

IEEE Engineering in Medicine and Biology Magazine

AUTHOR GUIDELINES FOR SUBMISSION OF MANUSCRIPTS



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CHECK LIST FOR FINAL SUBMISSION TO ENGINEERING IN MEDICINE AND BIOLOGY MAGAZINE

For First Electronic Submission for Feature Articles -

1. Margins 1 inch all around, double-spaced, saved in pdf format
2. References in text in numerical order, enclosed in brackets.
3. Figures Captions listed on a separate page. Figures at the end of the paper, one figure per page.
4. Electronically submit paper to Manuscript Central at:
<http://embs-ieee.manuscriptcentral.com/>
5. Papers not following this format will be rejected without review.

Final Submission for Theme and Feature Articles- Submit this completed form with your final manuscript

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3. References in text in numerical order, enclosed in brackets listed in format specified
4. Computer CD or ZIP, well protected, enclosed.
Each paper should be stored in a separate folder.
Text File in Microsoft Word without Figures
Figures included as Separate Files on Disk (TIFF, JPEG, GIF)
PDF file with Text and Figures with captions.
5. **Color Illustrations cost \$150 per figure. By submitting a figure with color, the author agrees to pay \$150 for each color figure.**
6. Authors' Bios and Photos enclosed (if using an electronic photo, make sure that file size is at least 500 kb)
7. Abstract and keywords
8. Check if the Senior author is less than 31 years old? (For IEEE Awards Competition)
9. Theme: IEEE copyright Release Form signed. (See <http://www.ieee.org/web/publications/rights/index.html>).
Feature: copyright form is electronically submitted via manuscript central.
10. Conditions listed in Author Guidelines met.

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The *EMB Magazine* encourages authors to pay the voluntary page charge of \$110 per page, which entitles the author to 100 reprints. Also color illustrations cost \$150 per figure. Beginning in 2004, there is a MANDATORY PAGE CHARGE at \$250 per page in excess of the first seven published pages. Beginning in 2007, there is a MANDATORY PAGE CHARGE at \$250 per page in excess of the first five published pages. Payment for these charges is not negotiable or voluntary.

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IEEE Engineering in Medicine and Biology Magazine

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I. Mission Statement

IEEE Engineering in Medicine and Biology Magazine is a theme-article publication that covers the full range of fields within biomedical engineering (BME), with each issue covering one theme. Articles are written for technically knowledgeable readers who are not necessarily specialists in the theme topic. A sample list of theme topics of interest include: biochemical engineering, biocontrols, bioinformatics, bioMEMS, biomaterials, biomechanics, biosignal processing, biotechnology, cellular and tissue engineering, clinical engineering, imaging and image processing, information technology, instrumentation, sensors and measurements, micro and nanotechnology, neural systems and engineering, physiological systems modeling, proteomics, radiology, rehabilitation engineering, robotics in surgery, and telemedicine. In addition to the theme articles, the magazine also publishes unsolicited features that are of interest to a broad segment of *IEEE Engineering in Medicine and Biology Magazine* readers.

The magazine also publishes over twenty regularly scheduled columns for readers interested in industry, academia and government. All papers are peer reviewed and authored by experts in the field. On occasion, the magazine publishes comprehensive, in-depth review, tutorial and survey papers.

II. Types of Manuscripts

Many authors are accustomed to writing papers for publication in *IEEE Transactions and Journals*. Magazine articles differ in a number of respects and authors must use these guidelines when submitting papers. In general,

- Magazine articles are shorter and are of more general interest in nature.
- Magazine articles contain more art.
- Color art is preferred.
- Magazine articles have fewer references and equations.

Typical articles are 20 ± 5 (double-spaced, single-column) pages long plus figures and references.

