PHYSICAL REVIEW B THIRD SERIES, VOLUME 59, NUMBER 2 1 JANUARY 1999-II

Expansion of the vortex cores in $YBa_2Cu_3O_{6.95}$ at low magnetic fields R729
J. E. Sonier, R. F. Kiefl, J. H. Brewer, D. A. Bonn, S. R. Dunsiger, W. N. Hardy, R. Liang, R. I. Miller, D. R. Noakes, and C. E. Stronach

ARTICLES

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

Small rings and amorphous tetrahedral carbon 733
Peter A. Schultz, Kevin Leung, and E. B. Stechel
Electrochemical properties of spinel Li_xCoO_2: A first-principles investigation 742
A. Van der Ven and G. Ceder
Pressure-induced phase transitions in AgCl, AgBr, and AgI 750
S. Hull and D. A. Keen
First-principles study on electronic structures and phase stability of MnO and FeO under high pressure 762
Zhong Fang, Igor V. Solovyev, Hideaki Sawada, and Kiyoyuki Terakura
Temperature dependence of Raman scattering and anharmonicity study of MgF_2 775
A. Perakis, E. Sarantopoulou, Y. S. Raptis, and C. Raptis

Inhomogeneous, disordered, and partially ordered systems

Surface structure of liquid metals and the effect of capillary waves: X-ray studies on liquid indium 783
H. Tostmann, E. DiMasi, P. S. Pershan, B. M. Ocko, O. G. Shpyrko, and M. Deutsch
Motion of twist defects in crystalline polyethylene: A molecular-dynamics study 792
Fei Zhang
Ab initio study of structural and electronic properties of yttria-stabilized cubic zirconia 797
G. Stapper, M. Bernasconi, N. Nicoloso, and M. Parrinello
Collective jumps in a soft-sphere glass 811
C. Oligschleger and H. R. Schober
Diffuse scattering from decagonal quasicrystals 822
Jianlin Lei, Renhui Wang, Chengzheng Hu, and Di-hua Ding
Polyanionic and octet phases in the K-Sb system. I. Crystalline intermetallic compounds 829
K. Seifert-Lorenz and J. Hafner
Polyanionic and octet phases in the K-Sb system. II. Liquid alloys 843
K. Seifert-Lorenz and J. Hafner
Spin-glass effects on critical behavior in systems with extended quenched disorder 855
L. De Cesare and M. T. Mercaldo
Influence of phason flips on electronical properties of quasicrystalline model systems 861
H. Schwabe, G. Kasner, and H. Böttger
Three-band Anderson-Mott-Hubbard model for the metal-insulator transition in cubic disordered tungsten bronzes Na_xWO_3 and $Na_xTa_yW_{1-y}O_3$ 871
Hartmut Dücker, Wolfgang von Niessen, Thorsten Koslowski, Michael A. Tusch, and David E. Logan
First-principles studies of the $\Sigma 5$ tilt grain boundary in Ni_3Al 891
Gang Lu, Nicholas Kioussis, R. Wu, and Mikael Ciftan
Activation energy and conductivity relaxation of sodium tellurite glasses 899
A. Pan and A. Ghosh
ac transport studies in polymers by resistor-network and transfer-matrix approaches: Application to polyaniline ... 905
H. N. Nagashima, R. N. Onody, and R. M. Faria
Dielectric susceptibility of the Coulomb glass 910
A. Díaz-Sánchez, M. Ortuño, M. Pollak, A. Pérez-Garrido, and A. Möbius

(Continued)