

# Instructions to Authors

## *Thin Solid Films*

### International Journal on the Science and Technology of Condensed Matter Films

Editor-in-chief, J. E. Greene  
Associate Editor, P. Desjardins

#### Types of contributions

- Full length (regular) papers not previously published nor posted on the web
- Invited review articles
- Letters, 1800-2500 words, reporting important results that justify priority handling

#### Aims and Scope

*Thin Solid Films* is an international journal that serves scientists and engineers working in the fields of thin-film synthesis, characterization, and applications. The field of thin films, which can be defined as the confluence of materials science, surface science, and applied physics, has become an identifiable unified discipline of scientific endeavor. The scope of *Thin Solid Films* is indicated by, but not limited to, the following topical subheadings:

- Synthesis and Characterization:** Nucleation and growth from the gas, liquid, and solid phases; microstructural and microchemical film characterization, new concepts and techniques for film synthesis, modification, processing, and characterization.
- Surfaces, Interfaces, and Colloidal behavior:** Surface and interface phenomena: physics, chemistry, and applications.
- Metallurgical, protective, and Hard Layers:** Fundamentals aspects of layers and coatings used in diffusion barrier, corrosion, high-temperature, wear, erosion, and other extreme environments.
- Mechanics and Nanomechanics of Thin Layers:** Mechanical properties of thin layers and nanoscale structures; surface forces; micro- and nanoengineering.
- Electronics, Optics, and Optoelectronics:** Synthesis, properties, and processing of layers used in electronic, optical, and opto-electronic applications; device engineering.
- Magnetics and Magneto-optics:** Fundamental aspects of layers used in magnetic and magneto-optic applications; magnetic, optical, and magneto-optical recording devices.
- Superconductivity:** Synthesis and properties of layers used in superconducting applications.
- Langmuir-Blodgett, Biological, and Related Films:** Synthesis and properties of Langmuir-Blodgett, biological and related layers; device applications.

- Thin Film Devices, Sensors, and Actuators:** Fabrication, processing, and properties of devices including sensors and actuators based upon thin layers.
- Condensed Matter Film Behavior:** Interdisciplinary and multidisciplinary topics.

#### Peer review process of full length articles

The editors seek the opinion of experts in the field for evaluation of all contributions to *Thin Solid Films* prior to editorial decision. We make efforts in obtaining the opinion of two independent reviewers.

#### Thin Solid Films Letter Articles

##### Intent:

The purpose of Letters in *Thin Solid Films* is to provide a rapid publication vehicle for novel and important results that have the potential to stimulate new research in the general area of thin films.

##### Criteria:

*Thin Solid Films* publishes short Letter articles only when they report important, new, and timely results in the general field of thin film growth, properties, or devices. The authors must show that the Letter represents a *substantial* advancement of established knowledge in an important subfield of thin films.

Letters, as opposed to full articles, are intended for the rapid dissemination of significant new fundamental knowledge. Merely being free of errors and reporting incremental progress in the field is not sufficient for Letter publication. We also do not accept publication of ongoing research as a series of Letters. Such work should be reported in a full paper.

##### Length:

Letters may be no more than a total of four printed journal pages including abstract, the body of the paper, figures, acknowledgements, and references.

##### Review process:

Submitted Letters will be initially screened by Editorial Board Members for their suitability and those that are deemed appropriate will be sent to one or two expert referees for evaluation. To facilitate rapid publication, a final decision will normally be reached after no more than two rounds of refereeing.

#### Submission of contributions

##### Online Submission tool

Papers should be submitted using the Online Submission Tool, which can be accessed directly at <http://ees.elsevier.com/tsf>.

The manuscript should be laid out as detailed below. Authors are reminded that delays in publication may occur if the instructions for submission and manuscript preparation are not strictly followed.

If the manuscript refers to recently submitted manuscripts or accepted papers still to be published, then a copy of these documents must also be supplied so that the reviewers

can judge the new manuscript in its proper context.

#### Corresponding author

To facilitate communication, the corresponding author is requested to provide his current e-mail address, phone and fax numbers.

#### Original material

Contributions are considered for review on the understanding that the authors have obtained the necessary authority for publication, as stated in the submission letter. Submission of a manuscript implies that it is not being simultaneously considered for publication elsewhere.

