

Article Title Up to 15 Words Times New Roman Font Size 14 Bold Centered 1.0 Between Lines

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 (Authors: size 12), (orcid and email: size 10); Times New Roman (TNR) font, normal, centered, 1.0 between lines

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 (Author Affiliation: Times New Roman (TNR) font, size 10, italics, centered, 1.0 between lines)

Abstract (title: TNR font size 10, italics, bold, line spacing: front 12, back 6)

These instructions constitute a guide for the preparation of scientific articles for the journal +Ingenio. Authors should use it to write both the initial and final versions of the article. It is recommended to apply this document as a "template" to prepare your manuscript. Additional information for the preparation of the article, submission and subsequent publication can be obtained in this document, from the main editor via e-mail or on the website: <http://revistas.fio.unam.edu.ar/index.php/ingenio>. The Abstract should present: the objective of the work, main materials, methods, results and conclusions; In addition, it should not be more than 200 words, any abbreviation, reference, figure or table. Justified text: TNR font, size 10, normal, line spacing 1.0.

Keywords – Up to 10 words in alphabetical order, first letter capitalized and separated by comma.
 (title: TNR italics, bold) (Justified text keywords: TNR, size 10, italics, line spacing 1.0).

Resumen (título: letra TNR tamaño 10, cursiva, negrita, interlineado: anterior 12, posterior 6)

Estas instrucciones constituyen una guía para la preparación de artículos científicos de la revista +Ingenio. Los autores deben utilizarla para escribir tanto la versión inicial y como la final del artículo. Se recomienda aplicar este documento como una "plantilla" para preparar su manuscrito. La información adicional para la preparación del artículo, el envío y posterior publicación, pueden obtenerse en este documento, con el editor principal vía e-mail o en el sitio web: <http://revistas.fio.unam.edu.ar/index.php/ingenio>. El Resumen debe presentar: el objetivo del trabajo, principales materiales, métodos, resultados y conclusiones; además no debe tener más de 200 palabras, ninguna abreviatura, referencia, figura ni tabla. El texto justificado: letra TNR, tamaño 10, normal, interlineado 1,0.

Palabras Clave – Hasta 10 palabras en orden alfabético, primera letra en mayúscula y separadas por coma.
 (título: letra TNR cursiva, negrita) (Palabras clave del texto justificado: TNR, tamaño 10, cursiva, interlineado 1,0).

SYMBOLS (title: TNR letter, normal, uppercase, size 10, spacing front 6 after 6). If you think necessary, here you can list all the variables and constants used in the text.

S Apparent power. (10 pts Times New Roman)
 V_o Output Controlled Voltage (units)
 V_i Initial Volume (L)

V_f Final Volume (L)
 P_p Partial Pressure (atm)
 T_a Absolute Temperature (K)

1. Article Format (Title: TNR Font Size 12, Bold, Normal, Spacing Anterior 12 Posterior 6)

Article text in TNR font size 12, normal, justified, 1.15 between lines, indentation 0.5 cm

The journal +INGENIO (Journal of Science, Technology and Innovation of the Faculty of Engineering (FI) of the National University of Misiones (UNaM), is a means through which researchers can publish their scientific works with the format model presented here.

The scientific articles cover topics of interest, in the field of Technical Sciences in general and in particular Engineering: Civil, Electromechanical, Electronic, Industrial, Computer and Mechatronics, among others.

Papers will be accepted in Spanish, Portuguese and English, in editable format Word for Windows.

Authors must submit their manuscript electronically and follow the review process through the +Ingenio website on <http://revistas.fio.unam.edu.ar/index.php/ingenio>. From this page, you can access all the information necessary for the submission of the manuscript.

1.1. Presentation (Subtitle: TNR 12 letter, front 6 posterior spacing, 6 italics)

Manuscripts submitted for publication in the Revista +Ingenio should preferably have between 9 and 15 single-column pages. Authors should use units of the International System (SI or MKS). The journal will not perform any final formatting of the article. Your document should be "ready to publish" once accepted.

1.2. Editing the Text

The manuscript should be prepared in A4 page format (297 mm x 210 mm), as the example given by this template. Do not modify the margins in this example. If you are creating the document yourself, keep in mind the margins listed in Table 1.

