

IEEE Sample Paper Title

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Keywords— Add 5 significant words from the abstract

I. INTRODUCTION

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II. PART TWO

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IV. CONCLUSION

Your paper doesn't necessarily need a conclusion, but if you want to include one, ensure that it summarizes your content differently than the abstract.

ACKNOWLEDGMENT

The spelling of "acknowledgement" is off, and that's ok. This is the way they want it to be spelled, even if you have multiple people you want to thank or acknowledge. Also, the acknowledgment title is not numbered.

REFERENCES

Align your references numerically with brackets that separate each one. Use the *IEEE* guide included for the different kinds of references and the order in which each part of the reference should be placed.

- [1] G Einstein, A. (2017). *Relativity*. La Vergne: NEeland Media, LLC, pp 60-90
- [2] W Newton, I. (2010). *Opticks*. Memphis, Tenn: General Books, pp 24-80

REFERENCE GUIDE FROM IEEE

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:

- [3] 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.
- [4] 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:

- [5] 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.
- [6] E. P. Wigner, "Theory of traveling-wave optical laser," *Phys. Rev.*, vol. 134, pp. A635–A646, Dec. 1965.
- [7] 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:

- [8] 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.
- [9] 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:

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

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Examples:

- [12] 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>.
- [13] *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/>
- [14] 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.
- [15] 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/>

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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:

- [16] J. S. Turner, "New directions in communications," *IEEE J. Sel. Areas Commun.*, vol. 13, no. 1, pp. 11-23, Jan. 1995.
- [17] 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.
- [18] 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.

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

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Example:

- [19] 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):

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Examples:

- [20] 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>
- [21] 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

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Example:

- [22] 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

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- [23] 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:

- [24] 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):

- [25] 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:

- [26] 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:

- [27] J. O. Williams, "Narrow-band analyzer," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, USA, 1993.
- [28] 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:

- [29] A. Harrison, private communication, May 1995.
- [30] B. Smith, "An approach to graphs of linear forms," unpublished.
- [31] 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:

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

Article number in reference examples:

- [34] 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.
- [35] 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.:

- [36] 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.