

SPIE proceedings manuscript sample (A4 size)

S. Gregory Jones*^a, Titania A. R. Schmidt^b, Kenneth M. Suzuki^a

^aNation's Research Laboratory, 345 Photon Drive, Los Angeles, CA, USA 95555-0345;

^bDept. of Optics, Central Univ./City Branch, 9876 Light Ave., Philadelphia, PA USA 00555-9642

ABSTRACT

Begin the abstract two lines below author names and addresses. The abstract summarizes key findings in the paper. It is a paragraph of 200 words or less. For the **keywords**, select up to 8 key terms for a search on your manuscript's subject.

Keywords: Times Roman, image area, acronyms, references

1. INTRODUCTION

Begin the Introduction two lines below the Keywords. The manuscript should not have headers, footers, or page numbers. It should be in a one-column format. References are often noted in the text¹ and cited at the end of the paper.

1.1 Margins

If the paper does not have the margins shown in Table 1, it will not upload properly.

Table 1. Margins and print area specifications.

| PAPER MARGINS | | | |
|---------------------------------------------------------|-----------------------------|--------------------|-----------------------------|
| A4 | | Letter | |
| Top margin | 2.54 cm (<i>1in.</i>) | Top margin | 1.0 in. (<i>2.54 cm</i>) |
| Bottom margin | 4.94 cm (<i>1.95 in.</i>) | Bottom margin | 1.25 in. (<i>3.17 cm</i>) |
| Left, right margin | 1.925 cm (<i>.76 in.</i>) | Left, right margin | .875 in. (<i>2.22 cm</i>) |
| <u>Printable area--all text, figures and footnotes:</u> | | | |
| A4: | 17.15×22.23 cm | Letter : | 6.75×8.75 in. |

1.2 Fonts

Table 2 shows the font sizes and highlighting in a typical manuscript. These font "styles" are contained with this sample manuscript and Section 4 below explains how to use them. Use Times Roman or another standard font to avoid font errors.

Table 2. Manuscript font sizes and formatting. This Microsoft Word template includes these formats as automated "styles", which can be selected in the Format menu -- Styles and Formatting. (9pt)

| Preformatted SPIE Template Styles | |
|-----------------------------------------------|------------------------------------------------------|
| <i>Manuscript component</i> | <i>Description</i> |
| SPIE paper title | 16 pt. bold, center |
| SPIE authors/affiliations | 12 pt., center |
| Keywords: *Keywords* | 10 pt., left justify |
| SPIE ABSTRACT TITLE | 11 PT. BOLD, center |
| SPIE abstract body text | 10 pt., justify |
| SPIE SECTION HEADING | 11 pt. BOLD, center, whole numbers |
| 1.1 Heading 2, SPIE subsection heading | 10 pt. bold, left justify, subsection numbers |
| SPIE body text | 10 pt., justify |
| SPIE figure caption | 9 pt., below figure, centered or indented |
| SPIE table caption | 9 pt., center above figure |
| SPIE footnote text | 9 pt., justify, numbered |
| REFERENCE HEADING | 11 pt. BOLD, center |
| 1. SPIE reference listing | 10 pt., justify, numbered in brackets |

2. FORMATTING OF MANUSCRIPT COMPONENTS

2.1 Title

Center the paper title at the top of the page in 16-pt. bold. Only the first word, proper nouns, and acronyms are capitalized. Keep titles brief and descriptive. Spell out acronyms unless they are widely known. Avoid starting with articles or prepositions, e.g., "The study of ...," or "On the"

2.2 Author affiliations

The author list is in 12-pt. regular, centered. Omit titles and degrees such as Dr., Prof., Ph.D., etc. The list of affiliations follows. Each author's affiliation should be clearly noted.

2.3 Section headings

Section headings are 11-pt. bold capitals, centered. Sections numbers have whole numbers, e.g., 1, 2, 3... Don't number the "Acknowledgements" and "References." Headings often used are: 1. Introduction, 2. Methodology, 3. Data, 4. Results, and 5. Conclusions.

2.4 Subsection heading

Subsection headings are left-justified, 10-pt. bold. Capitalize the first word, acronyms, and proper nouns.

2.5 Paragraphs

Add a blank line above and below section headings and between paragraphs. Avoid headings or one-line paragraphs at the top or bottom of a page by using page breaks or extra blank lines. One method to preserve page breaks is to make the bottom margin a little larger than the specifications. Indentation is optional. This spacing is automatic if you are using the SPIE "section" styles in Word.

2.6 Text

Text is 10 point and justified. Each sentence ends with a period and a single space before the next sentence.

2.7 Figures and captions

Figures are centered. Use or insert .jpg, .tiff, or .gif illustrations instead of PowerPoint or graphic constructions. Captions go below figures. Either center or indent 5 spaces from left margin and justify.



Figure 1. Figure captions are indented 5 spaces and justified. If you are familiar with Word styles, you can insert a field code called Seq figure which automatically numbers your figures.

