# Length-check LATEX template for preparing an article for submission to Optica Publishing Group journals Applied Optics, Journal of Optical Communications and Networking, JOSA A, JOSA B, Optics Letters, Optica, Optica Quantum, and Photonics Research

Author One<sup>1</sup>, Author Two<sup>2,\*</sup>, and Author Three<sup>3</sup>

Compiled February 24, 2025

This template contains important information on submissions to Optica Publishing Group journals. We encourage authors to focus first and foremost on their content and not on formatting. This template is provided as a guide, but following the visual styling is optional. Each manuscript will be formatted in a consistent way during production. Authors also have the option to submit articles to the Optica Publishing Group preprint server, Optica Open. You may find it helpful to use our optional Paperpal manuscript readiness check and language polishing service. Note that copyright and licensing information should not be added to your journal or Optica Open manuscript.

http://dx.doi.org/10.1364/ao.XX.XXXXXX

## 1. INTRODUCTION

We encourage authors to focus first and foremost on their content and not on formatting. This template is provided as a guide, but following the visual styling is optional. Each manuscript will be formatted in a consistent way during production. Authors also have the option to submit articles to the Optica Publishing Group preprint server, Optica Open. You may find it helpful to use our optional Paperpal manuscript readiness check and

## 2. CORRESPONDING AUTHOR

language polishing service.

author. The corresponding author typically is the person who
 submits the manuscript and handles correspondence throughout
 the peer review and publication process. Alternatively, you may
 choose not to identify a corresponding author in the manuscript

We require manuscripts to identify only a single corresponding

and instead use an author note to indicate equal author contri-

butions. Only a designated corresponding author will have a superscript asterisk attached to their e-mail address. Additional co-author e-mail addresses will have a superscript number in the numerical order of the affiliations.

#### 3. FIGURES AND TABLES

Do not place figures and tables at the back of the manuscript. Figures and tables should be placed and sized as they are likely to appear in the final article.

Figures and tables should be labelled and referenced in the standard way using the \label{} and \ref{} commands.

To meet accessibility requirements, do not rely solely on color to identify elements in figures (such as blue and red curves). Instead, use shapes or other features along with color. For example, you can use dashed and dotted lines, different shapes for data points, text labels pointing to the color features, numbering, etc.

For figures that are being reprinted by permission of the publisher, include the permission line required by that publisher in the caption. Please refer to the information on permissions and reprints for instructions.

### A. Sample Figure

35

Figure 1 shows an example figure.

#### B. Sample Table

Table 1 shows a sample table. Note that tables should have titles and not captions. To include additional information, use footnotes as shown in the example below.

# 4. SAMPLE DISPLAY EQUATION

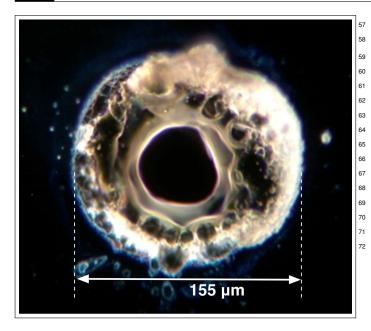
The following is an example of a sample display equation in surrounding text: Let  $X_1, X_2, ..., X_n$  be a sequence of independent

<sup>&</sup>lt;sup>1</sup> Publications Department, Optica Publishing Group, 2010 Massachusetts Avenue NW, Washington DC, 20036

<sup>&</sup>lt;sup>2</sup>School of Science, University of Technology, 2000 J St. NW, Washington DC, 20036

<sup>&</sup>lt;sup>3</sup> School of Optics, University of Technology, 2000 J St. NW, Washington DC, 20036

<sup>\*</sup>email@my-email.com



**Fig. 1.** Dark-field image of a point absorber. Reprinted with permission from Smith *et al.*, Phys. Rev. Appl. **17**, 12345 (2024) [46], Copyright 2024 by the American Physical Society.

**Table 1.** Shape Functions for Quadratic Line Elements<sup>a</sup>

Local Node	$\{N\}_m$	$\{\Phi_i\}_m \ (i=x,y,z)$
m = 1	$L_1(2L_1-1)$	$\Phi_{i1}$
m = 2	$L_2(2L_2-1)$	$\Phi_{i2}$
m = 3	$L_3 = 4L_1L_2$	$\Phi_{i3}$

<sup>&</sup>lt;sup>a</sup>Only quadratic line elements are included here.

and identically distributed random variables with  $E[X_i] = \mu$  and  $Var[X_i] = \sigma^2 < \infty$ , and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_{i=1}^{n} X_i$$
 (1)

denote their mean. Then, as n approaches infinity, the random variables  $\sqrt{n}(S_n - \mu)$  converge in distribution to a normal  $N(0, \sigma^2)$ .

# 5. SAMPLE ALGORITHM

Algorithms can be included using the commands as shown in algorithm 1.