Table 1. Page margins (titles: bold, normal, TNR 10, centered)

Page	Up (cm)	Down (cm)	Left/Right (cm)
First	1,5	1,5	2,5/1,5
Remainder	2,5	1,5	2,5/1,5

(model for all Tables in the text)

The indentation is 0.5 cm at the beginning of each paragraph (first line only).

Font sizes and styles: The font sizes specified in these guidelines are in accordance with the Word for Windows word processor and the font must be Times New Roman (TNR).

Table 2 shows the standard character sizes that should be used in different sections of the manuscript. At the same time, it is a model for the construction of article tables.

Table 2. Types of letters and font sizes (model for all Tables in the article)

Times New Roman (TNR)			
Letter Size	Normal	Bold font	<i>Italics</i>
10	Table Texts	Titles of Figures and Tables	

10	Texts of bibliographical references		<i>Affiliations of the authors</i>
10	Summary texts, Abstract, Keywords, and Keywords	Titles: Summary, Abstract, Keywords, and Keywords	
12	Names of the Authors and Main text		<i>Subtitle</i>
12	Texts in: Introduction Development Materials and methods Results and discussion Conclusions (justified)	The titles: Introduction Development Materials and methods Results and discussion Conclusions References	
14		Main Title from the article	

2. Organization of the Article

The works published in the magazine contain two sections: Cover and Main text.

The Cover contains: Title of the Article; Authors, Orcid, Email; Author Affiliations; Summary and Keywords; Abstract and Keywords.

The main text has: Introduction; Development that can present two titles: Materials and Methods, Results and Discussion; Conclusions; References.

This order must be respected, unless the authors wish to add some sections, such as: Symbolology, Appendices, Acknowledgments and Annexes.

Below are some clarifications on the parts of the article.

2.1. Article title

The title, if possible, contains up to 15 words without abbreviations, centered, bold, TNR font, size 14, capitalization only the first letter of each word. The title of the article must represent the content of the work. Below the title, 1 blank line size 14 is left (see page 1).

2.2. Authors, orcid, email, affiliations

Authors, orcid and email are on the same line, below the title. The Authors use TNR font size 12, normal, centered; The first name and surname(s) must be written in full, the 2nd intermediate name can be abbreviated (with the 1st capital letter of the name).

The orcid and email data: are in TNR font, size 10, normal, centered, 1.15 between lines.

Author affiliations follow 1 blank line size 1.0. Affiliations indicate where each author works: Department or Laboratory, Faculty, University and Country.

2.3. Summary, keywords, abstract, keywords

The Abstract can have up to 200 words and must present the objective of the work and main materials, methods and results. The abstract should not have any abbreviations, references, figures

or tables. To write the summary, as well as the entire manuscript, the passive voice should be used, for example “...the experimental results obtained demonstrate that...”.

Keywords are terms that allow you to quickly identify the main topics addressed in the presented work. They can be up to 10 words. (letter, see page 1)

Based on the information contained in Keywords, the works are indexed and stored in databases to allow them to be easily found by search engines. Articles in Portuguese or Spanish must include Abstract and Keywords in English.

Articles in English must include Summary and Keywords in Spanish.

2.4. Introduction

It introduces the reader to a historical-technical and scientific vision of the problem to be addressed, in a clear way (with bibliographical references). The problem to be solved is described from the general to the particular, mentioning the applications and scientific developments, if any. In the last paragraph of the introduction, the general objective of the work is presented. The Introduction is the first section of the Main Text of the article to be listed as: 1. Introduction. (see page 2)

2.5. Development

The parts of the development are listed: 2. Materials and Methods, and 3. Results and Discussion.

The Materials are those used in the experiences, they are technically described each with their reference. The Methods are the techniques used in the work, what they are called and what they consist of, each with their bibliographic reference.

The Results are the experimental data obtained and generally analyzed statistically. The Discussion is the comparison of one's own results with other similar experiences, using numbers.

2.6. Conclusions

It is listed as: 4. Conclusions. These must be clear, highlighting the importance and contributions of the research work. The advantages and disadvantages of the proposed topic must be discussed, as well as the results obtained, its possible applications and scientific novelties, if any. Conclusions in general are not written with numbers but with words expressing ideas. In this section the authors can also suggest future work to continue with the developed topic.

