

International Journal of Telecommunications, Electronics and Computer Science for A4 Page Size

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Abstract— This document gives formatting instructions for authors preparing papers for publication in the International Journal on Informatics Visualization. The authors must follow the instructions given in the document for the papers to be published. You can use this document as both an instruction set and a template into which you can type your own text. Please leave the space above the title empty. Space is intentionally spared for the journal title. JOIV requires the authors to cite at least 30 sources, and all the citations in-text must be synchronized with references. It is highly recommended to use a citation manager to ensure citation synchronization. **The word number in abstract should be within 230-250 words and consists of objectives, materials, method, results, and implication for further research.**

Keywords— Put your keywords here; keywords are separated by a semicolon.

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I. INTRODUCTION

Authors are suggested to present their articles in the section structure: **INTRODUCTION - THE MATERIALS AND METHOD - RESULTS AND DISCUSSION - CONCLUSION**. The discussion should provide a bridge between results and the literature review in introduction. Please be sure that the citations are up to date. All the citations should be listed in the references. It is expected that the citations are **at least 20 sources**, and 70% are the publication within 2019-2022 and from international publication. Use **Mendeley** for citation and references. JOWIM requires authors to submit **at least 6 pages article**, excluding the references. Maximum number of **authors is 5**

II. PAGE LAYOUT

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III. PAGE STYLE

All paragraphs must be indented. All paragraphs must be justified, i.e., both left-justified and right-justified.

A. Text Font of Entire Document

The entire document should be Times New Roman at 10 points in size. Other font type and size may be used if needed for special purposes. Recommended font type and sizes are shown in Table 1.

TABLE I
FONT SIZES FOR PAPERS

Font Size	Appearance (in Times New Roman or Times)		
	Regular	Bold	Italic
8	table caption (in Small Caps), figure caption, reference item		reference item (partial)
9	Institution, author email address, and cell in a table	abstract body	abstract heading (also in Bold)
10	level-1 heading (in Small Caps), paragraph		author affiliation level-2 heading, level-3 heading,
12	author name		
18	title		

B. Title and Author Details

Title must be Times New Roman at 18 points in size. Author name must be Times New Roman at 12 points in size. Author affiliation must be Times New Roman at 9 points in size and *italic*. Corresponding email address must be Times New Roman at 9 points in size. All title and author (s) affiliation must be in single-column format and must be centered.

Every word in a title must be capitalized except for short minor words such as “a”, “an”, “and”, “as”, “at”, “by”, “for”, “from”, “if”, “in”, “into”, “on”, “or”, “of”, “the”, “to”, “with”.

Author details must not show any professional title (e.g., Managing Director), any academic title (e.g., Dr.) or any membership of any professional organization.

To avoid confusion, the family name must be written as the last part of each author name (e.g., John A.K. Smith). Each affiliation must include, at the very least, the name of the company and the name of the country where the author is based (e.g., Causal Productions Pty Ltd, Australia).

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No more than 3 levels of headings should be used. All headings must be in 10pt font. Every word in a heading must be capitalized except for short minor words as listed in Section III-B.

1) *Level-1 Heading:* A level-1 heading must be in Small Caps, centered and numbered using uppercase Roman numerals. For example, see heading “III. Page Style” of this document. The two level-1 headings which must not be numbered are “Acknowledgment” and “References”.

2) *Level-2 Heading:* A level-2 heading must be in *Italic*, left-justified and numbered using an uppercase alphabetic letter followed by a period. For example, see heading “C. Section Headings” above.

3) *Level-3 Heading:* A level-3 heading must be indented, in *Italic* and numbered with an Arabic numeral followed by a right parenthesis. The level-3 heading must end with a colon. The body of the level-3 section immediately follows the level-3 heading in the same paragraph. For example, this paragraph begins with a level-3 heading.

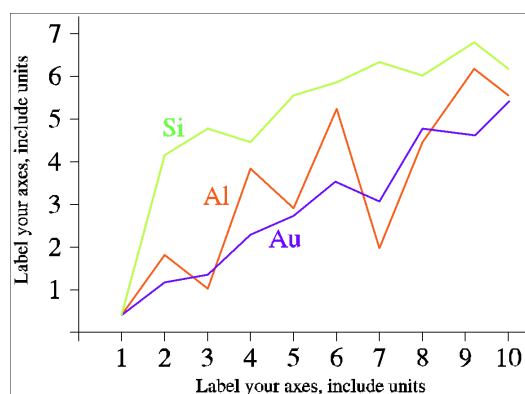


Fig. 1 A sample line graph using colors which contrast well both on screen and on a black-and-white hardcopy

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Figures and tables must be centered in the column. Large figures and tables may span across both columns. Any table or figure that takes up more than 1 column width must be positioned either at the top or at the bottom of the page.