#### Algorithm 1. Euclid's algorithm

1: <b>procedure</b> EUCLID( <i>a</i> , <i>b</i> )		⊳ The g.c.d. of a and b
2:	$r \leftarrow a \bmod b$	
3:	while $r \neq 0$ do	$\triangleright$ We have the answer if r is 0
4:	$a \leftarrow b$	
5:	$b \leftarrow r$	
6:	$r \leftarrow a \bmod b$	
<i>7</i> :	return b	⊳ The gcd is b

#### A. Supplementary materials in Optica Publishing Group journals

Optica Publishing Group 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 the Prism manuscript system. Please refer to the Author Guidelines for Supplementary Materials in Optica Publishing Group Journals for more information on labeling supplementary materials and your manuscript. For preprints submitted to Optica Open a link to supplemental material should be included in the submission.

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 JOCN or PRJ.

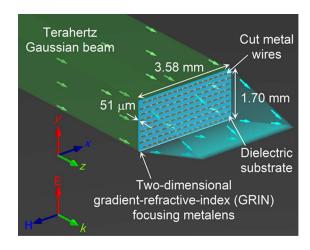


Fig. 2. Terahertz focusing metalens.

#### B. Sample Dataset Citation

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

## C. 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. BACK MATTER

84

85

86

89

90

92

Back matter sections should be listed in the order Funding/Acknowledgment/Disclosures/Data Availability Statement/Supplemental Document section.

**Funding.** Content in the funding section will be generated entirely from details submitted to Prism. Authors may add placeholder text in this section to assess length, but any text added to this section 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 Acknowledgment, even if this duplicates information in the funding section. For preprint submissions, please include funder names and grant numbers in the manuscript.

**Acknowledgment.** 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

155

156

157

158

159

162

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 section at the end of the manuscript. List the Disclosures codes identified on the 153 Conflict of Interest policy page. If there are no disclosures, then list "The authors declare no conflicts of interest."

103 Here are examples of disclosures:

100 101

104

105

106

107

108

109

111

112

113

115

116

117 118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

136

137

139 140

141

145

146

147

148

149

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

**Disclosures.** The authors declare no conflicts of interest.

**Data Availability Statement.** A Data Availability Statement (DAS) is required for all submissions. The DAS should be an unnumbered separate section titled "Data availability" that immediately follows the Disclosures section. See the Data Availability Statement policy page for more information.

There are four common (sometimes overlapping) situations that authors should use as guidance. The examples below are provided as minimal models. You may paste the appropriate statement into your submission and include any additional details that may be relevant.

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

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

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

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

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

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

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

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

Data availability statements are not required for preprint submissions.

**Supplemental document.** A supplemental document must be called out in the back matter so that a link can be included. For example, "See Supplement 1 for supporting content." Note that the Supplemental Document must also have a callout in the body of the paper.

# 7. REFERENCES

Note that *Optics Letters* and *Optica* short articles use an abbreviated reference style. Citations to journal articles should omit the article title and final page number; this abbreviated reference style is produced automatically when the *Optics Letters* journal option is selected in the template, if you are using a .bib file for your references.

Add citations manually or use BibTeX. See [1–5]. List up to three author names in references. If there are more than three authors, list the first three followed by *et al*.

3

## **REFERENCES**

- 1. Y. Zhang, S. Qiao, L. Sun, et al., Opt. Express 22, 11070 (2014).
- 2. Optica Publishing Group, "Optica," https://opg.optica.org.
- P. Forster, V. Ramaswamy, P. Artaxo, et al., "Changes in atmospheric consituents and in radiative forcing," in Climate Change 2007: The Physical Science Basis. Contribution of Working Group 1 to the Fourth Assesment Report of Intergovernmental Panel on Climate Change, S. Solomon, D. Qin, M. Manning, et al., eds. (Cambridge University Press, 2007).
- R. McKay, "X-ray crystallography," Ph.D. thesis, Princeton University (1982).
- 5. V. S. C. Manga Rao and S. Hughes, Phys. Rev. B 75 (2007).

# **FULL REFERENCES**

169

Y. Zhang, S. Qiao, L. Sun, et al., "Photoinduced active terahertz metamaterials with nanostructured vanadium dioxide film deposited by solgel method," Opt. Express 22, 11070–11078 (2014).

- 2. Optica Publishing Group, "Optica," https://opg.optica.org.
- P. Forster, V. Ramaswamy, P. Artaxo, et al., "Changes in atmospheric consituents and in radiative forcing," in Climate Change 2007: The Physical Science Basis. Contribution of Working Group 1 to the Fourth Assesment Report of Intergovernmental Panel on Climate Change, S. Solomon, D. Qin, M. Manning, et al., eds. (Cambridge University Press, 2007).
- R. McKay, "X-ray crystallography," Ph.D. thesis, Princeton University
  (1982).
- 178 5. V. S. C. Manga Rao and S. Hughes, "Single quantum-dot Purcell factor and  $\beta$  factor in a photonic crystal waveguide," Phys. Rev. B **75** (2007).