

PHYSICAL REVIEW B

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 1098-0121)

PERIODICALS

Postmaster send address changes to:
APS Subscription Services
Suite 1N01
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 78, NUMBER 22

CONTENTS

DECEMBER 2008-1(II)

RAPID COMMUNICATIONS

Structure, structural phase transitions, mechanical properties, defects

- High-pressure nanocrystalline structure of a shock-compressed single crystal of iron (*4 pages*) 220101(R)
James A. Hawreliak, Daniel H. Kalantar, James S. Stölken, Bruce A. Remington, Hector E. Lorenzana,
and Justin S. Wark

Magnetism

- Almeida-Thouless transition below six dimensions (*4 pages*) 220401(R)
T. Temesvári
- ⌘ Breakdown of magnetic order in Mott insulators with frustrated superexchange interaction (*4 pages*) 220402(R)
J.-S. Zhou, Y. Uwatoko, K. Matsubayashi, and J. B. Goodenough
- Unconventional spin freezing and fluctuations in the frustrated antiferromagnet NiGa_2S_4 (*4 pages*) 220403(R)
D. E. MacLaughlin, Y. Nambu, S. Nakatsuji, R. H. Heffner, Lei Shu, O. O. Bernal, and K. Ishida
- Optical evidence of mixed-phase behavior in manganite films (*4 pages*) 220404(R)
P. Gao, T. A. Tyson, Z. Liu, M. A. DeLeon, and C. Dubourdieu
- Spin correlations in the geometrically frustrated pyrochlore $\text{Tb}_2\text{Mo}_2\text{O}_7$ (*4 pages*) 220405(R)
D. K. Singh, J. S. Helton, S. Chu, T. H. Han, C. J. Bonnoit, S. Chang, H. J. Kang, J. W. Lynn, and
Y. S. Lee

Superfluidity and superconductivity

- High-energy spin excitations in BaFe_2As_2 observed by inelastic neutron scattering (*4 pages*) 220501(R)
R. A. Ewings, T. G. Perring, R. I. Bewley, T. Guidi, M. J. Pitcher, D. R. Parker, S. J. Clarke, and
A. T. Boothroyd
- Electronic structure of $\text{LaFeAsO}_{1-x}\text{F}_x$ from x-ray absorption spectroscopy (*4 pages*) 220502(R)
T. Kroll, S. Bonhommeau, T. Kachel, H. A. Dürr, J. Werner, G. Behr, A. Koitzsch, R. Hübel,
S. Leger, R. Schönfelder, A. K. Ariffin, R. Manzke, F. M. F. de Groot, J. Fink, H. Eschrig, B. Büchner,
and M. Knapfer
- X-ray spectra and electronic structures of the iron arsenide superconductors $R\text{FeAsO}_{1-x}\text{F}_x$ ($R=\text{La}, \text{Sm}$)
(*4 pages*) 220503(R)
E. Z. Kurmaev, R. G. Wilks, A. Moewes, N. A. Skorikov, Yu. A. Izyumov, L. D. Finkelstein,
R. H. Li, and X. H. Chen



Copyright 2008 by The American Physical Society



1098-0121(20081201)78:22;1-J

(Continued)

⌘ Selected for a Viewpoint in *Physics*. Please visit <http://physics.aps.org/>.

⌘ The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).