#### Submission letter

Each manuscript must be accompanied by a letter addressed to the editor stating that the work is original, unpublished, and not being considered elsewhere. In addition, introduction letters of manuscripts submitted as Letters must specifically demonstrate why the material deserves rapid publication.

The authors are requested to suggest names (with postal and e-mail addresses) of at least three individuals who are qualified to review their paper. The referee(s) selected by the Editor may not necessarily be chosen from this list. Please note that processing of the manuscript may be delayed if these suggestions for referees are not given in the cover letter of the original manuscript.

#### There are no page charges

#### Language

Papers will be published in either American or British English. It is expected that authors submit carefully written and proofread material meeting the standards of scientific publication. It is recommended that non-English speaking authors have their work edited and proofread by someone fluent in English before submission of their paper.

Some third party editing services are available to authors who want to publish in scientific, technical and medical journals and need assistance before they submit their article or before it is accepted for publication. More information about language editing services can be found on the Elsevier web site (<http://www.elsevier.com>); search for *Language services* in the pages containing information for authors.

#### Manuscript preparation

##### File format and presentation

Articles prepared using any of the more popular word-processing packages are acceptable but please note the following points.

**File formats.** The article must be saved in the native format of the word processor used, e.g. WordPerfect® or Microsoft® Word. However, if a non-western version of these word processors is used, save the file in rich text format (RTF). Authors who use LaTeX should utilize the Elsevier LaTeX package. More information can be found in the pages for authors at <http://www.elsevier.com>.

**Presentation.** Do not use options such as automatic word breaking (hyphenation), justified layout, double columns or automatic paragraph numbering (especially for numbered references). However, you are encouraged to use your word processor's facilities to indicate text attribute, such as bold face, italic, subscript, superscript, etc.

The manuscript should be prepared in double-spaced 12-point font, preferably Arial, Times, Helvetica, Symbols, on single-column, numbered pages with wide (3 cm) margins. Leave a blank line between each paragraph.

#### **Title**

Title should be concise and informative; avoid abbreviations.

#### **Author names and affiliations**

Where the family name may be ambiguous (e.g. a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lowercase superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each author.

Current addresses of authors should be indicated in a footnote.

#### **Corresponding author**

Clearly indicate who is willing to handle correspondence at all stages of the peer review process, publication, and post-publication. Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.

#### **Abstract**

Each paper should have a concise and factual abstract of ~100 words. The abstract should state briefly the purpose of the research, the principal results and the major conclusions. As the abstract is often presented separate from the article, it must be written in such a way that it stands alone.

#### **Keywords**

During the process of online submission, authors are requested to supply a maximum of eight keywords, preferably but not necessarily, selected from the structured Suggested Keyword List of Thin Solid Films, which is available from the keyword data entry item of the Elsevier submission tool. If authors believe an important keyword is not listed, they can use unlisted keywords of their own knowledge of the field.

#### **Main Text**

The main word processor document should contain the text, the list of references, the list of table and figure captions, and the tables, if any.

Please adhere to the following order: Title, Authors, Affiliations, Abstract, Main text, Acknowledgements, Appendix, References, List of figure and table captions, Tables, Figures. Some flexibility of presentation of

the main text is allowed but the authors are urged to arrange the subject matter clearly under such headings as Introduction, Experimental Details, Results, Discussion, etc. The sections and subsections should be numbered 1., 1.1, ..., 2., ...

Use SI units.

Do not use the words "First" and/or "to our knowledge" and/or "successfully" and/or "new" and/or "novel" or variants in the title, abstract or text of the manuscript.

All tables and illustrations should be numbered consecutively throughout the paper using Arabic numerals. (Examples: Fig. 1. and Table 1). When preparing tables, use table grids (one grid for each separate table). If no grid is being used, use tabs to align the columns, not spaces.

**Keyboard discipline and accuracy.** Please take care to distinguish properly between the digit 1 and the letter l (also 0 and O). Use tabs for indents (paragraphs), not spaces or the indent function. Use your word processor spell check. Systematically insert a space between numbers and units.

#### **Bibliographic references and notes**

All references should be readily accessible. Reports published in conference proceedings are acceptable if the proceeding is index in the major scientific databases. In particular, a collection of conference abstracts is not considered as a readily accessible report.

References should be numbered consecutively (numerals in square brackets) throughout the text and collected together with the footnotes in a reference list at the end of the paper. In the text, references are noted by on-line Arabic numerals in square brackets as in: "Smith and Roberts [1] measured..." These reference indicators should be one space from words and inside punctuation: "... some previous work [1,3,5-7]." Reference to not readily accessible reports should be avoided.

