

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

- Original (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.

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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. Lyman, 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.

Conference Proceedings

- [9] 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.
- [10] P. Hones, R. Sanjinés, F. Lévy, in: B.D. Sartwell, J.H. Givens, C. Mitterer, S.L. Rohde (Eds.), *25th International Conference on Metallurgical Coatings and Thin Films*, San Diego, U.S.A., April 27-May 1, 1998, *Thin Solid Films* 332 (1998) 240.
- [11] 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

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

Industrial reports and papers

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

For specific data:

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

For unpublished results (subject to editor's approbation):

- [16] A. Roberts, S.M. Lanoix, unpublished [*if not accepted for publication, subject to editor's approbation*]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

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