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Fig. 2 shows an example of a low-resolution image which would not be acceptable, whereas Fig. 3 shows an example of an image with adequate resolution. Check that the resolution is adequate to reveal the important detail in the figure.

Please check all figures in your paper both on screen and on a black-and-white hardcopy. When you check your paper on a black-and-white hardcopy, please ensure that:

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- the image used in each figure is clear,
- all text labels in each figure are legible.

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Figures must be numbered using Arabic numerals. Figure captions must be Times New Roman at 8 points in size. Captions of a single line (e.g., Fig. 2) must be centered whereas multi-line captions must be justified (e.g., Fig. 1). Captions with figure numbers must be placed after their associated figures, as shown in Fig. 1.



Fig. 2 Example of an unacceptable low-resolution image



Fig. 3 Example of an image with acceptable resolution

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Tables must be numbered using uppercase Roman numerals. Table captions must be centered and in 8 pt Regular font with Small Caps. Every word in a table caption must be capitalized except for short minor words as listed in Section III-B. Captions with table numbers must be placed before their associated tables, as shown in Table 1.

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Equations should be placed flush-left with the text margin. Equations are centered and numbered consecutively starting from 1 as follows

$$E(F) = E(0) + \sum_i \left(\frac{\delta E(F)}{\delta F_i} \right) F_i \quad (1)$$

J. References

The heading of the References section must not be numbered. All reference items must be Times New Roman at 8 points in size. Please use Regular and Italic styles to distinguish different fields as shown in the References section. Number the reference items consecutively in square brackets (e.g. [1]). The examples of reference items of different format are as follows:

- Basic format for books [1], [2]
- Basic format for periodicals [3], [4], [5]
- Basic format for reports [6], [7]
- Basic format for handbooks [8], [9]
- Basic format for books (when available online) [10], [11], [12], [13]
- Basic format for journals (when available online) [14], [15], [16]
- Basic format for papers presented at conferences (when available online) [17]
- Basic format for reports and handbooks (when available online) [18], [19]

- Basic format for computer programs and electronic documents (when available online) [20]
- Basic format for patents (when available online) [21]
- Basic format for conference proceedings (published) [22]
- Example for papers presented at conferences (unpublished) [23]
- Basic format for patents [24]
- Basic format for theses (M.S.) and dissertations (Ph.D.) [25], [26]
- Basic format for the most common types of unpublished references [27], [28], [29]
- Basic formats for standards [30], [31].

IV. CONCLUSION

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NOMENCLATURE

a	specific surface area	m ² m ⁻³
x	length coordinate	m
Greek letters		
α	heat transfer coefficient	Wm ⁻² K ⁻¹
τ	residence time	s
Subscripts		
i	inlet	
e	equilibrium	

ACKNOWLEDGMENT

We would like to thank Causal Productions for permits to use and revise the template provided by Causal Productions. Original version of this template was provided by courtesy of Causal Productions (www.causalproductions.com).

REFERENCES

Basic format for books:

J. K. Author, "Title of chapter in the book," in *Title of His Published Book*, xth ed. City of Publisher, (only U.S. State), Country: Abbrev. of Publisher, year, ch. x, sec. x, pp. xxx–xxx.

Examples:

- [1] G. O. Young, "Synthetic structure of industrial plastics," in *Plastics*, 2nd ed., vol. 3, J. Peters, Ed. New York, NY, USA: McGraw-Hill, 1964, pp. 15–64.
- [2] W.-K. Chen, *Linear Networks and Systems*. Belmont, CA, USA: Wadsworth, 1993, pp. 123–135.

Basic format for periodicals:

J. K. Author, "Name of paper," *Abbrev. Title of Periodical*, vol. x, no. x, pp. xxx–xxx, Abbrev. Month, year, DOI. 10.1109.XXX.123456.

