# Universal manuscript template for OSA journals

# AUTHOR ONE, 1 AUTHOR TWO, 2,\* AND AUTHOR THREE 2,3

**Abstract:** LATEX manuscripts submitted to OSA journals may use these instructions and this universal template format. The template simplifies manuscript preparation and eases transfer between OSA journals. Applied Optics, JOSA A, JOSA B, Optics Letters, and Optica authors may also use the previous, legacy templates, particularly if a precise length estimate is needed. Authors will still need to adhere to article-length restrictions based on the final, published format.

© 2020 Optical Society of America under the terms of the OSA Open Access Publishing Agreement

#### 1. Introduction

Adherence to the specifications listed in this template is essential for efficient review and publication of submissions. Proper reference format is especially important (see Section 7).  $\eta$ 

# 2. Multiple corresponding authors

There are two options for indicating multiple corresponding authorship, and they are formatted quite differently. The first format would be as follows and uses an asterisk to denote one of the authors:

```
\operatorname{Author} \operatorname{Author} \operatorname{One} \operatorname{Authormark} \{1,3\} \text{ and } \operatorname{Author} \operatorname{Two} \operatorname{Authormark} \{2,4,\star\}\}
```

\authormark{2}Publications Department, Optical Society of America, 2010 Massachusetts Avenue NW, Washington, DC 20036, USA\\
\authormark{3}xyz@osa.org}

\email{\authormark{\*}opex@osa.org}

This format will generate the following appearance:

# Author $One^{1,3}$ and Author $Two^{2,4,*}$

The second format forgoes the asterisk and sets all email addresses equally within the affiliations. Please note that this format does not use the \email {} field at all.

<sup>&</sup>lt;sup>1</sup>Peer Review, Publications Department, The Optical Society (OSA), 2010 Massachusetts Avenue NW, Washington, DC 20036, USA

<sup>&</sup>lt;sup>2</sup>Publications Department, The Optical Society (OSA), 2010 Massachusetts Avenue NW, Washington, DC 20036, USA

<sup>&</sup>lt;sup>3</sup>Currently with the Department of Electronic Journals, The Optical Society (OSA), 2010 Massachusetts Avenue NW, Washington, DC 20036, USA

<sup>\*</sup>opex@osa.org

<sup>&</sup>lt;sup>1</sup>Peer Review, Publications Department, Optical Society of America, 2010 Massachusetts Avenue NW, Washington, DC 20036, USA

<sup>&</sup>lt;sup>2</sup>Publications Department, Optical Society of America, 2010 Massachusetts Avenue NW, Washington, DC 20036, USA

<sup>&</sup>lt;sup>3</sup>xyz@osa.org \*opex@osa.org

```
\address{\authormark{1}Peer Review, Publications Department, Optical Society of America, 2010 Massachusetts Avenue NW, Washington, DC 20036, USA\\
\authormark{2}Publications Department, Optical Society of America, 2010 Massachusetts Avenue NW, Washington, DC 20036, USA\\\
\authormark{3}xyz@osa.org\\\
\authormark{4}opex@osa.org}
```

This format will generate the following appearance:

# AUTHOR ONE<sup>1,3</sup> AND AUTHOR TWO<sup>2,4</sup>

These are the preferred formats for multiple corresponding authorship, and either may be used.

#### 3. Abstract

The abstract should be limited to approximately 100 words. If the work of another author is cited in the abstract, that citation should be written out without a number, (e.g., journal, volume, first page, and year in square brackets [Opt. Express 22, 1234 (2014)]), and a separate citation should be included in the body of the text. The first reference cited in the main text must be [1]. Do not include numbers, bullets, or lists inside the abstract.

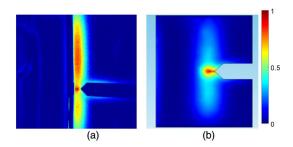


Fig. 1. Sample caption (Fig. 2, [1]).