The *EMB Magazine* accepts two types of articles:

- **Theme Articles.** These papers are a collection of 8-10 papers written by experts in a particular area that total 60 magazine pages. The *EMB Magazine* is basically a theme

paper publication, with one theme published each issue. Examples of previous and future themes include: Genome Analysis and Interpretation, Respiration, Bioterrorism, Heart Rate Variability, Infrared Imaging, Molecular Electronics, BME Education, Nanotechnology, Biotechnology, Tissue Engineering, Biomaterials, EMG, Healthcare Technology, and Economics and Policy. **Potential Guest Editors should contact the EMB Magazine Editor-in-Chief directly via email at jenderle@bme.uconn.edu to inquire about the suitability of a topic.**

Beginning January 2007, all papers in new theme issues must be reviewed using manuscript central. Once a theme has been accepted by the Editor-in-Chief, a theme link on manuscript central for paper submission will be created. This link will be created at the time authors submit their papers for review¹. A sample link description is:

By Invitation Only: Special Issue: Gerontechnology. Guest Editors: Silvestro Micera, Paolo Bonato and Toshiyo Tamura

The Guest Editor should inform the Editor-in-Chief when the link should be activated.

The Guest Editor is responsible for identifying and inviting contributing authors. The Guest Editor is responsible for having each paper reviewed by at least two expert reviewers (using Manuscript Central). After all papers have been successfully reviewed, the Guest Editor writes a brief introduction describing the papers in the issue and submits the collection of papers to the Editor-in-Chief (each paper should have an Author Checklist, final draft of paper, figures, and biographies and photographs for all authors). It is easiest if the collection of papers be stored electronically on a CD, with each paper stored on a separate folder. Figures should be stored in separate files at high resolution necessary for printing.

- **Feature Articles.** These are technical articles of interest to most biomedical engineers and are unsolicited. To be considered for publication, the article must be of interest to a broad segment of *EMB Magazine* readers, well written and at the current state of knowledge. All Feature articles are submitted and peer reviewed through Manuscript Central by submission of a single file that contains the entire paper, with figures placed at the end of the paper. Absolutely do not submit the figures as individual files. Because of page limitations, Feature articles are published on a space available basis in the Feature Article section to complete an issue of the *EMB Magazine*. Typically, these articles are not related to the theme of the issue.

¹ The delay in assigning a link on manuscript central is to reduce the clutter due to the number of planned theme issues.

The *EMB Magazine* also welcomes:

- Letters to the Editor
- Notes
- News from Around the World
- Commentaries
- Pieces of Personal Opinion
- Conference Announcements
- Society News

Non-Article contributions should be sent directly to the Editor-in-Chief.

GENERAL INFORMATION FOR ALL PAPERS

Color illustrations cost \$150 per figure.

The *EMB Magazine* encourages authors to pay the voluntary page charge of \$110 per page, which entitles the author to 100 reprints.

Beginning in 2004, there is a MANDATORY PAGE CHARGE at \$250 per page in excess of the first seven published pages. Payment for these charges is not negotiable or voluntary.

Beginning in 2007, there is a MANDATORY PAGE CHARGE at \$250 per page in excess of the first five published pages. Payment for these charges is not negotiable or voluntary.

"In line with the National Institutes of Health (NIH) Public Access Policy, IEEE acknowledges that the broad and open dissemination of NIH-funded research results may benefit not only future science and engineering initiatives, but may also serve the greater interests of society as a whole. A carefully considered and practical application of this principle is essential so as to ensure the scholarly value of the original work and the value added to the work throughout the editing and publishing processes.

IEEE's position with respect to public access to NIH-funded work published in IEEE journals is as follows:

- IEEE authors may voluntarily submit their funded work to PubMed Central (PMC) in the 12th month of the print publication
- IEEE will supply authors of funded work with the final versions of their papers, which authors may then submit directly to PMC

IEEE already makes its content available to the general public worldwide through its content delivery web site, IEEE Xplore, and remains committed to the idea of convenient, timely and affordable access to scholarly and professional publications."

III. First Principles

Please read and follow these instructions. They are important. Include the Author Checklist with your final submission.