Examples:

- [3] J. U. Duncombe, "Infrared navigation—Part I: An assessment of feasibility," *IEEE Trans. Electron Devices*, vol. ED-11, no. 1, pp. 34–39, Jan. 1959, 10.1109/TED.2016.2628402.
- [4] E. P. Wigner, "Theory of traveling-wave optical laser," *Phys. Rev.*, vol. 134, pp. A635–A646, Dec. 1965.
- [5] E. H. Miller, "A note on reflector arrays," *IEEE Trans. Antennas Propagat.*, to be published.

Basic format for reports:

J. K. Author, "Title of report," Abbrev. Name of Co., City of Co., Abbrev. State, Country, Rep. xxx, year.

Examples:

- [6] E. E. Reber, R. L. Michell, and C. J. Carter, "Oxygen absorption in the earth's atmosphere," Aerospace Corp., Los Angeles, CA, USA, Tech. Rep. TR-0200 (4230-46)-3, Nov. 1988.
- [7] J. H. Davis and J. R. Cogdell, "Calibration program for the 16-foot antenna," Elect. Eng. Res. Lab., Univ. Texas, Austin, TX, USA, Tech. Memo. NGL-006-69-3, Nov. 15, 1987.

Basic format for handbooks:

Name of Manual/Handbook, x ed., Abbrev. Name of Co., City of Co., Abbrev. State, Country, year, pp. xxx-xxx.

Examples:

- [8] *Transmission Systems for Communications*, 3rd ed., Western Electric Co., Winston-Salem, NC, USA, 1985, pp. 44–60.
- [9] *Motorola Semiconductor Data Manual*, Motorola Semiconductor Products Inc., Phoenix, AZ, USA, 1989.

Basic format for books (when available online):

J. K. Author, "Title of chapter in the book," in *Title of Published Book*, xth ed. City of Publisher, State, Country: Abbrev. of Publisher, year, ch. x, sec. x, pp. xxx–xxx. [Online]. Available: <http://www.web.com>

Examples:

- [10] G. O. Young, "Synthetic structure of industrial plastics," in *Plastics*, vol. 3, Polymers of Hexadromicon, J. Peters, Ed., 2nd ed. New York, NY, USA: McGraw-Hill, 1964, pp. 15–64. [Online]. Available: <http://www.bookref.com>.
- [11] *The Founders' Constitution*, Philip B. Kurland and Ralph Lerner, eds., Chicago, IL, USA: Univ. Chicago Press, 1987. [Online]. Available: <http://press-pubs.uchicago.edu/founders/>
- [12] The Terahertz Wave eBook. ZOmega Terahertz Corp., 2014. [Online]. Available: http://dl.z-thz.com/eBook/zomega_ebook_pdf_1206_sr.pdf. Accessed on: May 19, 2014.
- [13] Philip B. Kurland and Ralph Lerner, eds., *The Founders' Constitution*. Chicago, IL, USA: Univ. of Chicago Press, 1987, Accessed on: Feb. 28, 2010, [Online] Available: <http://press-pubs.uchicago.edu/founders/>

Basic format for journals (when available online):

J. K. Author, "Name of paper," *Abbrev. Title of Periodical*, vol. x, no. x, pp. xxx-xxx, Abbrev. Month, year. Accessed on: Month, Day, year, DOI: 10.1109.XXX.123456, [Online].

Examples:

- [14] J. S. Turner, "New directions in communications," *IEEE J. Sel. Areas Commun.*, vol. 13, no. 1, pp. 11–23, Jan. 1995.
- [15] W. P. Risk, G. S. Kino, and H. J. Shaw, "Fiber-optic frequency shifter using a surface acoustic wave incident at an oblique angle," *Opt. Lett.*, vol. 11, no. 2, pp. 115–117, Feb. 1986.
- [16] P. Kopyt *et al.*, "Electric properties of graphene-based conductive layers from DC up to terahertz range," *IEEE THz Sci. Technol.*, to be published. DOI: 10.1109/THZ.2016.2544142.

Basic format for papers presented at conferences (when available online):

J.K. Author. (year, month). Title. presented at abbrev. conference title. [Type of Medium]. Available: site/path/file

Example:

- [17] PROCESS Corporation, Boston, MA, USA. Intranets: Internet technologies deployed behind the firewall for corporate productivity. Presented at INET96 Annual Meeting. [Online]. Available: <http://home.process.com/Intranets/wp2.htm>

Basic format for reports and handbooks (when available online):

J. K. Author. "Title of report," Company. City, State, Country. Rep. no., (optional: vol./issue), Date. [Online] Available: site/path/file

Examples:

- [18] R. J. Hijmans and J. van Etten, "Raster: Geographic analysis and modeling with raster data," R Package Version 2.0-12, Jan. 12, 2012. [Online]. Available: <http://CRAN.R-project.org/package=raster>
- [19] Teralyzer. Lytera UG, Kirchhain, Germany [Online]. Available: http://www.lytera.de/Terahertz_THz_Spectroscopy.php?id=home, Accessed on: Jun. 5, 2014

Basic format for computer programs and electronic documents (when available online):

Legislative body. Number of Congress, Session. (year, month day). *Number of bill or resolution, Title*. [Type of medium]. Available: site/path/file
NOTE: ISO recommends that capitalization follow the accepted practice for the language or script in which the information is given.

Example:

- [20] U.S. House. 102nd Congress, 1st Session. (1991, Jan. 11). *H. Con. Res. 1, Sense of the Congress on Approval of Military Action*. [Online]. Available: LEXIS Library: GENFED File: BILLS

Basic format for patents (when available online):

Name of the invention, by inventor's name. (year, month day). Patent Number [Type of medium]. Available: site/path/file

Example:

- [21] Musical toothbrush with mirror, by L.M.R. Brooks. (1992, May 19). Patent D 326 189 [Online]. Available: NEXIS Library: LEXPAT File: DES

Basic format for conference proceedings (published):

J. K. Author, "Title of paper," in *Abbreviated Name of Conf.*, City of Conf., Abbrev. State (if given), Country, year, pp. xxxxxx.

Example:

- [22] D. B. Payne and J. R. Stern, "Wavelength-switched passively coupled single-mode optical network," in *Proc. IOOC-ECOC*, Boston, MA, USA, 1985, pp. 585–590.

Example for papers presented at conferences (unpublished):

- [23] D. Ebehard and E. Voges, "Digital single sideband detection for interferometric sensors," presented at the *2nd Int. Conf. Optical Fiber Sensors*, Stuttgart, Germany, Jan. 2–5, 1984.

Basic format for patents:

J. K. Author, "Title of patent," U.S. Patent x xxx xxx, Abbrev. Month, day, year.

Example:

- [24] G. Brandli and M. Dick, "Alternating current fed power supply," U.S. Patent 4 084 217, Nov. 4, 1978.

Basic format for theses (M.S.) and dissertations (Ph.D.):

- a) J. K. Author, "Title of thesis," M.S. thesis, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.
- b) J. K. Author, "Title of dissertation," Ph.D. dissertation, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.

Examples:

- [25] J. O. Williams, "Narrow-band analyzer," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, USA, 1993.

- [26] N. Kawasaki, "Parametric study of thermal and chemical nonequilibrium nozzle flow," M.S. thesis, Dept. Electron. Eng., Osaka Univ., Osaka, Japan, 1993.

Basic format for the most common types of unpublished references:

- a) J. K. Author, private communication, Abbrev. Month, year.
- b) J. K. Author, "Title of paper," unpublished.
- c) J. K. Author, "Title of paper," to be published.

Examples:

- [27] A. Harrison, private communication, May 1995.
- [28] B. Smith, "An approach to graphs of linear forms," unpublished.
- [29] A. Brahms, "Representation error for real numbers in binary computer arithmetic," IEEE Computer Group Repository, Paper R-67-85.

Basic formats for standards:

- a) *Title of Standard*, Standard number, date.
- b) *Title of Standard*, Standard number, Corporate author, location, date.

Examples:

- [30] IEEE Criteria for Class IE Electric Systems, IEEE Standard 308, 1969.

- [31] Letter Symbols for Quantities, ANSI Standard Y10.5-1968.

Article number in reference examples:

- [32] R. Fardel, M. Nagel, F. Nuesch, T. Lippert, and A. Wokaun, "Fabrication of organic light emitting diode pixels by laser-assisted forward transfer," *Appl. Phys. Lett.*, vol. 91, no. 6, Aug. 2007, Art. no. 061103.
- [33] J. Zhang and N. Tansu, "Optical gain and laser characteristics of InGaN quantum wells on ternary InGaN substrates," *IEEE Photon. J.*, vol. 5, no. 2, Apr. 2013, Art. no. 2600111

Example when using et al.:

- [34] S. Azodolmolky *et al.*, Experimental demonstration of an impairment aware network planning and operation tool for transparent/translucent optical networks," *J. Lightw. Technol.*, vol. 29, no. 4, pp. 439–448, Sep. 2011.