#### 4. Assessing final manuscript length

OSA's Universal Manuscript Template is based on the OSA Express layout and will provide an accurate length estimate for Optics Express, Biomedical Optics Express, Optical Materials Express, and OSA's newest title OSA Continuum. Applied Optics, JOSAA, JOSAB, Optics Letters, Optica, and Photonics Research publish articles in a two-column layout. To estimate the final page count in a two-column layout, multiply the manuscript page count (in increments of 1/4 page) by 60%. For example, 11.5 pages in the OSA Universal Manuscript Template are roughly equivalent to 7 composed two-column pages. Note that the estimate is only an approximation, as treatment of figure sizing, equation display, and other aspects can vary greatly across manuscripts. Authors of Letters may use the legacy template for a more accurate length estimate.

<sup>&</sup>lt;sup>1</sup>Peer Review, Publications Department, Optical Society of America, 2010 Massachusetts Avenue NW, Washington, DC 20036, USA

<sup>&</sup>lt;sup>2</sup>Publications Department, Optical Society of America, 2010 Massachusetts Avenue NW, Washington, DC 20036, USA

<sup>&</sup>lt;sup>3</sup>xyz@osa.org

<sup>&</sup>lt;sup>4</sup>opex@osa.org

## 5. Figures, tables, and supplementary materials

#### 5.1. Figures and tables

Figures and tables should be placed in the body of the manuscript. Standard LATEX environments should be used to place tables and figures:

```
\begin{figure}[htbp]
\centering\includegraphics[width=7cm]{osafig1}
\caption{Sample caption (Fig. 2, \cite{Yelin:03}).}
\end{figure}
```

## 5.2. Supplementary materials in OSA journals

OSA journals allow authors to include supplementary materials as integral parts of a manuscript. Such materials are subject to peer-review procedures along with the rest of the paper and should be uploaded and described using OSA's Prism manuscript system. Please refer to the Author Guidelines for Supplementary Materials in OSA Journals for more detailed instructions on labeling supplementary materials and your manuscript. Visualizations, Data Files, Datasets, and Code must be associated with a figure, table, or equation, OR be referenced in the results section of the manuscript.

**Authors may also include Supplemental Documents** (PDF documents with expanded descriptions or methods) with the primary manuscript. At this time, supplemental PDF files are not accepted for partner titles, JOCN and Photonics Research. To reference the supplementary document, the statement "See Supplement 1 for supporting content." should appear at the bottom of the manuscript (above the References heading). Please note that to create text color for supplementary materials links, use of the command

\textcolor{urlblue}{Visualization 1} is preferred to using the command \url{Visualization 1}.

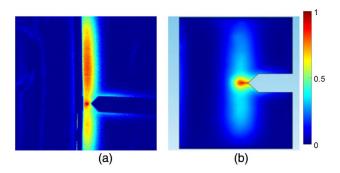


Fig. 2. (a) Three traps create three rings of magnetic nanoparticles. (b) The rings interact with one another (see Visualization 1, [2]).

```
\begin{figure}[hbt!]
\centering\includegraphics{opexfig2}
\caption{Normalized modulus distributions of transverse electrical
field components of the TM01 mode in PWs with (a) SiO_2 core
and (b) Si core}{Visualization 1}), \cite{Masajada:13}).}
\end{figure}
```

#### 6. Mathematical and scientific notation

#### 6.1. Displayed equations

Displayed equations should be centered. Equation numbers should appear at the right-hand margin, in parentheses:

$$J(\rho) = \frac{\gamma^2}{2} \sum_{k(\text{even}) = -\infty}^{\infty} \frac{(1 + k\tau)}{\left[ (1 + k\tau)^2 + (\gamma\rho)^2 \right]^{3/2}}.$$
 (1)

All equations should be numbered in the order in which they appear and should be referenced from within the main text as Eq. (1), Eq. (2), and so on [or as inequality (1), etc., as appropriate].

# **Funding**

Content in the funding section will be generated entirely from details submitted to Prism. Authors may add placeholder text in the manuscript to assess length, but any text added to this section in the manuscript will be replaced during production and will display official funder names along with any grant numbers provided. If additional details about a funder are required, they may be added to the Acknowledgments, even if this duplicates information in the funding section. See the example below in Acknowledgements.

### **Acknowledgments**

Acknowledgments should be included at the end of the document. The section title should not follow the numbering scheme of the body of the paper. Additional information crediting individuals who contributed to the work being reported, clarifying who received funding from a particular source, or other information that does not fit the criteria for the funding block may also be included; for example, "K. Flockhart thanks the National Science Foundation for help identifying collaborators for this work."

