

PHYSICAL REVIEW B

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 0163-1829)

PERIODICALS

Postmaster send address changes to:
American Institute of Physics
Suite 1NO1
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 60, NUMBER 12

CONTENTS

15 SEPTEMBER 1999-II

RAPID COMMUNICATIONS

Electronic structure: wide-band, narrow-band, and strongly correlated systems

- Charge-order transition in the extended Hubbard model on a two-leg ladder R8417
Matthias Vojta, R. E. Hetzel, and R. M. Noack
- Destruction of the Mott insulating ground state of Ca_2RuO_4 by a structural transition R8422
C. S. Alexander, G. Cao, V. Dobrosavljevic, S. McCall, J. E. Crow, E. Lochner, and R. P. Guertin
- Electronic-structure evolution through the metal-insulator transition in RNiO_3 R8426
I. Vobornik, L. Perfetti, M. Zacchigna, M. Grioni, G. Margaritondo, J. Mesot, M. Medarde, and P. Lacorre
- Ultrasound investigations of orbital quadrupolar ordering in UPd_3 R8430
N. Lingg, D. Maurer, V. Müller, and K. A. McEwen
- Field scaling and exponential temperature dependence of the magnetoresistance in $(\text{TMTSF})_2\text{PF}_6$ R8434
G. Kriza, G. Szeghy, I. Kézsmárki, and G. Mihály
- Theoretical study of the optical conductivity of α' - NaV_2O_5 R8438
Mario Cuoco, Peter Horsch, and Frank Mack
- Resonant enhancement effect on two-photon absorption due to excitons in alkaline-earth fluorides excited with
synchrotron radiation and laser light R8442
Toru Tsujibayashi, Masayuki Watanabe, Osamu Arimoto, Minoru Itoh, Shunsuke Nakanishi, Hiroshi Itoh,
Shuji Asaka, and Masao Kamada

Semiconductors I: bulk

- Ab initio* calculation of hyperfine interactions for the $^5\text{A}_2$ excited state of the neutral vacancy in diamond R8446
U. Gerstmann, M. Amkreutz, and H. Overhof
- Instability of the high-pressure CsCl structure in most III-V semiconductors R8449
Kwiseon Kim, V. Ozoliņš, and Alex Zunger
- Experimental evidence for the effect of nonequilibrium acoustic plasmons on carrier relaxation in bulk
semiconductors R8453
J. F. Lampin, F. X. Camescasse, A. Alexandrou, M. Bonitz, and V. Thierry-Mieg

Semiconductors II: surfaces, interfaces, microstructures, and related topics

- Berry phase and persistent current in disordered mesoscopic rings R8457
Shiro Kawabata
- Hydrogen-desorption kinetic measurement on the $\text{Si}(100)\text{-}2\times 1\text{:H}$ surface by directly counting desorption sites R8461
Deng-Sung Lin and Ru-Ping Chen
- Adsorption process of metastable molecular oxygen on a $\text{Si}(111)\text{-(}7\times 7\text{)}$ surface R8465
Kazuyuki Sakamoto, Satoshi Doi, Yoshimitsu Ushimi, Kenichi Ohno, Han Woong Yeom, Toshiaki Ohta,
Shozo Suto, and Wakio Uchida