Beginning January 1, 2003, the *EMB Magazine* **ONLY** accepts Feature Type papers through Manuscript Central at the website:

<http://embs-ieee.manuscriptcentral.com/>.

a. Feature Articles

All Feature Type papers are electronically peer reviewed and a publication decision is sent back to the corresponding author via email. Typically, accepted papers with minor (and in unusual circumstances major) changes are revised by the authors and resubmitted for another review cycle through Manuscript Central. The same set of reviewers reexamines the revised paper and makes a recommendation ultimately to the Editor-in-Chief. To make this process efficient, it is essential that the authors indicate how each of the reviewer's comments is addressed when resubmitted in the "view comments/respond" section, accessible when the manuscript is resubmitted. Put the comments in their proper boxes (e.g. responses to the associate editor will only go to the associate editor, and the reviewers will not be able to see them). DO NOT leave the response to reviewers blank. If the authors have not satisfactorily addressed all issues raised by the reviewers, the paper will be rejected without further revision.

Once a paper is accepted for publication as a Feature Article, a hardcopy and electronic copies are sent to the Editor-in-Chief via surface mail. The contents should include the Author Checklist, paper, figures, author biographies, and author photographs. The copyright form is electronically submitted via manuscript central when the paper is accepted. Two electronic files of the paper should be submitted; one in Word without figures, and one a PDF file with text and inserted figures with captions. TeX/LaTeX is not acceptable. Figures must be included as Separate Files and not embedded in the Word file. Photographs must be hardcopy or of sufficient resolution (>500kB) if electronic. The electronic files can be sent in a floppy disk, ZIP disk or CD.

b. Theme Articles

All articles for a Theme should be submitted to the Guest Editor for a Theme since the Guest Editor receives all manuscripts for an issue from the authors and then sends the entire collection of papers to the Editor-in-Chief via surface mail. The contents for each paper should include the Author Checklist, paper, figures, author biographies, author photographs and a signed copyright form available from <http://www.ieee.org/copyright>. For each paper, a hardcopy and two electronic files of the paper are required, one in Word without figures, and one a PDF file with text and inserted figures with captions. TeX/LaTeX is not acceptable. Figures must be included as Separate Files and not embedded in the Word file. Photographs

must be hardcopy or of sufficient resolution (>500kB) if electronic. The electronic files can be sent in a ZIP disk or CD.

Each paper in the theme should be stored in a single folder (folder denoted by corresponding author's name), containing the paper files, all figures, biographies and author photographs.

Consider shipment via private courier service, e.g., Federal Express (especially from outside the US). Include a mailing address for the Corresponding Author as well as phone and fax numbers, and e-mail or telex addresses, if available. Questions may arise at any stage, and we will need to contact the author.

c. Feature Article Peer Review

For Feature Articles, the Editor-in-Chief determines whether an article is suitable for the *EMB Magazine*, and may be rejected out right if deemed unsuitable. If suitable, the paper is forwarded to reviewers selected for their expertise in a given field. If a paper is accepted with minor review, the author is often asked to expand, rewrite, or explain further the content of his article. Authors should make sure that all issues raised by the reviewers are addressed as previously described.

d. Final Acceptance

Once a manuscript has received the final approval of the reviewers and Editor-in-Chief, the author will be notified. He or she will be asked to prepare the manuscript for final publication as previously described.

e. Abstract and Keywords

EMB Magazine articles, unlike papers in Transactions and Journals, do not contain abstracts. However, abstract and keywords are necessary for electronic indexing by IEEE. The Abstract should be brief, between 50 and 100 words. Four to eight keywords are usually sufficient.

f. Author Proofs

The author will receive a galley proof of his or her article prior to publication. The usual format is as a PDF file email attachment. Fax or express delivery are alternatives. The author is requested to provide corrections to the galley within three working days after receipt.

g. Reprint Requests

At the time the author receives the galley of his or her article, he or she should also receive a Reprint Order Form. This should be completed and returned with the proofs or sent directly to the Magazines Reprint Department, 445 Hoes Lane, Piscataway, NJ 08855. Note that reprints are provided with the payment of voluntary page charges.

h. Printed Issue

Once the issue of a publication has been printed, three complimentary copies of the magazine are sent to the corresponding author, who author should distribute them to the coauthors. The copies are sent from the printer directly to the corresponding author when the issue is mailed. If an author has requested reprints, these will be sent separately after the issue has been mailed.

i. Voluntary and Mandatory Page Charges

Voluntary page charges are a means to help defray some of the costs of publication of the *EMB Magazine*. With the page proofs will be a request for voluntary page charges from the corresponding author. With payment of voluntary page charges, reprints (black and white) will be provided. The payment or non-payment of these charges is strictly voluntary and in no way will affect publication of the article.

