Biophysical *Journal* SUPPORTING MATERIAL

Supporting Material is published in the online version of *Biophysical Journal* (*BJ*). The information in the Supporting Material should enhance the main article and provide additional substantive material.

The Supporting Material will be evaluated during the peer review process, along with the article manuscript, and will be accepted only if the reviewers and/or the Editorial Board determine that the information provides additional substance to the printed version of the article and enhances the reader's scientific understanding of the article.

Supporting Material cannot have been published previously.

# SUBMISSION

## SPECIFICATIONS

Please provide **one composite PDF file** containing all supporting text, tables, figures, schemes (formatted as figures), and references. If supporting material was created in LaTeX, please convert it to a composite PDF before uploading the file. We strongly recommend that the final size of this PDF be less than 10 MB in order to ensure successful downloads for all readers. Please note that this document will ***not*** be copyedited or typeset, and you will not receive proofs of this material; therefore, ***please provide a file that you consider ready for publication online.***

Material that cannot reasonably fit within this composite PDF (including long tables, databases [formatted as tables], movies, models, and MATLAB *.fig files [see below]) may be submitted as separate files. Below are the acceptable file formats for Supporting Material that cannot be included in the composite PDF:

- **Tables:** *.pdf, *.xls, *.doc
- **Movies:** *.avi, *.gif, *.mov, *.mpg
- **Data and Models:** *Please upload in a *.zip file*
- **MATLAB Figures:** *.fig *(see below)*

**Note:** Individual file size should not exceed 50 MB.

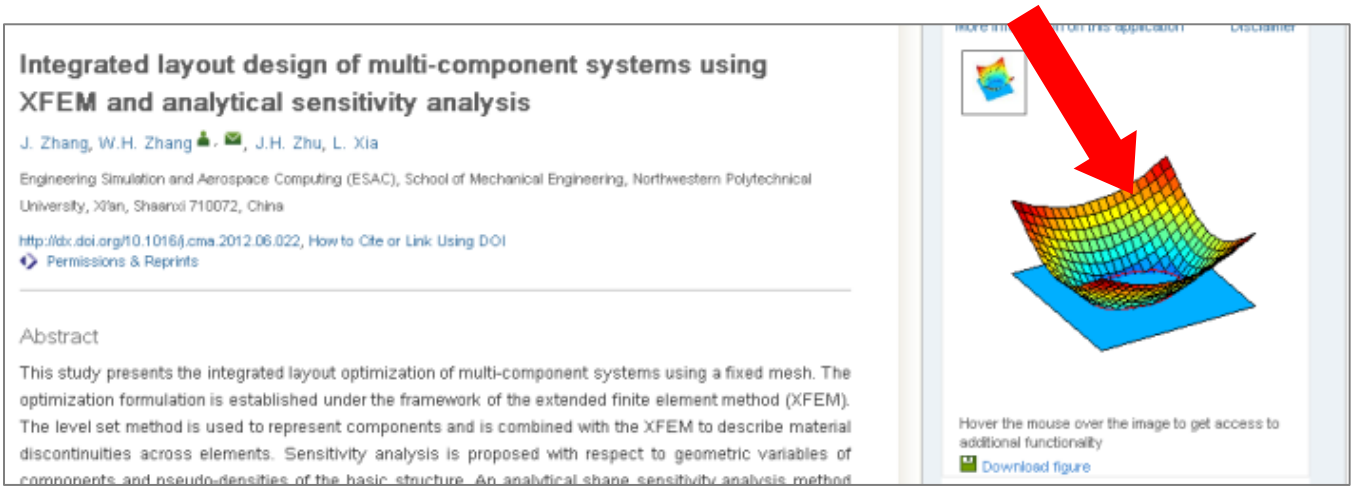
### MATLAB *.FIG FILES

As noted above, you may submit MATLAB figures as part of the Supporting Material. These figures will be available online in a MATLAB image viewer, which enriches an article by enabling the reader to explore figures with data interactively and in the context of the article. The *.fig file format captures not only the visual information but also the underlying data, which makes it possible for the reader to view a figure at maximum accuracy at all levels of zoom and from all viewpoints, as well as to download the data for validation or reuse (readers must have MATLAB).

MATLAB figures may contain experimental data, numerical results, a visualization of a model, or other kinds of data-based, visual research output.

**When you prepare a *.fig file, please be advised that the MATLAB figure viewer does not support GUI elements (for example, a button that requires user input).** Please take this limitation into account when preparing your files to ensure that they will be displayed correctly with your online article. For more information about creating *.fig files with MATLAB, please visit the MathWorks website: http://www.mathworks.nl/help/techdoc/ref/saveas.html

Below is an example of the MATLAB image viewer:




## CITATION

**Each supporting file must be cited at least once within the main article.** See below for the correct citation style.

## COVER LETTER

Mention the Supporting Material in a cover letter that is submitted with the article.

# IN-TEXT CITATION STYLE

The entire composite file can be cited as "Supporting Material," or individual elements therein can be cited in the following formats:

- Fig. S1
- Table S1
- Movie S1

Where a component of the Supporting Material is first cited in the main text, follow that citation with "in the Supporting Material" (e.g., "Fig. S1 in the Supporting Material"). Subsequent citations do not need to include this text.

