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
500 Sunnyside Boulevard
Woodbury, NY 11797-2999

THIRD SERIES, VOLUME 57, NUMBER 21 ***CONTENTS*** **1 JUNE 1998-I**

BRIEF REPORTS

Structure, structural phase transitions, mechanical properties, defects, etc.

Quantitative density-functional study of nested fullerenes 13 339
M. I. Heggie, M. Terrones, B. R. Eggen, G. Jungnickel, R. Jones, C. D. Latham, P. R. Briddon, and H. Terrones

Impurity-induced phase transition in quantum paraelectrics 13 343
Y. G. Wang, W. Kleemann, W. L. Zhong, and L. Zhang

High-pressure elastic properties of liquid and solid ammonia 13 347
T. Kume, M. Daimon, S. Sasaki, and H. Shimizu

Inhomogeneous, disordered, and partially ordered systems

Limits on the continuum-percolation transport exponents 13 351
I. Balberg

Dynamics, dynamical systems, lattice effects, quantum solids, etc.

Total energy calculations of the lattice properties of cubic and hexagonal diamond 13 355
B. R. Wu and Ji-an Xu

Thermal properties of intrinsically disordered $LiNbO_3$ crystals at low temperatures 13 359
E. Pérez-Enciso and S. Vieira

Bubble model for positronium annihilation in liquids 13 363
Tapas Mukherjee, Subir Kumar Das, Bichitra Nandi Ganguly, and Binayak Dutta-Roy

Magnetism

Symmetry properties of magnetization in the Hubbard model at finite temperatures 13 367
Gang Su and Masuo Suzuki

Dynamical properties of the compounds $CuGeO_3$ and α'-NaV_2O_5 at nonzero temperatures 13 371
K. Fabricius and U. Löw

Derivation of the t-J model: Electron spectrum and exchange interactions in narrow energy bands 13 375
V. Yu. Irkhin

Magnetic phase transition in (La,Na) manganites 13 379
M. M. Savosta, V. A. Borodin, P. Novák, Z. Jirák, J. Hejtmánek, and M. Maryško

Role of winding numbers in quantum Monte Carlo simulations 13 382
Patrik Henelius, S. M. Girvin, and Anders W. Sandvik

Modification of the rare-earth magnetic moment upon hydrogen absorption in R-Fe intermetallics probed by Fe K-edge x-ray magnetic circular dichroism 13 386
J. Chaboy, L. M. García, F. Bartolomé, H. Maruyama, A. Marcelli, and L. Bozukov

Superfluidity and superconductivity

Growth of the normal-flow instability of a vortex array in two-component HeII 13 390
E. Infeld and T. Lenkowska-Czerwińska

Damping of the vortex motion in the electron-doped superconductor $Nd_{1.85}Ce_{0.15}CuO_x$ 13 393
R. P. Huebener and F. Gollnik

(Continued)

0163-1829(19980601)57:21;1-Z