

Universal manuscript template for Optica Publishing Group journals

AUTHOR ONE,^{1,*} AUTHOR TWO,¹ AND AUTHOR THREE¹

¹*Reserch Institute for Interdisciplinary Science, Okayama University, Okayama, Japan*

^{*}*imai1117@okayama-u.ac.jp*

Abstract: not yet

© 2022 Optica Publishing Group under the terms of the [Optica Publishing Group Publishing Agreement](#)

1. Introduction

not yet

2. Experimental setup

2.1. 976 nm amplifier system

A schematic of the fiber amplifier system is shown in Fig. 1. An external-cavity laser diode(ECLD) at 976 nm is used for a seed laser. The seed laser is pre-amplified by tapered amplifier from 30 mW to 900 mW, and coupled to the YDFA input fiber which is a polarization maintining(PM) fiber with a FPC/AC connector. The seed input of the YDFA is connected to an isolator and wavelength divison multiplexing(WDM) filter, which are used to block return light such as backward ASE to the seed laser. The seed and pump light are combined to a double cladding PM fiber which has core of 20 μm and by pump and signal combiner

2.2. 987 nm amplifier system

2.3. 1112 nm amplifier system

`\author{Author One\authormark{1,3} and Author Two\authormark{2,4,*}}`

`\address{\authormark{1}Peer Review, Publications Department,
Optica Publishing Group, 2010 Massachusetts Avenue NW,
Washington, DC 20036, USA\\`

`\authormark{2}Publications Department, Optica Publishing Group,
2010 Massachusetts Avenue NW, Washington, DC 20036, USA\\`

`\authormark{3}xyz@optica.org}`

`\email{\authormark{*}opex@optica.org}`

This format will generate the following appearance:

AUTHOR ONE^{1,3} AND AUTHOR TWO^{2,4,*}

¹*Peer Review, Publications Department, Optica Publishing Group, 2010 Massachusetts Avenue NW,
Washington, DC 20036, USA*

²*Publications Department, Optica Publishing Group, 2010 Massachusetts Avenue NW, Washington, DC
20036, USA*

³*xyz@optica.org*

^{*}*opex@optica.org*

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.

```

41 \author{Author One\authormark{1,3} and Author Two\authormark{2,4}}
42
43 \address{\authormark{1}Peer Review, Publications Department,
44 Optica Publishing Group, 2010 Massachusetts Avenue NW,
45 Washington, DC 20036, USA\\
46 \authormark{2}Publications Department, Optica Publishing Group,
47 2010 Massachusetts Avenue NW, Washington, DC 20036, USA\\
48 \authormark{3}xyz@optica.org\\
49 \authormark{4}opex@optica.org}

```

50 This format will generate the following appearance:

51 **AUTHOR ONE^{1,3} AND AUTHOR TWO^{2,4}**

52 ¹Peer Review, Publications Department, Optica Publishing Group, 2010 Massachusetts Avenue NW,
53 Washington, DC 20036, USA

54 ²Publications Department, Optica Publishing Group, 2010 Massachusetts Avenue NW, Washington, DC
55 20036, USA

56 ³xyz@optica.org

57 ⁴opex@optica.org

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

59 3. Results and discussion

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

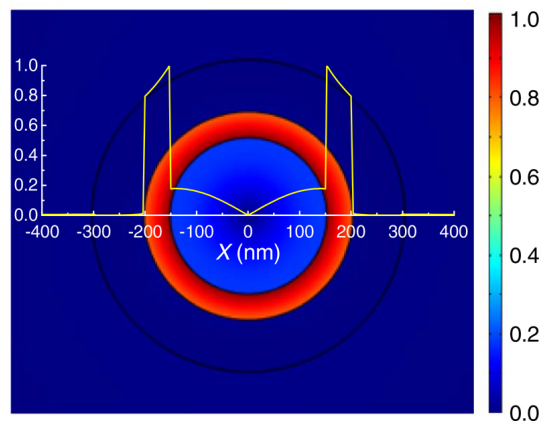


Fig. 1. Sample caption (Fig. 2, [1]).

65 4. Assessing final manuscript length

66 The Universal Manuscript Template is based on the Express journal layout and will provide
67 an accurate length estimate for *Optics Express*, *Biomedical Optics Express*, *Optical Materials*
68 *Express*, and our newest title *OSA Continuum Applied Optics*, *JOSAA*, *JOSAB*, *Optics Letters*,
69 *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 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.

5. Figures, tables, and supplementary materials

5.1. Figures and tables

Figures and tables should be placed in the body of the manuscript. Standard L^AT_EX 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 Optica Publishing Group journals

Our 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 our Prism manuscript system. Please refer to the [Author Guidelines for Supplementary Materials in Optica Publishing Group Journals](#) for more detailed instructions on labeling supplementary materials and your 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).

5.3. Sample Dataset Citation

1. M. Partridge, "Spectra evolution during coating," figshare (2014), <http://dx.doi.org/10.6084/m9.figshare.1004612>.

5.4. Sample Code Citation

2. C. Rivers, "EpiPy: Python tools for epidemiology," figshare (2014) [retrieved 13 May 2015], <http://dx.doi.org/10.6084/m9.figshare.1005064>.

