

Extended cluster algorithm in quantum simulations (<i>4 pages</i>)	020406(R)
Hiromi Otsuka	
Magnetic excitations in a nanocontact (<i>3 pages</i>)	020407(R)
J. M. D. Coey, L. Berger, and Y. Labaye	
Superfluidity and superconductivity	
Electron-phonon interaction in the normal and superconducting states of MgB_2 (<i>4 pages</i>)	020501(R)
Y. Kong, O. V. Dolgov, O. Jepsen, and O. K. Andersen	
Electronic structure of superconducting MgB_2 and related binary and ternary borides (<i>4 pages</i>)	020502(R)
N. I. Medvedeva, A. L. Ivanovskii, J. E. Medvedeva, and A. J. Freeman	
Tunneling spectroscopy in the magnetic superconductor $\text{TmNi}_2\text{B}_2\text{C}$ (<i>4 pages</i>)	020503(R)
H. Suderow, P. Martinez-Samper, N. Luchier, J. P. Brison, S. Vieira, and P. C. Canfield	
Polarization-dependent x-ray-absorption spectroscopy of $\text{RNi}_2\text{B}_2\text{C}$ ($R = \text{Er to Lu}$): Reduced Ni-3 <i>d</i> occupancy in $\text{YbNi}_2\text{B}_2\text{C}$ (<i>4 pages</i>)	020504(R)
Chandan Mazumdar, Z. Hu, H. von Lips, M. S. Golden, J. Fink, P. C. Canfield, and G. Kaindl	
Thermal transport properties of MgB_2 (<i>3 pages</i>)	020505(R)
T. Muranaka, J. Akimitsu, and M. Sera	
Interlayer coupling in ultrathin high- T_c artificial structures (<i>4 pages</i>)	020506(R)
G. Balestrino, S. Lavanga, P. G. Medaglia, P. Orgiani, and A. Tebano	
Role of electron-electron correlation in the valence states of $\text{YBa}_2\text{Cu}_3\text{O}_7$: Low-energy excitations and Fermi surface (<i>4 pages</i>)	020507(R)
S. Monastera, F. Manghi, and C. Ambrosch-Draxl	
Surface electronic structures of superconducting thin film $\text{MgB}_2(0001)$ (<i>4 pages</i>)	020508(R)
In Gee Kim, J. I. Lee, B. I. Min, and A. J. Freeman	
Magnetic phase diagram of $\text{Ca}_{2-x}\text{Sr}_x\text{RuO}_4$ governed by structural distortions (<i>4 pages</i>)	020509(R)
Z. Fang and K. Terakura	
Flux-flow resistivity in UPt_3 : Evidence for nonsingular vortex-core structure (<i>4 pages</i>)	020510(R)
N. Lütke-Entrup, R. Blaauwgeers, B. Plaçais, A. Huxley, S. Kambe, M. Krusius, P. Mathieu, and Y. Simon	

ARTICLES

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

Interaction of vacancies with a grain boundary in aluminum: A first-principles study (<i>7 pages</i>)	024101
Gang Lu and Nicholas Kioussis	
Nonresonant inelastic x-ray scattering study of cubic boron nitride (<i>5 pages</i>)	024102
S. Galambosi, J. A. Soininen, K. Hämäläinen, Eric L. Shirley, and C.-C. Kao	
Phase behavior of the N_2 -Ar system at high pressures: A Raman spectroscopy study (<i>6 pages</i>)	024103
H. T. Lotz and J. A. Schouten	
Grain boundary sliding and migration: Effect of temperature and vacancies (<i>7 pages</i>)	024104
Peter Ballo, Nicholas Kioussis, and Gang Lu	
Dielectric relaxation and order-parameter dynamics in lawsonite (<i>6 pages</i>)	024105
P. Sondergeld, W. Schranz, A. Tröster, H. Kabelka, H. Meyer, M. A. Carpenter, Z. Lodziana, and A. V. Kityk	
Antiphase structures of an improper ferroelastic phase transition driven by an M_5^- zone boundary phonon in $\text{RAg}_{1-x}\text{In}_x$ (<i>12 pages</i>)	024106
Wenwu Cao, Avadh Saxena, and Dorian M. Hatch	