# SUPPORTING REFERENCES

Please include supporting references and their citations within the main text, which will result in proper credit being given to all of the authors and journals of the cited references.

Supporting references should be formatted as follows:

1. All references included in the Supporting Material document should be listed at the end of the document. This list should be titled "Supporting References."
2. All unique supporting references should also be included in the article text reference list.
3. Supporting references should be cited within the article text, in a short section titled "Supporting Citations."

## SUPPORTING MATERIAL REFERENCE LIST

All supporting references should be included in a list at the end of the Supporting Material document:

- This list should be titled "Supporting References."
- Citations should be formatted as numbers in parentheses; therefore, the reference list should be numbered.
- The numbering of the reference list should begin with 1 and proceed accordingly (1, 2, 3, 4, 5, …).

Please make sure that each reference is formatted correctly according to journal standards. See the "References" section within the main Author Guidelines document for details on the correct formatting of references.

## SUPPORTING REFERENCES IN THE MAIN-TEXT REFERENCE LIST

**All supporting references should be included in the main-text reference list:**

- Supporting references should be included at the end of the main-text reference list, numbered accordingly.
    - For example, if there are 43 main-text references and three supporting references, the supporting references would appear at the end of the list as #44, #45, and #46.
- Any supporting references that have been previously cited in the main text should ***not*** be added to the end of the main-text reference list, because this would result in duplicate references within the list.
    - In the example given in the point above, if one of the three supporting references had already been cited in the main text, that reference would not be added to the end of the list. The other two supporting references would appear at the end of the list as #44 and #45.

See the examples on the following two pages for further clarification on the numbering of main-text and supporting references.

## Citing Supporting References in the Main Text

**Supporting references should be cited within a short section titled "Supporting Citations":**

- This section should appear directly after the main text (i.e., before the reference list).
- The section should include only those supporting references that were not previously cited in the main text.
- The wording of this section is as follows: “References (XX–XX) appear in the Supporting Material.”

See the examples below for further clarification.

## Examples of Proper Formatting

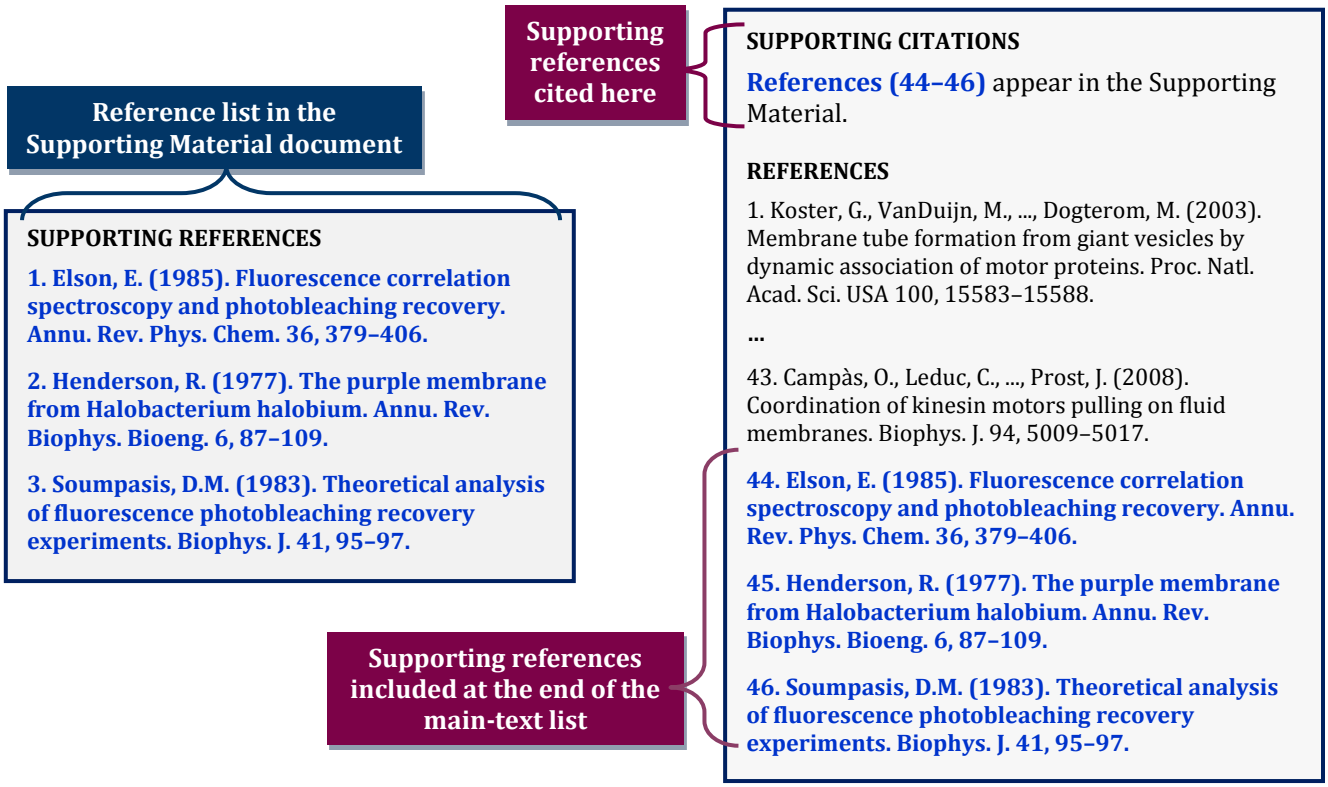
On the following pages are two examples showing how to format your reference lists and main-text Supporting Citations section.