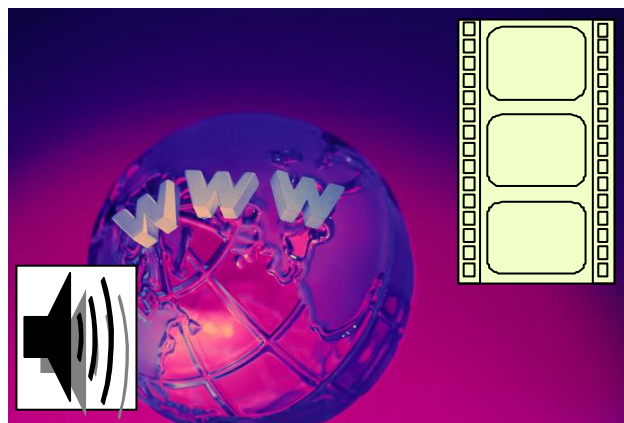
2.8 Tables and captions

Tables are centered. The caption goes above the table. The caption text should indent 5 spaces from left margin and justify. Table examples are on page 1 and 2 and below.

3. MULTIMEDIA FIGURES – VIDEO AND AUDIO FILES

Video and audio files can be included for publication. Table 3 lists the specifications for the multimedia files. Use a screenshot or another .jpg illustration for placement in the text. Use the file name to begin the caption. The text of the caption must end with the text "<http://dx.doi.org/doi.number.goes.here>" which tells the SPIE editor where to insert the hyperlink in the digital version of the manuscript.

Here is a sample illustration and caption for a multimedia file:



Video 2. A label of “Video/Audio 1, 2, ...” should appear at the beginning of the caption to indicate to which multimedia file it is linked. Include this text at the end of the caption: <http://dx.doi.org/doi.number.goes.here>

Table 3. Information on video and audio files that can accompany a manuscript submission.

| Item | Video | Audio |
|---------------------|------------------------------------------------------|---------------------|
| File name | Video1, video2, ... | Audio1, audio2, ... |
| Number of files | 0-10 | 0-10 |
| Size of each file | max. 5 mb | max. 5mb |
| File types accepted | .mpeg, .mov (Quicktime), .wmv (Windows Media Player) | .wav, .mp3 |

4. MATHEMATICAL EQUATIONS

Use common fonts like Times Roman in your math equations. A math reference in a paragraph sentence such as $\alpha \frac{\rho}{s}$ is not numbered. The steps of a mathematical argument can be numbered using a right-aligned tab for clarity, for example

$$\alpha = \frac{-b \pm \sqrt{b^2 - 2ac}}{2o} \tag{1}$$

and

$$\rho = \sum (x - x')^2. \tag{2}$$

5. USING THIS TEMPLATE AND ITS AUTOMATIC FORMATTING

This document template and more information is available on SPIE.org:

<http://spie.org/x14101.xml> or by emailing author_help@spie.org

5.1 View the pre-formatted styles

To see the formats available with this manuscript, go to the Format menu and choose "Styles and Formatting". To view which style is being used in any part of this document, place your cursor on the line and look in the Styles and Formatting display.

5.2 Using SPIE styles

To use this template in Microsoft Word: open this file and save it to a new file name. Type over the existing text with your paper. Alternately, you can delete all text, and select the SPIE style for each paragraph from the Styles and Formatting menu.

5.3 Notes on SPIE styles

The styles listed in Table 2 automatically add extra spacing before and/or after paragraphs: SPIE title, SPIE authors-affiliations, SPIE section heading, SPIE subsection heading, and SPIE body text. The 1.1 Heading 2 style automatically goes into the body text style after one paragraph return.

REFERENCES

1. Booth, N. and Smith, A. S., [Infrared Detectors], Goodwin House Publishers, New York & Boston, 241-248 (1997).
2. Davis, A., R., Bush, C., Harvey, J. C. and Foley, M. F., "Fresnel lenses in rear projection displays," SID Int. Symp. Digest Tech. Papers 32(1), 934-937 (2001).
3. Van Derlofske, J. F., "Computer modeling of LED light pipe systems for uniform display illumination," Proc. SPIE 4445, 119-129 (2001).
4. C. Jones, Director, Miscellaneous Optics Corporation, interview, Sept. 23, 2008.
5. www.optics4yurresearch.com/7752.html

REFERENCE LINKING

SPIE is able to display the references section of your paper in the SPIE Digital Library, complete with links to referenced journal articles, proceedings papers, and books, when available. This added feature will bring more readers to your paper and improve the usefulness of the SPIE Digital Library for all researchers.

Denote reference citations within the text of your paper by means of a superscript number. List references at the end of the paper in numerical order, and enclose the reference number in square brackets. Include the following information (as applicable).

If you use this formatting, your references will link your manuscript to other research papers that are in the CrossRef system. Exact punctuation is required for the automated linking to be successful.

book: [1] Booth, N. and Smith, A. S., [Infrared Detectors], Goodwin House Publishers, New York & Boston, 241-248 (1997).

journal paper: [2] Davis, A., R., Bush, C., Harvey, J. C. and Foley, M. F. , "Fresnel lenses in rear projection displays," SID Int. Symp. Digest Tech. Papers 32(1), 934-937 (2001).

proceedings paper: [3] Van Derlofske, J. F., "Computer modeling of LED light pipe systems for uniform display illumination," Proc. SPIE 4445, 119-129 (2001).