2.7. References

It is listed as: 5. References. The citation of references [1], [2], etc. Throughout the text, they should appear between square brackets, size 12, normal. Bibliographic citations must be entered with correlative numbers placed in square brackets, [1] of size 12 (same as the text) and normal style. The references will be incorporated, in the list of bibliographical references, in the order in which they appear in the text. The text may include names of authors, but also include the corresponding bibliographic reference number.

It is recommended to use the IEEE format to incorporate the styles of bibliographies related to journal and conference articles, books and technical notes. Examples are given in the references section. At the end of these guidelines, there is an example of how references should be inserted: [1]-[5] or as described in [3].

2.8. *Symbology, Appendix and Acknowledgments*

If you add these additional sections, the following instructions should be considered:

None of them are numbered.

Symbology: Symbology is the definition of the constants and variables used throughout the document. Their inclusion is not mandatory. If this section is included, it should precede the Introduction. These constants and variables can be arranged in a table distributed across the page width between margins (see page 1).

In the event that the authors do not include this section, the definition of variables and constants should be done throughout the text, just after they are mentioned.

Acknowledgments and Appendices: The Acknowledgments to Contributors and Funding Bodies section, as well as the sections of the Appendices, should not be numbered and should be at the end of the text, before the bibliographic **references**. At the end of this guide is an example of these optional sections.

2.9. *Final Phase*

Authors are supposed to rigorously take into account the established margins. If this is not the case, you will be asked to resend the document so that you can comply with it, thus delaying the preparation of the contents of the journal.

2.10. *Page margins*

It is very important to maintain these margins. They are required to put magazine information and page numbers.

2.11. *Figures, PDF Creation and Tables*

All figures must be embedded in the document. When you include an image, be sure to insert the actual image instead of a link to your local computer. As much as possible, use standard Adobe Acrobat or Ghostscript PDF conversion tools for best results.

Figures and tables should be inserted into the text right after they are first mentioned; If necessary, use the entire width between the margins. The resolution of the figures should be at least 300 dpi and preferably vector files should be used for better print quality (EMF or EPS). To insert images into the word processor, place the cursor at the insertion point and use Insert - Image - From File or copy the image to the Windows clipboard, and then use Edit - Paste Special - Image (Enhanced Metafile).

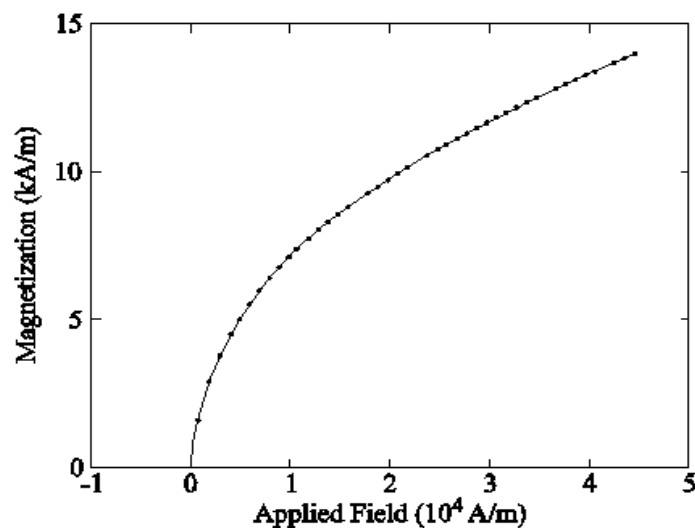


Fig. 1. Magnetization depending on the applied field.

(Notice that there is a period after the figure number, followed by a space.)

Table titles must be above tables, and figure titles must be below figures. Tables must have titles, designated by the word Table, and numbered in sequence by Arabic numerals. Table titles should be centered and bold, as shown in Table 1. (see page 2)

The figures also need titles and are designated by the abbreviation Fig., and numbered with Arabic numerals in sequence. The title of the figure should be centered and bold, as shown in the example in Fig. 1. The titles of the figures are also designated by Fig. x in the text. The designation of the parts of a figure is done by adding lowercase letters to the numbers of the figures beginning with the letter a, e.g., Fig. 1(a). Two figures can be placed next to each other by inserting a table of 2 columns and one row, without borders and with self-adjustment to the window (margins). Shapes are inserted one into each cell in this table. This arrangement serves, for example, to compare two different results.