EXAMPLE 1

**Formatting of Reference Lists when *None* of the Supporting References Have Been Previously Cited in the Main Text**

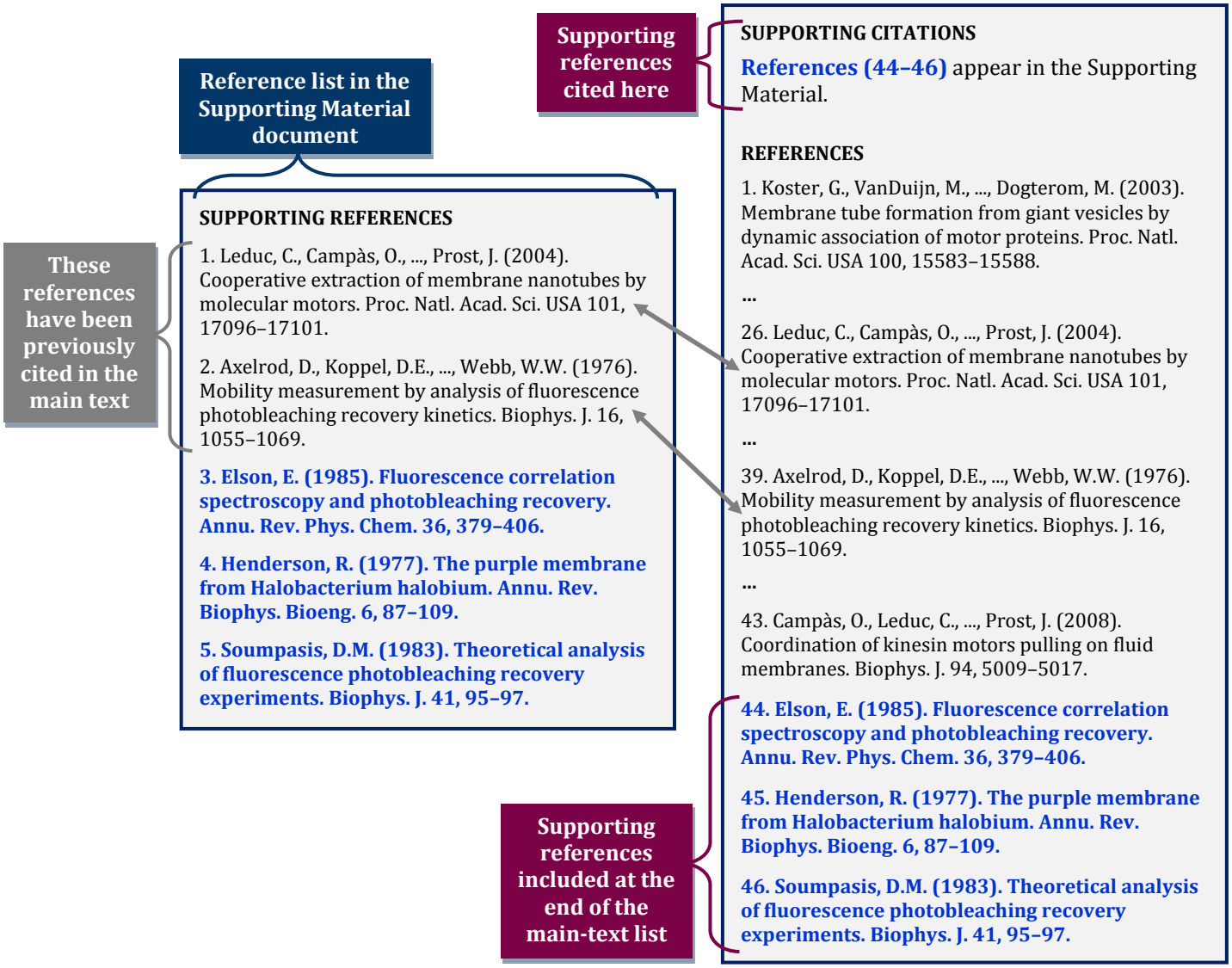
**Left:** a Supporting Material reference list comprising three references, none of which has been previously cited in the main text.

**Right:** the corresponding Supporting Citations section and reference list in the main text.



EXAMPLE 2

**Formatting of Reference Lists when *One or More* of the Supporting References Has Been Previously Cited in the Main Text**

**Left:** a Supporting Material reference list comprising five references, two of which have been previously cited in the main text.

**Right:** the corresponding Supporting Citations section and reference list in the main text. Note that the two previously cited supporting references have not been added to the end of the main-text reference list, nor have they been cited in the Supporting Citations section.