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:

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

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].

105 7. Backmatter

106 Backmatter sections should be listed in the order Funding/Acknowledgment/Disclosures/Data
107 Availability Statement/Supplemental Document section An example of backmatter with each of
108 these sections included is shown below.

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

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

121 **Disclosures.** Disclosures should be listed in a separate nonnumbered section at the end of the manuscript
122 List the Disclosures codes identified on the [Conflict of Interest policy page](#), as shown in the examples below:

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

124 If there are no disclosures, then list “The authors declare no conflicts of interest.”

125 **Data Availability Statement.** A Data Availability Statement (DAS) will be required for all submissions
126 beginning 1 March 2021 The DAS should be an unnumbered separate section titled “Data Availability”
127 that immediately follows the Disclosures section See the [Data Availability Statement policy page](#) for more
128 information.

129 OSA has identified four common (sometimes overlapping) situations that authors should use as guidance
130 These are provided as minimal models, and authors should feel free to include any additional details that
131 may be relevant.

132 1. When datasets are included as integral supplementary material in the paper, they must be declared
133 (e.g., as “Dataset 1” following our current supplementary materials policy) and cited in the DAS, and
134 should appear in the references.

135 **Data availability.** Data underlying the results presented in this paper are available in Dataset 1,
136 Ref. [3].

137 2. When datasets are cited but not submitted as integral supplementary material, they must be cited in
138 the DAS and should appear in the references.

139 **Data availability.** Data underlying the results presented in this paper are available in Ref. [3].

140 3. If the data generated or analyzed as part of the research are not publicly available, that should be
141 stated Authors are encouraged to explain why (e.g. the data may be restricted for privacy reasons),
142 and how the data might be obtained or accessed in the future.

143 **Data availability.** Data underlying the results presented in this paper are not publicly available at
144 this time but may be obtained from the authors upon reasonable request.

145 4. If no data were generated or analyzed in the presented research, that should be stated.

146 **Data availability.** No data were generated or analyzed in the presented research.

147 **Supplemental document.** See Supplement 1 for supporting content.

148 8. References

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

152 8.1. Formatting reference items

153 Each source must have its own reference number Footnotes (notes at the bottom of text pages) are
154 not used in our journals References require all author names, full titles, and inclusive pagination
155 Examples of common reference types can be found in the [style guide](#).

156 The commands `\begin{thebibliography}{} and \end{thebibliography}` for-
157 mat the section according to standard style, showing the title **References** Use the `\bibitem{label}`
158 command to start each reference.

159 8.2. Formatting reference citations

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

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

165 8.3. BibTeX

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

169 If your manuscript already contains a manually formatted `\begin{thebibliography}...`
170 `\end{thebibliography}` list, then delete the `latexmkrc` file (if present) from your
171 submission files However you should ensure that your manually-formatted reference list adheres
172 to style accurately.

173 9. Conclusion

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

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

180 References

- 181 1. D. Yelin, D. Oron, S. Thiberge, E. Moses, and Y. Silberberg, “Multiphoton plasmon-resonance microscopy,” *Opt.*
182 *Express* **11**, 1385–1391 (2003).
- 183 2. J. Masajada, M. Bacia, and S. Drobczyński, “Cluster formation in ferrofluids induced by holographic optical tweezers,”
184 *Opt. Lett.* **38**, 3910–3913 (2013).
- 185 3. Y. Zhang, S. Qiao, L. Sun, Q. W. Shi, W. Huang, L. Li, and Z. Yang, “Photoinduced active terahertz metamaterials
186 with nanostructured vanadium dioxide film deposited by sol-gel method,” *Opt. Express* **22**, 11070–11078 (2014).
- 187 4. Optica, “Optica Publishing Group,” <https://www.opg.optica.org>.
- 188 5. P. Forster, V. Ramaswamy, P. Artaxo, T. Bernsten, R. Betts, D. Fahey, J. Haywood, J. Lean, D. Lowe, G. Myhre,
189 J. Nganga, R. Prinn, G. Raga, M. Schulz, and R. V. Dorland, “Changes in atmospheric constituents and in radiative
190 forcing,” in *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth*
191 *assessment report of Intergovernmental Panel on Climate Change*, S. Solomon, D. Qin, M. Manning, Z. Chen,
192 M. Marquis, K. B. Averyt, M. Tignor, and H. L. Miler, eds. (Cambridge University Press, 2007).

- 193 6. B. H. Dean, D. L. Aronstein, S. J. Smith, R. Shiri, and S. D. Acton, "Phase retrieval algorithm for JWST flight and
194 testbed telescope," in *Space Telescopes and Instrumentation I: Optical, Infrared, and Millimeter*, vol. 6265 (2006),
195 p. 17.
- 196 7. R. McKay, "X-ray crystallography," Ph.D. thesis, Princeton University (1982).
- 197 8. C. Rivers, "EpiPy: Python tools for epidemiology," figshare (2014) [retrieved 13 May 2015], [http://dx.doi.
198 org/10.6084/m9.figshare.1005064](http://dx.doi.org/10.6084/m9.figshare.1005064).