To better understand graphs, the definition of their axes should be done with words and not with letters, except when referring to waveforms. Units must be in parentheses. For example, use the designation "Magnetization (A/m)" or "Magnetization (Ax^{A})" instead of "M (A/m)". Multipliers can generally be a source of confusion. Write "Magnetization (kA/m)" or "Magnetization (10^3 A/m)". Do not type "Magnetization (A/m) x 1000" because the reader would not know whether the upper axis label in Fig. 1 is 15000 A/m or 0.015 A/m.

The figures should preferably be made with black strokes and a white background, since the printed version of the magazine is in black and white. Your lines should be thick. Also, when there are different types of lines on the same chart, different line styles should be used. Also, to enhance your graphics, use a legible font with an appropriate size, as shown in Fig. 2; approximately 10 to 12 points for axis numbers and 12 to 14 points for axis labels.

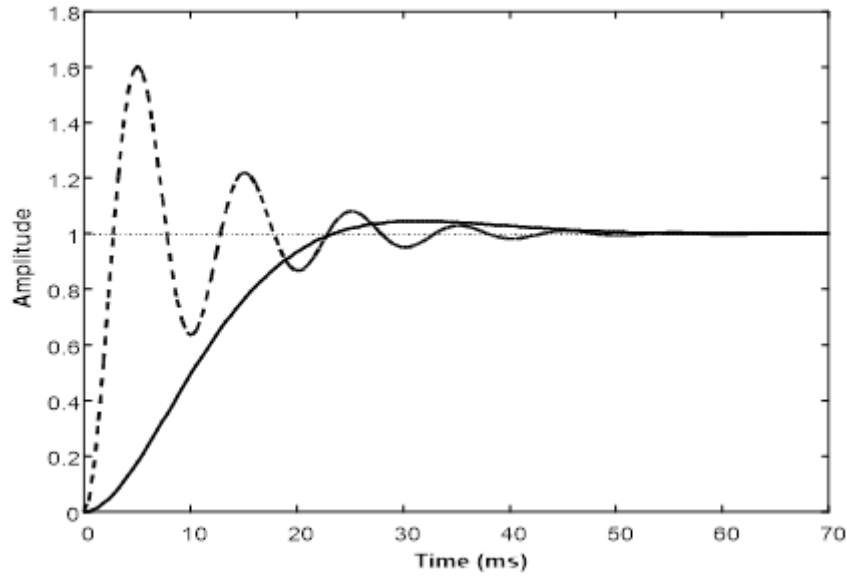


Fig. 2. Responses to the unit step of the compensated control system (solid line) and uncompensated (dashed line)

2.12. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have already been defined in the abstract, for example "... Pulse Width Modulation (PWM)..." or "Uninterruptible Power Supplies (UPS)". Abbreviations such as IEEE, SI, CA, and CC do not need to be defined. Abbreviations that incorporate periods should not have spaces: Type "C.N.R.S." and not "C.N.R.S.". Do not use abbreviations in the title unless unavoidable.

3. Helpful Tips

3.1. Equations

Use a table of 2 columns and one row, with no borders, as shown in (1). Number the equations consecutively with Arabic numerals in parentheses, justified in the right margin; as in (1). In the first column is the equation centered in the cell and in the second column the number of the equation is written in parentheses centered in the cell and justified in the right margin.

Put punctuation marks on equations when they are part of a sentence, as in

$$\int_0^{r_2} F(r, \varphi) dr d\varphi = [\sigma r_2 / (2\mu_0)] \cdot \int_0^\infty \exp(-\lambda |z_j - z_i|) \lambda^{-1} J_1(\lambda r_2) J_0(\lambda r_i) d\lambda. \quad (1)$$

It is recommended to use the table in equations (1) and (2) which is already formatted for this template.

$$u_c(t) = K_p \left[e_v(t) + \tau_d \frac{de_v(t)}{dt} \right] \quad (2)$$

Where: u_c is the control action; K_p is the proportional gain; E_v is the voltage error signal and τ_D is the derivative time constant.