#### **Disclosures**

Disclosures should be listed in a separate nonnumbered section at the end of the manuscript. List the Disclosures codes identified on OSA's Conflict of Interest policy page, as shown in the examples below:

ABC: 123 Corporation (I,E,P), DEF: 456 Corporation (R,S). GHI: 789 Corporation (C).

If there are no disclosures, then list "The authors declare no conflicts of interest."

#### 7. References

Proper formatting of references is extremely important, not only for consistent appearance but also for accurate electronic tagging. Please follow the guidelines provided below on formatting, callouts, and use of BibTeX.

#### 7.1. Formatting reference items

Each source must have its own reference number. Footnotes (notes at the bottom of text pages) are not used in OSA journals. References require all author names, full titles, and inclusive pagination. Examples of common reference types can be found on the Author and Reviewer Resource Center.

The commands \begin{thebibliography} {} and \end{thebibliography} format the section according to standard style, showing the title **References**. Use the \bibitem{label} command to start each reference.

### 7.2. Formatting reference citations

References should be numbered consecutively in the order in which they are referenced in the body of the paper. Set reference callouts with standard \cite{} command or set manually inside square brackets [1].

To reference multiple articles at once, simply use a comma to separate the reference labels, e.g. \cite{Yelin:03, Masajada:13, Zhang:14}, produces [1–3].

# 7.3. BibT<sub>E</sub>X

BibTEX may be used to create a file containing the references, whose contents (i.e., contents of .bbl file) can then be pasted into the bibliography section of the .tex file. A BibTEX style file, osajnl.bst, is provided.

If your manuscript already contains a manually formatted \begin{thebibliography}...\end{thebibliography} list, then delete the latexmkrc file from your submission files. However you should ensure that your manually-formatted reference list adheres to the OSA style accurately.

#### 8. Conclusion

After proofreading the manuscript, compress your .tex manuscript file and all figures (which should be in EPS or PDF format) in a ZIP, TAR or TAR-GZIP package. All files must be referenced at the root level (e.g., file figure-1.eps, not /myfigs/figure-1.eps). If there are supplementary materials, the associated files should not be included in your manuscript archive but be uploaded separately through the Prism interface.

Add references with BibTeX or manually. [1–8]

#### References

- D. Yelin, D. Oron, S. Thiberge, E. Moses, and Y. Silberberg, "Multiphoton plasmon-resonance microscopy," Opt. Express 11, 1385–1391 (2003).
- J. Masajada, M. Bacia, and S. Drobczyński, "Cluster formation in ferrofluids induced by holographic optical tweezers," Opt. Lett. 38, 3910–3913 (2013).
- 3. Y. Zhang, S. Qiao, L. Sun, Q. W. Shi, W. Huang, L. Li, and Z. Yang, "Photoinduced active terahertz metamaterials with nanostructured vanadium dioxide film deposited by sol-gel method," Opt. Express 22, 11070–11078 (2014).
- 4. Optical Society, "OSA Publishing," https://www.osapublishing.org.
- P. Forster, V. Ramaswamy, P. Artaxo, T. Bernsten, R. Betts, D. Fahey, J. Haywood, J. Lean, D. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz, and R. V. Dorland, "Changes in atmospheric consituents and in radiative forcing," in *Climate Change 2007: The Physical Science Basis. Contribution of Working Group 1 to the Fourth* assessment report of Intergovernmental Panel on Climate Change, S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor, and H. L. Miler, eds. (Cambridge University Press, 2007).
- B. H. Dean, D. L. Aronstein, S. J. Smith, R. Shiri, and S. D. Acton, "Phase retrieval algorithm for JWST flight and testbed telescope," in *Space Telescopes and Instrumentation I: Optical, Infrared, and Millimeter*, vol. 6265 (2006), p. 17.
- 7. R. McKay, "X-ray crystallography," Ph.D. thesis, Princeton University (1982).
- C. Rivers, "Epipy: Python tools for epidemiology," figshare (2014) [retrieved 13 May 2015], http://dx.doi.org/10.6084/m9.figshare.1005064.