A Mandatory Page Charge at \$250 per page is billed for pages in excess of the first seven published pages. Payment for these charges is NOT negotiable or voluntary. Beginning in 2007, the mandatory page charge begins at five pages.

j. Ethical Considerations

Papers that report results involving human subjects or animals must include a statement certifying that generally accepted ethical procedures were followed, which were in accordance with the policies and procedures of the institute having jurisdiction over the research.

k. Posting Your Article on a Website

Note that authors and their companies have the right to post their IEEE-copyrighted material on their own servers without permission, provided that the server displays a prominent notice alerting readers to their obligations with respect to copyrighted material and that the posted work includes the IEEE copyright.

IV. Some Style Notes

See copies of the *EMB Magazine* for examples of proper article formats and requirements for the types of articles published. Feature articles generally consist of the title, byline, author affiliation, footnote (including any financial support acknowledgment), introductory paragraphs, body, conclusions, reference list, list of figures and table captions, and original figures and tables for reproduction. An article may also include appendices, a nomenclature, a glossary of symbols, and an acknowledgment of nonfinancial support.

Manuscripts should be double spaced, 12 point font, with margins of about 2.5 cm (6 picas/1 inch) on each side of each page. Number each page in the bottom margin. Use single-column format. DO NOT try to make the manuscript page look like a printed page.

a. Consecutive Numbering of Parts

All manuscript pages, footnotes, equations, and references should be labeled in consecutive numerical order. Figures and tables should be cited in text in numerical order. Figures should be numbered (Arabic) in a single sequence; likewise for tables. Refrain from using a word processor's automatic numbering feature.

b. Writing Style

The following service is available for authors writing articles for the magazine. SPi provides scientific, technical and medical publishers with a high quality, end-to-end outsourcing solution. Their multi-country delivery platform harnesses the talent of more than 3,500 content and BPO specialists. Located in the US, Europe and the Philippines, these specialists copyedit and typeset more than 1 million pages per year for over 600 journals. SPi has provided content tagging and editing services to IEEE Publishing Operations since 2002.

An author who would like assistance with English grammar and usage prior to submitting their manuscript to an IEEE publication for review or during the review process can now go directly to <http://www.prof-editing.com/ieee/> to submit a manuscript for copy editing. The SPi copy editors will edit for grammar, usage, organization, and clarity, querying potentially substantive revisions as necessary. An author can use the service, at their own expense, as often as desired. Cost estimates are available immediately on line. Edited manuscripts will generally be returned to the author within two weeks of submission.

- Use simple and correct English, i.e., “use” not “utilize” or “usage,” “affected” not “impacted” (except for teeth). Remember, “data” is a plural word.
- Parameters are what you fix, variables are what you measure, e.g., “temperatures were set at 20, 30, and 40 deg. C. (parameters) and measurements were made of blood pressure and flow (variables).
- In describing portions of the paper, use the term “above” to refer to previous statements and “below” to indicate what is to follow.
- Use metric (SI) units and abbreviations. Leave a space between the last digit of a number and its units. Use scientific notation for numbers, with a leading 0 for numbers less than 1, e.g., 0.23 ml.
- If a commercial product is mentioned, include model number along with manufacturer, city and state (country).

- In general, do not use footnotes. For a sentence or two, just put the comment in parentheses. For a paragraph or two, use a side bar. Alternatively, include with references as endnotes.
- To use an abbreviation or acronym, first spell it out, and then follow with the abbreviation or acronym in parentheses. (This is not required for common units of measurement.) For plurals, do not use an apostrophe, i.e., use EEGs and 1990s, not EEG's and 1990's.
- “, et al.,” takes commas front and back, and one period; “, i.e.,” and “, e.g.,” take two commas and two periods.
- At the start of a sentence use “Figure 3”; within a sentence, use “Fig. 6” or “Figs. 8-10”.
- Use “2-D” and “3-D” for two and three dimensions.
- Do not waste words in the introduction (or conclusions) describing what will be (was) presented in the paper. Do not go into what will be done in future work; save that for your next paper.

c. Figures, Tables, and Captions List for Final Submission

Illustrations and photographs should be submitted either electronically or as a hard copy. Do not embed figures and photographs in the text document (either electronic or hardcopy). Each figure or photograph should be on a separate page if hardcopy or a separate file if electronic. IEEE Magazines will make an effort to standardize sizes and fonts, however, the better the quality of the material submitted, the better the published result.

