labelling and citing Supplementary items using the following formats: Supplementary Figure 1, Supplementary Table 1, Supplementary Methods, Supplementary Note 1, Supplementary Discussion, and Supplementary References. All supplementary items must be cited in the main article.	☐
Each Supplementary Figure requires a caption. These should be presented below the Figure and should refer to all panels.	☐

Error bars in Supplementary Figures must be defined.	☐
Where data are presented in Supplementary Information, large datasets must be supplied as Supplementary Data files, whereas smaller Tables must be supplied as Supplementary Tables.	☐
Where Supplementary Movie/Audio/Data/Software files are provided, each file should be labelled as Supplementary Movie/Audio/Data/Software 1, etc., and legends for these should be given in the cover letter (not in the Supplementary Information file). All Supplementary Movie/Audio/Data/Software must be cited in the main manuscript.	☐