

Vacuum, Surfaces, and Films

JVST Editor-in-Chief: Eray Aydil,
Department of Chemical Engineering and Materials Science, University of Minnesota

AVS Publications Office Manager: Nancy Schultheis,

Editorial Assistant: Estella K. Stansbury,
Journal of Vacuum Science and Technology, AVS Publications Office, 100 Park Drive, Suite 105,
Research Triangle Park, NC 27709, Telephone: (919) 361-2787 and (919) 361-2342;
Fax: (919) 361-1378; E-mail: jvst@jvst.org

Associate Editors:

Jane P. Chang, University of California at Los Angeles
(UCLA)

William D. Hinsberg, IBM Almaden Research Center

AVS Publications Committee:

Ivan Petrov, Chair, University of Illinois
Gregory J. Exarhos, Pacific Northwest Natl. Lab.
Sergi Kalinin, Oak Ridge National Lab.

JVST Editorial Board:

Steven L. Bernasek Princeton University
Yves J. Chabal University of Texas at Dallas
Vincent M. Donnelly University of Houston
James R. Engstrom Cornell University
Sarah R. Kurtz National Renewable Energy Laboratory
Tadatsugu Minami Kanazawa Institute of Technology
Stephen J. Pearton University of Florida

Eric Kay, Review Articles
Gary McGuire, International Technology Center
Colin A. Wolden, Colorado School of Mines

Mark H. Engelhard, Pacific Northwest Natl. Lab.
J. William Rogers, Jr., Idaho National Lab.
Winston V. Schoenfeld, Univ. of Central Florida

R. Ramesh Univ. of California at Berkeley
Jack Rowe North Carolina State University
Ellen D. Williams University of Maryland
Richard van de Sanden Eindhoven University of
Technology
Mikhail Zharnikov Universität Heidelberg

The *Journal of Vacuum Science & Technology A* is published six times annually (Jan/Feb, Mar/Apr, May/ Jun, Jul/Aug, Sep/Oct, Nov/Dec) by AVS through the American Institute of Physics (AIP). It is an official publication of AVS and is received by all members of the Society. It is devoted to reports of original research, letters and review articles. The *JVST A* will include topics such as applied and fundamental surface science, atomic layer deposition, electronic and photonic materials and their processing, magnetic thin films and interfaces, materials and thin films for energy conversion and storage, photovoltaics-including thin film solar cells and organic and hybrid solar cells, plasma science and technology including plasma-surface interactions, plasma diagnostics plasma deposition and etching and applications of plasmas to micro- and nanoelectronics, surface engineering, thin film deposition, etching, properties and characterization, transmission electron microscopy including in situ methods, tribology, vacuum science and technology. This journal will publish papers from conferences that are sponsored by AVS and its divisions. *JVST A* is available online and in CD format. When a paper is accepted for publication in *JVST A* and as soon as it is formatted and proofread, the paper will be posted on the *JVST* website with the *final archival volume and page reference*. As a member or subscriber you are eligible to receive all *JVST A* issues on-line from 1983 to present just as they appear in the hard copy version. In addition, *JVST* is available to members and subscribers dating back to its initial publication in 1964 (prior to the split into *JVST A* and *JVST B*). Please contact AVS to set up your online account.

Submit Manuscripts to the AVS Publications Peer X-Press site for *JVST A*: <http://jvsta.peerx-press.org>.

The AVS Publications Office contact information: 100 Park Drive, Ste. 105, Caller Box 13994, Research Triangle Park, North Carolina 27709-3994; e-mail: publications@avs.org. Before preparing a manuscript, authors should read "Information for Contributors," found on the journal website (Author tab) and printed in the first issue of each volume of the journal. Submission of a manuscript is a representation that the manuscript has not been published previously nor currently submitted for publication elsewhere. A copyright form is available on the submission site and must be completed by the author and submitted online or directly to the Publications Office prior to publication of an accepted paper in the *Journal of Vacuum Science & Technology A (JVST A)*. This written transfer of copyright, which previously was assumed to be implicit in the act of submitting a manuscript, is necessary under the 1978 copyright law in order for AVS and AIP to continue disseminating research results as widely as possible. Further information may be obtained from AIP.

Publication Charge: To support the cost of wide dissemination of research results through the publication of journal pages and production of a database of articles, the author's institution is requested to pay a *page charge* of \$85.00 per page without reprints or \$95.00 per page with 100 free reprints. For Errata the minimum page charge is \$10, with no free reprints. AVS members receive the benefit of having page charges waived.

Supplementary Material: Authors may submit multimedia, data tables, text, etc. for publication online alongside their manuscript. For additional information see <http://www.aip.org/pubservs/epaps.html>.

Advertising Rates For advertisement reservations, contact Deborah Bott, Advertising Sales Manager, AIP, 2 Huntington Quadrangle, Suite 1NO1, Melville, NY 11747-4502 USA. Tel. 800-247-2422 OR 516-576-2430; Fax: 516-576-2327; Email: dbott@aip.org. Find the Media Kit online at: <http://scitation.aip.org/jvsta/medkit06.pdf>

Copying: Single copies of individual articles may be made for private use or research. Authorization is given to copy articles beyond the free use permitted under Sections 107 and 108 of the U.S. Copyright Law, provided that the copying fee of \$30.00 per copy per article is paid to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA, <http://www.copyright.com>. For classroom use fees, contact CCC's Academic Permission Service. (Note: The ISSN for this journal is 0734-2101.)

Authorization does not extend to systematic or multiple reproduction, to copying for promotional purposes, to electronic storage or distribution, or to republication in any form. In all such cases, specific written permission from AIP must be obtained. Note: Copies of individual articles may also be purchased online via AIP's DocumentStore service (<http://scitation.aip.org/documentstore/>).

Other Use: See journal home page for authors web posting guidelines. Permission is granted to quote from the journal with the customary acknowledgment of the source. Republication of an article or portions thereof requires formal permission from AIP and may be subject to fees. Permission may be obtained online using Rightslink. Simply click on the Rightslink icon found on the article abstract page. You may also address requests to: AIP Office of Rights & Permissions, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; Tel.: +1 516-576-2268; Fax: +1 516- 576-2450; E-mail: rights@aip.org.

Copyright © 2012 AVS. All rights reserved.

AVS

Officers

Alison A. Baski, *President*
Virginia Commonwealth University

Angus A. Rockett,
Immediate-Past President
University of Illinois at
Urbana Champaign

Susan B. Sinnott,
President-Elect
University of Florida

Joseph E. Greene, *Secretary*
University of Illinois

Stephen M. Rossnagel, *Treasurer*
IBM T. J. Watson Research Center

Directors

Jane P. Chang
University of California at Los
Angeles (UCLA)

Steven M. George
University of Colorado at Boulder

Ian S. Gilmore
National Physical Laboratory

Lars G. Hultman
Linköping University, Sweden

Gregory N. Parsons
North Carolina State University

David Surman
Kratos Analytical, Inc.

JVST

Eray Aydil, *Editor-in-Chief*
University of Minnesota

AVS Membership Information may be obtained from

Angela Klink
AVS
125 Maiden Lane
15th Floor
New York, NY 10038
(212) 248-0200, ext. 222
angela@avs.org