If submitting hardcopy for line art, graphs, charts, tables, drawings, photos and gray scale diagrams, these will be scanned electronically for final production by our Production staff. All hardcopy illustrations and photographs should be original proofs **ONLY** and **NOT** Xerox or velox copies. Whenever possible, photographs should be glossy prints with no screening. Absolutely do not submit laser printer output as it does not reproduce well. Digitally scanned photographs (color or gray scale) generally do not have sufficient resolution for proper printing.

If submitting electronic files for line art, graphs, charts, tables, drawings, photos and gray scale diagrams, each figure should be saved in a separate file at 3.1 MB uncompressed or at least 500 kB compressed.

Use consistent typefaces on all your figures. The best typefaces for labels are Helvetica. IEEE Magazine style calls for labels to be upper and lower case. For best results, all of your figures

should be the same size (width length) whenever possible. Hardcopies of figures should be no larger than 8 1/2" x 11" (22 x 28 cm).

Provide captions on a separate page or file. Do not put them on the figure. If submitting a hardcopy, number each figure on the bottom front in the margin. If electronic, label the file with the figure number. On graphs, show only the coordinate axes, or at most the major grid lines, to avoid a dense result after reduction. DO NOT put boxes around your figures to enclose them.

There are two types of graphic files, bitmaps and vectors. A bitmap image is defined in terms of colored or black dots and such an image is fixed with respect to both size and resolution. Since a bitmap's resolution is fixed, printing a bitmap at a larger size results in a loss of resolution. It is therefore important that bitmap images be created in the right size, and at the highest resolution possible. Vector graphic files define an image as lines and curves and can be scaled up or down with little or no loss of definition.

Bitmap Images

Scanned images are always bitmaps. Drawing programs, such as Illustrator, Visio and Corel Draw produce vector files. Presentation programs, such as PowerPoint produce vector files.

In all cases, hard copy of images must be submitted along with the electronic version. The hard copy should be of the highest resolution possible.

Photo images may be supplied as photographs, slides, or transparencies. Laser proofs or magazine cutouts are NOT acceptable.

Bitmaps are measured in dots per inch (dpi). They should be at least 300 dpi (600 dpi is preferred) at the final printed size. In other words, if your image is to be printed 3.5 inches wide it should contain at least 1050 (300 dots x 3.5 inches) dots horizontally and preferably 2100 (600 dots x 3.5 inches) dots horizontally. When in doubt as to proper size, it is best to error on the larger size rather than making a graphic too small. Check the settings of your graphics software.

Since magazines are printed at a resolution that is much greater than that of a computer screen, images of lesser resolution will appear to be out of focus, or show evidence of "bitmapping." For example, diagonal lines will look like a flight of stairs. Files created for the web are optimized for viewing on a computer monitor that shows images at 72 dpi and are too small by a factor of at least 4; images created for or captured from the web are generally unacceptable for publication. GIF images are generally automatically optimized for use on the web and are therefore rarely acceptable for publication and should be avoided. Screen captures will also be low resolution and should be avoided.

Photographs, images with tints (use tints only when necessary, never just for appearance), and other grayscale images should be of good quality with proper contrast. Too high contrast will cause your image to appear “washed out” when printed; too low contrast will appear to be a blob of black and/or gray. If text must be placed in the image make sure that it is of sufficient contrast with the surrounding area so that it will be legible. Text should be 8 point Helvetica (or Swiss) when the image is at the final printed size. (If you are adding text in either Adobe PhotoShop or Corel PhotoPaint, please add text on a separate layer and send the file in native PhotoShop (*.PSD) or PhotoPaint (*.CPT) format.)