List all authors; use first name initials and last name(s) only. Journal titles should be abbreviated according to the Chemical Abstracts Service Source Index (<http://www.cas.org/sent.html>). Leave a blank line between each entry in the list of references.

#### **Examples of reference formats:**

##### *Journal papers*

- [1] D. Brandl, Ch. Schoppmann, Ch. Tomaschko, H. Voit, *Thin Solid Films* 242 (1995) 192.
- [2] A. Erdemir, C. Bindal, J. Pagan, P. Wilbur, *Surf. Coat. Technol.* 76/77 (1995) 559.
- [3] S. Auzary, K.F. Badawi, L. Bimbault, J. Rabier, R.J. Gaboriaud, P. Goudeau, *J. Phys. III* 7 (1997) 35 (in French).
- [4] S. Roberts, *Thin Solid Films* (to be published). [*if accepted for publication, provide a copy of the acceptance letter*]

##### *Thesis (if available through a library)*

- [5] R. Ramesh, Ph.D. Thesis, College van Dekanen, University of Twente, The Netherlands, 1992.

##### *Monographs, edited books*

- [6] J.L. Vosson, W. Kern, *Thin Films Processes*, Academic Press, New-York NY, 1987.
- [7] M.J. Carr, C.E. Lymar, J.M. Cowley, In: J.M. Cowley (Ed.), *Electron Diffraction Technique*, vol. 1, International Union of Crystallography/Oxford University Press, New York, 1992, p. 122.
- [8] M.J. Adams, B.J. Briscoe, S.K. Sinha, in: D. Dowson, C.M. Taylor, T.H.C. Childs, M. Godet, G. Dalmas (Eds.), *Dissipative Processes in Tribology*, Tribology Series, vol. 27, Elsevier, Amsterdam, 1994, p.223.
- [9] IEEE Power Engineering Society, *IEEE Guide for Installation Methods for Fiber-Optic Cables in Electric Power Generating Stations and in Industrial Facilities*, IEEE, IEEE Std 1428-2004, 2005.

##### *Conference Proceedings*

- [10] C.H. Perry, F. Lu, F. Namavar, N.M. Kalkhoran, R.A. Soref, in: S.S.Iyer, R.T. Collins, L.T. Canham (Eds.), *Light Emission from Silicon*, Boston, U.S.A., December 3-5, 1991, Materials Research Society Symposium Proceedings 256 (1991) 153.
- [11] P. Hones, R. Sanjinés, F. Lévy, in: B.D. Sartwell, J.H. Givens, C. Mitterer, S.L. Rohde (Eds.), *25<sup>th</sup> International Conference on Metallurgical Coatings and Thin Films*, San Diego, U.S.A., April 27-May 1, 1998, *Thin Solid Films* 332 (1998) 240.
- [12] J.J. Favier, D. Camel, in: B. Cockayne, J.H.C. Hogg, B. Lunn, P.J. Wright (Eds.), *Crystal Growth 1986*, Proceedings of the Eight International Conference on Crystal Growth, York, U.K., July 13-18, 1986, p. 50.

##### *Patent*

- [13] H. Yamagishi, A. Hiroe, H. Nishio, K. Miki, K. Tsuge, Y. Tawada, U.S. Patent No. 5264710, 23 Nov. 1993.

##### *Industrial reports and papers*

- [14] J. Cleveland, *Spring Constant Update*, Digital Instruments, Santa Barbara, CA, 1996. [add web site address if available]

##### *For specific data*

- [15] O.S. Heavens, *Optical Properties of Thin Solid Films*, Dover, New-York, 1991, p. 46.
- [16] *Powder Diffraction File*, Joint Committee on Powder Diffraction Standards, ASTM, Philadelphia, PA, 1967, Card 4301027.

##### *For unpublished results (subject to editor's approbation):*

- [17] A. Roberts, S.M. Lanoix, unpublished [*if not accepted for publication, subject to editor's approbation*]
- [18] D. H. Smith, Physics Department, Chicago University, Chicago, U.S.A., private commun. [*also subjected to editor's approbation*]

## Illustrations

### Présentation

Do not embed figures and tables in the core of the text. Figures should be provided only as separate, high resolution electronic files; one file per figure or element of a figure. Make sure that in the copy generated for the review process by the electronic submission system, figures are located at the end of the manuscript. This is accomplished easily by sorting the files appropriately.