Use parentheses to avoid ambiguity in denominators. Make sure that the symbols in your equation have been defined before or immediately after the equation appears. Italicize symbols for units or constants (T could refer to temperature, but T is also the tesla unit). Snapshot variables should be written in italics and lowercase. Constants should be italicized and capitalized. Arrays and vectors should be written in bold. We recommend authors to use IEEE standards for variable nomenclature.

When referring to an equation, refer to "(1)", and not "Ec. (1)" or "equation (1)", except at the beginning of the sentence: "Equation (1) is..."

If you are using Word, use Microsoft Equation Editor or MathType for the equations in your document (Insert - Object - Create New - Microsoft Equation Editor or MathType Equation). The "Hover over text" option should not be selected.

3.2. Other recommendations

Use a space after the full stop and the colon. Avoid using participles, such as "Using (1), the potential was calculated." [It is unclear who or what he used (1)]. Instead, write "The potential was calculated using (1)" or "Using (1) the potential was calculated." At the end of a sentence, don't use hyphens or add spaces to fit the sentence. Avoid truncating the word at the end of the sentence, using (Shift + Enter) or go to the options bar in: Page Layout – Breaks – Text Wrapping.

Thanks

This work has been carried out thanks to the support of the National Research Agency and the... This project was funded by the ANPCyT. The authors would like to thank Samuel Jackson for his cooperation in the preparation of this article.

Appendix A. Title of the First Appendix

In this section you can write the text and equations related to the first appendix.

Appendix B. Title of the Second Appendix

In this section you can write the text and equations related to the second appendix.

References (bibliographic)

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, chapter x , section 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 journal articles (Transactions or newspapers):

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 manuals:

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

Examples:

- [6] *Transmission Systems for Communications*, 3rd ed., Western Electric Co., Winston-Salem, NC, USA, 1985, pp. 44–60.
- [7] *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, chapter x, section x, pp. xxx–xxx. [Online]. Available: <http://www.web.com>

Examples:

- [8] 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>.
- [9] *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/>
- [10] 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.
- [11] 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 magazines (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:

- [12] J. S. Turner, "New directions in communications," *IEEE J. Sel. Areas Commun.*, vol. 13, no. 1, pp. 11–23, Jan. 1995.
- [13] 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.
- [14] 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/TTHZ.2016.2544142.

Formato básico para artículos presentados a conferencias (cuando se encuentran disponibles online):

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

Example:

- [15] 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>

Formato básico para informes técnicos y manuales (cuando se encuentran disponibles online):

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

Examples:

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

Formato básico para programas de computadora y documentos electrónicos en general (cuando se encuentran disponibles online):

Legislative body. Number of Congress, Session. (year, month day). *Number of bill or resolution*, Title. [Type of medium]. Available: site/path/file

NOTA: La norma ISO recomienda que las mayúsculas sigan la práctica aceptada para el idioma o el script en el que se proporciona la información.

Example:

- [18] 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

Formato básico para patentes (cuando se encuentran disponibles online):

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

Example:

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

Formato básico para artículos en conferencias (publicadas):

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

Example:

- [20] 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.

Ejemplo de artículos presentados a conferencias (no publicadas):

- [21] 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.

Formato básico para patentes:

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

Example:

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

Formato básico para tesis de maestría (M.S.) y de doctorado (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., State, year.

Examples:

- [23] O. Williams, "Narrow-band analyzer," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, USA, 1993.
- [24] Kawasaki, "Parametric study of thermal and chemical nonequilibrium nozzle flow," M.S. thesis, Dept. Electron. Eng., Osaka Univ., Osaka, Japan, 1993.

Formato básico para la mayoría de referencias no publicadas:

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:

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

Formato básico para estándares o normas:

a) *Title of Standard*, Standard number, date.

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

Examples:

- [28] IEEE Criteria for Class IE Electric Systems, IEEE Standard 308, 1969.
- [29] Letter Symbols for Quantities, ANSI Standard Y10.5-1968.

Ejemplo cuando se usa el término et al.:

- [30] 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.