Vector Images

Included in this format are: CorelDRAW (*.CDR), Corel Presentation Exchange (*.CMX), Adobe Illustrator (*.AI, *.EPS), Visio (*.VSD) and other DRAW type programs (*.EPS)

Unlike bitmapped images, vector graphics are resolution-independent and can be sized without any loss of resolution. However, if there are labels or other text in the image, the image should be sized appropriately to the publication and text should be 8 point Helvetica (or Swiss). Other fonts should be avoided as they will have to be changed to match the publication style.

All line weights and outlines should be 0.5 point in weight. All colors should be defined as CMYK, avoiding Pantone or spot colors. White boxes may not be used to “break” lines (or cover any unwanted aspect of your drawing) as this makes tinting a graphic impossible. Use two separate lines to draw a broken line. Avoid putting in your own tints if for appearance only, such decisions are better made by the design staff associated with the magazine.

Where possible, files should be saved and sent in native format, but where that is impossible, graphics may be saved in Encapsulated PostScript format.

Write author name and figure number with a soft pencil on the back of each illustration. Caution: do not write on the back of photographs with a ball-point pen. This often puts an impression through to the front. To avoid confusion, include an “up” arrow to indicate proper orientation. Please do not use paper clips or tape of any kind on photographs. It could mark them. Remember to protect illustrations by using cardboard backing in shipment. Make sure photographs are properly separated so they do not stick together.

Tables

Use Tables where appropriate. Do not submit large tables full of numbers. Use graphs or submit only significant results.

d. Section Headings

Section headings should NOT be enumerated by Roman numerals, nor their references to section numbers within the text. Primary and secondary section headings are sufficient for

almost all articles. Tertiary section headings are allowed, but quaternary section headings will be edited out by the staff editors.

e. Mathematical Notation

To avoid errors in editing and typesetting, authors should clearly identify subscripts, superscripts, Greek letters, and other symbols. Add margin notes or other explanations wherever necessary. It is especially important to distinguish clearly between the following terms.

- Capital and lowercase letters when used as symbols.
- Zero and the letter “O”.
- The lowercase letter “l,” and numeral one, and the prime sign (').
- The letters “k” and κ (kappa), “u” and μ (mu), “v” and ν (nu), “n” and η (eta).
- Bold type should be indicated for vectors and matrices.
- Italic type should be indicated for all text variables. If an equation is likely to be longer than the magazine’s column width, it is helpful to indicate the best places for the equation to be broken into multiple lines.
- Avoid ambiguities in equations and fractions in text through careful use of parentheses, brackets, slants, etc. Note that in text, fractions are usually “broken down” to fit on one line and confusion can result if terms are not properly labeled. The conventional order of brackets is $\{[()]\}$.
- Use of the multi dot rather than the multiplication sign when multiplying by powers of ten in equations or text is at the author’s discretion.
- In your manuscript, put each equation on a separate line. If you number them, put the number in parentheses in line on the far right of the page.
- Lead into an equation by ending the previous line with a colon. Do not use a period or comma to end an equation.

f. Units and Abbreviations

The International System of Units (SI) is advocated for use in IEEE publications.

Unit symbols should be used with measured quantities, i.e., 1 mm, but not when unit names are used in text without quantities, i.e., “a few millimeters.”

If quantities must be expressed in English units, the SI equivalents should be given also in parentheses, i.e., a distance of 4.7 in (12 cm).

Most acronyms and abbreviations should be defined the first time they are used in text.

g. Reference Style

A numbered list of references may be provided at the end of the article as a separate page or pages of the manuscript. The list should be arranged in the order of citation in text, not in

alphabetical order. List only one reference per reference number. Except for review articles, please try to limit the number of citations to 20 of the most recent references.

Each reference number should be enclosed by square brackets. In text, citations of references may be given simply as "in [1]," rather than as "in reference [1]." Similarly, it is not necessary to mention the authors of a reference unless the mention is relevant to the text. It is almost never useful to give dates of references in text. These will usually be deleted by staff editors if included. Please do not use a word processor's automatic numbering feature. Footnotes or other words and phrases that are not part of the reference format do not belong on the reference list. Phrases such as "For example," should not introduce references in the list, but should instead be given in parentheses in text, followed by the reference number, i.e., "For example, see [5]." Samples of correct formats for various types of references are as follows.

