PHYSICAL REVIEW B
CONDENSED MATTER AND MATERIALS PHYSICS

Editor
PETER D. ADAMS

Associate Editors
ANTHONY M. BEGLEY **ALLEN GOLAND**
KELVIN G. LYNN **FRANK NARDUCCI**
MYRON STRONGIN **MICHAEL WEINERT**

Assistant Editors
MATTHEW D. EAGER **SUSAN H. FARRANT** **JULIE KIM-ZAJONZ**
DANIEL T. KULP **BRADLEY RUBIN** **R. MARK WILSON**

EDITORIAL BOARD

Term ending 31 December 2002
JOHN R. CLEM
BARBARA A. JONES
MICHAEL R. NORMAN
DOUGLAS OSHEROFF
JOHN A. POPLE

Term ending 31 December 2003
HIDETOSHI FUKUYAMA
PATRICIA M. MOONEY
J. B. PENDRY
JOSÉ RIERA
B. SRIRAM SHASTRY

Term ending 31 December 2004
VINCENT H. CRESPI
DANIEL W. HONE
ANNA PAINELLI
Z. VALY VARDENY
D. WEAIRE

Published through the
American Institute of Physics
by
The American Physical Society

President
WILLIAM F. BRINKMAN

President-Elect
MYRIAM P. SARACHIK

Vice-President
HELEN R. QUINN

Editor-in-Chief
MARTIN BLUME

Treasurer and Publisher
THOMAS J. MCILRATH

Executive Officer
JUDY R. FRANZ

Editorial Office:

The American Physical Society
1 Research Road, Box 9000
Ridge, NY 11961-9000

Phone: (631) 591-4020
Fax: (631) 591-4141
Email: prb@aps.org
Web: http://publish.aps.org/
Submissions: prbtex@aps.org or
http://publish.aps.org/ESUB/

Production and distribution by

American Institute of Physics
Suite 1NO1
2 Huntington Quadrangle
Melville, NY 11747-4502

Phone: (516) 576-2200
Fax: (516) 576-2643
Email: prb1@aip.org

Manuscripts may be **submitted** electronically if in appropriate format (see http://publish.aps.org/ESUB/ or inquire at prbtex@aps.org). Alternatively, send three copies to the Editorial Office. Submission is a representation that the manuscript has not been published previously and is not currently under consideration for publication elsewhere. A signed APS **copyright-transfer** form (effective only on acceptance for publication) must be provided; the form is available on the APS Web server and appears at the end of the 1 July 2002 issue of *Physical Review Letters*. Information for contributors may be found on our Web server or in the January and July issues.

To help defray editorial and production expenses, authors of published articles are requested to pay a **publication charge** of \$95 per article plus \$95 per journal page. Publication charges are not requested for properly prepared electronic submissions. Acceptable formats are REVTEX (preferred), LATEX, Harvmac, plain TEX; PostScript figures. **Reprints** are offered for sale to authors.

For information about **subscription prices** and about the **online version** of the journal, see our Web server, or inquire at assocpub@aps.org. **Member** inquiries regarding **subscriptions**, renewals, address changes, missing or damaged copies, microfilm, and single-copy orders should be addressed to the APS Membership Department, One Physics Ellipse, College Park, MD 20740-3844 [phone: (301) 209-3280; fax: (301) 209-0867; email: membership@aps.org]. **Nonmembers** should address subscription inquiries to APS Subscription Services, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502 [phone: (516) 576-2270 or (800) 344-6902; fax: (516) 349-9704; email: subs@aps.org]. For address changes please send both old and new addresses, and, if possible, include an address stencil imprint from the mailing wrapper of a recent issue; allow six weeks advance notice.

Copyright 2002 by The American Physical Society

Permission to quote excerpts or to reprint any figures or tables should be obtained directly from an author. The American Physical Society for its part hereby grants permission to quote excerpts and reprint figures and/or tables from its journals with acknowledgment of the sources. **Individual** teachers, students, researchers, and libraries in nonprofit institutions acting for them are permitted to make hard copies of articles for use in teaching or research, provided such copies are not sold. **Copying of articles for sale** by document delivery services or suppliers, or beyond the free copying allowed above, is permitted against payment of a copying fee. The current copying fee is \$20.00, per article, per copy. Express permission of APS is not required, except for purposes stated below, provided that the fee is paid through the Copyright Clearance Center, Inc. (CCC), 222 Rosewood Drive, Danvers, MA 01923. Contact the CCC for information on how to report copying and remit payments. **Reproduction** in a reprint collection, or for advertising or promotional purposes, or republication in any form requires permission of one of the authors and a license from APS. Such a license must be sought from Barbara Hicks, Associate Publisher, The American Physical Society, One Physics Ellipse, College Park, MD 20740-3844. Permission from the author must be sought and obtained from him or her directly.

Physical Review B (ISSN: 0163-1829; CODEN PRBMDO; printed in USA) is published four times a month (twice on the 1st and twice on the 15th of each month) by The American Physical Society through the American Institute of Physics.

POSTMASTER: Send address changes to Physical Review B, APS Subscription Services, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502. The 2002 print + online subscription price is \$5465 Academic Base; \$6015 Carnegie Doctoral/Equivalent; \$6570 Carnegie Research/Equivalent/Corporate & Government. Periodicals postage rates are paid at Huntington Station, NY, and additional mailing offices.