**Character font.** Please use system fonts: Symbols, Times, Helvetica, or Arial only.

**Format and font size.** Illustrations must fit a one- or two-column format (8.25 or 17.75 cm overall width) on the journal page. The one-column format is strongly preferred and a figure containing one graph should not extend over two columns. Make sure to use uniform lettering and sizing of your original artwork. Please submit the line drawings in the actual size – usually 8.25 cm overall width. Original illustrations that do not need to be reduced will yield the best quality. All characters within an illustration should be at least 1.5 mm height; subscript and superscript characters should be at least 1.0 mm height. If grey or color characters are used, all characters within an illustration should be at least 2 mm height and subscript and superscript characters should be at least 1.5 mm height. All lines should be at least 0.5 pt. Ensure that nothing is hand-drawn or hand-labeled in your figures.

**Graphs.** All graphs should have four axes (top, bottom, left, right). The figure legends and the legend boxes, if any, should be enclosed in the area delimited by the four graph axes. The left and bottom axes should bear axis titles (and units) and tick marks and labels. If used, the secondary y-axis should read as the primary one, from bottom to top. All graphs within a figure should have the same width and height and, if transmitted as objects in a single page, be aligned.

### Color illustrations

Color line art will be used for the electronic version of the journal if a high quality electronic version is provided. Please carefully choose colors for them to be easy to see on the screen and to reproduce well when readers print the paper from a black and white printer. Note that a black and white copy must also be provided for the printed version of the journal.

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### Electronic format for illustrations

The following requirements are to be met:

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**File names.** Use the first author's last name and the figure number as filename, example Smith\_Fig2a.tif. Name your files using the correct software extension, e.g. \*.tif, \*.eps.

**Figures file format and resolution.** One of the following formats/resolution should be adhered to.

#### Line art:

- Graphs created in a Microsoft® compatible applications can be provided embedded in a Microsoft® PowerPoint® file if the file is saved in the native PowerPoint® format **AND** the figures prepared at their final size (8.25 cm width). Thin Solid Films does not accept Microsoft® Office Excel files.
- Send as Portable Document Format (PDF). In order to create PDF files at a suitable quality for print, authors should download and use the relevant version of the Adobe Acrobat Distiller job option file available in the Files Format menu of the artwork instructions that can be found in the pages for authors on the Elsevier web site.
- Send in as encapsulated postscript file (EPS), absolute minimum line width of 0.5 pt. Do not place bitmap images within the EPS file, but send these in as TIFF, instead, as indicated below.
- Send in as black and white TIFF files, with a minimum resolution of 1000 dpi.
- Files of scanned line drawings are acceptable only if done at a minimum of 1016 dpi.

#### Halftone and halftone-line art combination:

- Send in grey scale TIFF files, with a minimum resolution of 300 dpi (no lettering), or 500 dpi when there is lettering.
- Provided that the minimum resolution of the original TIFF files is high enough, halftone-line art combination can be send embedded in a Microsoft® PowerPoint® file if the file is saved in the native PowerPoint® format **AND** the figures prepared at their final size (8.25 cm width).

#### Color images:

- Send in as EPS files; see the Elsevier artwork instructions for color images.

Computer generated graphics should be produced in gray scale if to be published in black & white. Graphics should be created near to the size they will be finally printed. This will help with the lettering and resolution of your files, as the resolution will be lost if we have to enlarge a file.

Authors using graphic applications that do not allow a full control of the resolution of the TIFF export format should generate post-script files (\*.ps or \*.eps) directly from the application they were created with by printing their graphs to a file after choosing a generic, high-resolution post-script printer driver. Users of Originlab™ Origin, SPSS Science™ SigmaPlot®, or other similar software applications should verify the resolution of their exported TIFF files and, if necessary, generate higher resolution post-script files or provide their graphs embedded in a PowerPoint® files as indicated above.

Some useful information about artwork can be found in the pages for authors of the Elsevier web site (<http://www.elsevier.com>). Choose the “Artwork Instructions” in one of the submenus. However, always comply with the Thin Solid Films Instructions to Authors.

### After acceptance

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Authors will receive proofs, which they are requested to correct and return as soon as possible. No new material may be inserted in the text at the time of proofreading. A Note added in proof must be dated and the author must have requested and received the Editor's approval.

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