Books:

- [1] O.T. Zimmerman and I. Lavine, *Conversion Factors and Tables*, Dover, NH: Industrial Research Service, 1961.
- [2] G.O. Young, "Synthetic structure of industrial plastics," in *Plastics*, vol. 3, *Polymers of Hexadromicon*, J. Peters, ed., 2nd ed., New York: McGraw Hill, 1964, pp. 15-64.

Periodicals:

- [3] M.A. McHenry and D.C. Chang, "Coupled-mode theory of two non-parallel dielectric wavelengths," *IEEE Trans. Microwave Theory Tech.*, vol. 43, pp. 1469-1475, Nov. 1994.

Articles from published conference proceedings:

- [4] D.B. Payne and J.R. Stern, "Wavelength-switched passively coupled single-mode optical network," in Proc. IOOC-ECOC '85, 1985, p. 585.

Papers presented at conferences (unpublished):

- [5] D. Ebehard and E. Voges, "Digital single sideband detection for interferometric sensors," presented at 2nd Int. Conf. Optical Fiber Sensors, Stuttgart, F.R.G., 1984.

Technical reports:

- [6] E.E. Reber, R.L. Mitchell, and C.J. Carter, "Oxygen absorption in the earth's atmosphere," Aerospace Corp., Los Angeles, CA, Tech. Rep. TR-0200 (4230-46)-3, Nov. 1968.

h. References—Electronic Sources

The guidelines for citing electronic information as offered below subscribes to the International Standards Organization (ISO) documentation system.

Journal Articles:

Author, Title, Journal [Type of medium], volume (issue), pagination if given, (year, month).
Available: Directory: File:

Example:

- [1] R. Lazarus, "Self-similar solutions for converging shocks and collapsing cavities," IEEE Trans. Plasma Sci., [online], vol. 21, (no. 4), pp. 876-880, (Aug. 1993), Available <http://www.halcyon.com/pub/journals/21ps04-lazarus>.

Material Obtained Through Loose-Leaf, Computer, or Information Services

References to material obtained through computer services or information services are treated like first references to original printed material except that the usual information is followed by the name of the service, the name of the service provider, and the accession or identifying numbers within the service.

Example:

- [2] R. J. Vidmar, "On the use of atmospheric plasmas as electromagnetic reflectors," IEEE Trans. Electromag. Compat., vol. 21, no. 3, pp. 238-244, Aug. 1992. Dialog, ERIC, ED 152318.

Computer Programs and Electronic Documents

The ISO recommends that capitalization follow the accepted practice for the language or script in which the information is given.

Example:

- [3] S. H. Gold, "Study of gain in C-band deflection cavities," in Computer Knowledge [electronic bulletin board], s.l. July 2 1993-; [cited Dec. 12, 1993], Available listserv@NETFIN. BITNET.
- [4] R. Chew, "A comparison of RF electrode models," in MD Net [database online], Bethesda MD; National Library of Medicine, 1994 [cited Nov. 1994]. Identifier no. D000162 [52 lines].
- [5] D. Shamlo, "Electronic marketing and identifying techniques," in Electronic Guide [database online]. New York: Computer Wire, 1989 [updated May 23, 1989; cited March 12, 1992]. Accession no. 004082; NO=RE436. 4 screens. Available from DIALOG Information Services, Inc., Palo Alto, CA.

"Work in progress" is not an acceptable reference. "Work in press" should be cited as completely as known. "Personal communication" should indicate complete name and mailing address of the informant. Journals or magazines with a single-word name are spelled out completely, e.g., Anesthesiology, Science. Abbreviations of journals and magazines are given in the International Standards Organization's "International Standard ISO-4-1972 (E). Documentation - International Code for Abbreviation of Titles of Periodicals."

Some common abbreviations used are:

Am = American
J = Journal
Trans = Transactions
Sci = Science
Int = International
Arch = Archives
Proc = Proceedings
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