

# Title of primary manuscript: supplementary material

**AUTHOR ONE<sup>1</sup>, AUTHOR TWO<sup>1</sup>, AND AUTHOR THREE<sup>2,\*</sup>**

<sup>1</sup>Publications Department, OSA-The Optical Society, 2010 Massachusetts Avenue NW, Washington D.C., 20036

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

\*Corresponding author: email@my-email.com

Compiled November 3, 2014

---

This L<sup>A</sup>T<sub>E</sub>X template can be used to prepare a supplementary document for inclusion with submission to OSA's new journal, *Optica*. This document, which may include supplementary information such as expanded descriptions of materials and methods, will be published as a PDF linked to the primary article. The supplemental file should only present information that would be useful and worthwhile for the reader, for example, details that would be necessary to reproduce an experiment. The article, however, must be coherent without the supplemental PDF file. Please see the [Author Guidelines for Supplementary Materials](#) for more information. Supplementary documents are not copyedited and so should be prepared carefully with the template provided. An abstract outlining the methods and materials in the supplementary document should be included here. The primary article should also be identified in the abstract: This document provides supplementary information to "Title of primary manuscript," *Optica* volume, first page (year). The supplementary document should also be referred to at the end of the primary article before the references: "See Supplement 1 for supporting content." OSA production staff will add final citation details, and so the source file must be provided.

Note that this template can be run from your own T<sub>E</sub>X system or within the cloud-based [Write-LaTeX system](#). © 2014 Optical Society of America

<http://dx.doi.org/10.1364/optica.99.099999.s1> [supplementary document doi]

---

## 1. INTRODUCTION

This template is designed to assist with creating a supplementary materials document to accompany an *Optica* article. See the OSA's [Style Guide](#) and [Manuscript Templates](#) pages for more details.

This template contains example content to help you create your document, and you may use this template as a visual guide. The sections below show examples of different components and styles.

If you have a question while using this template on writeL<sup>A</sup>T<sub>E</sub>X, please use the help menu ("??") on the top bar to search for help or to contact our support team.

## 2. NUMBERING ITEMS IN THE SUPPLEMENTARY DOCUMENT

The supplementary materials document may contain additional figures, tables, equations, etc. Such items should be numbered, with an uppercase "S" to identify them as supplementary. For

example, number the first figure in the supplementary document "Fig. S1"; the first table "Table S1"; etc.

This template has been designed to automatically format these components with this styling, but we include the naming convention here for reference.

### Naming Convention for Countable Items

Algorithm S1  
Equation (S1)  
Figure S1  
Media S1  
Table S1

## 3. EXAMPLES OF SUPPLEMENTARY MATERIAL COMPONENTS

### 4. FIGURES AND TABLES

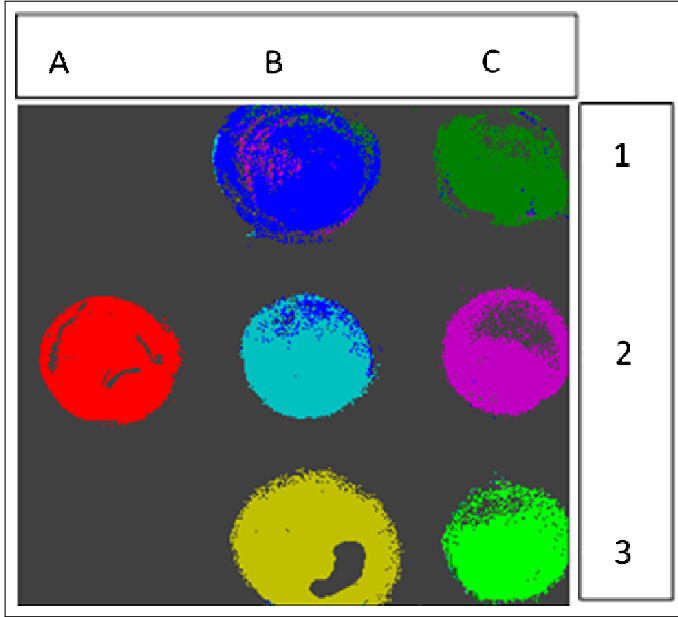
It is not necessary to place figures and tables at the back of the manuscript. Figures and tables should be sized as they are to

appear in the final article. Do not include a separate list of figure captions and table titles.

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

### A. Sample Figure

Figure S1 shows an example figure.



**Fig. S1.** False-color image, where each pixel is assigned to one of seven reference spectra.

### B. Sample Table

Table S1 shows an example table.

**Table S1.** Shape Functions for Quadratic Line Elements

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

## 5. SAMPLE EQUATION

Let  $X_1, X_2, \dots, X_n$  be a sequence of independent and identically distributed random variables with  $E[X_i] = \mu$  and  $\text{Var}[X_i] = \sigma^2 < \infty$ , and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_i^n X_i \quad (\text{S1})$$

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

## 6. SAMPLE ALGORITHM

Algorithms can be included using the commands as shown in algorithm S1.

### Algorithm S1. Euclid's algorithm

```

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

```

### MEDIA

The supplemental document may contain linked objects such as video, 2D, 3D, and machine-readable data files. Please see the [Author Guidelines for Supplementary Materials](#) for more information. Such files should be cited in the supplementary document as in the primary document but using the naming convention described above.

### REFERENCES

The supplementary materials document may contain a reference list. The reference list should follow OSA's citation style and should be checked carefully, since no copyediting will be performed by OSA staff. You may add citations manually or use BibTeX. See [1].

Citations that are relevant to the primary manuscript and the supplementary document may be included in both places.

### REFERENCES

1. 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).