

## RAPID COMMUNICATIONS

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

- Thermal and nonthermal melting of gallium arsenide after femtosecond laser excitation ..... R11 805  
K. Sokolowski-Tinten, J. Bialkowski, M. Boing, A. Cavalleri, and D. von der Linde
- Structure of crystalline methanol at high pressure ..... R11 809  
David R. Allan, Stewart J. Clark, Marco J. P. Brugmans, Graeme J. Ackland, and Willem L. Vos

### Inhomogeneous, disordered, and partially ordered systems

- Ab initio* molecular dynamics of expanded liquid sodium ..... R11 813  
S. R. Bickham, O. Pfaffenzeller, L. A. Collins, J. D. Kress, and D. Hohl
- Kinetic process of mechanical alloying in  $\text{Fe}_{50}\text{Cu}_{50}$  ..... R11 817  
J. Y. Huang, J. Z. Jiang, H. Yasuda, and H. Mori

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

- Defect energy with conjugate boundary conditions in spin-glass models in two dimensions ..... R11 821  
F. Matsubara, T. Shirakura, and M. Shiomi
- Spin coherence excitation and rephasing with optically shelved atoms ..... R11 825  
B. S. Ham, M. S. Shahriar, M. K. Kim, and P. R. Hemmer
- Electric-field distribution in composite media ..... R11 829  
D. Cule and S. Torquato

### Magnetism

- Spectral function of the spiral spin state in the trestle and ladder Hubbard model ..... R11 833  
Ryotaro Arita, Koichi Kusakabe, Kazuhiko Kuroki, and Hideo Aoki
- Anomalous ferromagnetic spin fluctuations in an antiferromagnetic insulator  $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$  ..... R11 837  
R. Kajimoto, T. Kakeshita, Y. Oohara, H. Yoshizawa, Y. Tomioka, and Y. Tokura
- Orbital dynamics: The origin of the anomalous optical spectra in ferromagnetic manganites ..... R11 841  
R. Kilian and G. Khaliullin
- Exactly solvable models of unconventional magnetic alloys: Bethe ansatz versus renormalization-group method ... R11 845  
Valery I. Rupasov
- Susceptibility inhomogeneity and non-Fermi-liquid behavior in nominally ordered  $\text{UCu}_4\text{Pd}$  ..... R11 849  
D. E. MacLaughlin, R. H. Heffner, G. J. Nieuwenhuys, G. M. Luke, Y. Fudamoto, Y. J. Uemura, R. Chau, M. B. Maple, and B. Andraka
- Enhanced orbital magnetism at the nanostructured  $\text{Co/Cu}(1\ 1\ 13)$  surface ..... R11 853  
H. A. Dürr, G. van der Laan, J. Vogel, G. Panaccione, N. B. Brookes, E. Dudzik, and R. McGrath



|                                                                                                                         |         |
|-------------------------------------------------------------------------------------------------------------------------|---------|
| Ultrafast optical modulation of an exchange biased ferromagnetic/antiferromagnetic bilayer .....                        | R11 857 |
| Ganping Ju, A. V. Nurmikko, R. F. C. Farrow, R. F. Marks, M. J. Carey, and B. A. Gurney                                 |         |
| In-plane magnetization of an ultrathin film of $\text{Fe}_3\text{O}_4(111)$ grown epitaxially on $\text{Pt}(111)$ ..... | R11 861 |
| F. Schedin, L. Hewitt, P. Morrall, V. N. Petrov, G. Thornton, S. Case, M. F. Thomas, and V. M. Uzdin                    |         |
| Influence of magnetization on the reordering of nanostructured ball-milled Fe-40 at. % Al powders .....                 | R11 864 |
| A. Hernando, X. Amils, J. Nogués, S. Suriñach, M. D. Baró, and M. R. Ibarra                                             |         |

**Superfluidity and superconductivity**

|                                                                                               |         |
|-----------------------------------------------------------------------------------------------|---------|
| Metallic stripes: Separation of spin, charge, and string fluctuation .....                    | R11 868 |
| J. Zaanen, O. Y. Osman, and W. van Saarloos                                                   |         |
| Superconducting proximity effect in a mesoscopic ferromagnetic wire .....                     | R11 872 |
| M. Giroud, H. Courtois, K. Hasselbach, D. Mailly, and B. Pannetier                            |         |
| Magnetic properties of Eu-doped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ studied by ESR ..... | R11 876 |
| V. Kataev, B. Rameev, A. Validov, B. Büchner, M. Hücker, and R. Borowski                      |         |

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

|                                                                                                                                                                                  |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Internal friction of ceramic single crystals at very high temperature .....                                                                                                      | 11 880 |
| Giuseppe Pezzotti and Ken'ichi Ota                                                                                                                                               |        |
| Diffraction-pattern calculation and phase identification of hypothetical crystalline $\text{C}_3\text{N}_4$ .....                                                                | 11 890 |
| Jianbo Wang, Jianlin Lei, and Renhui Wang                                                                                                                                        |        |
| Coherent quasielastic Bragg scattering from single crystals containing fast diffusers .....                                                                                      | 11 896 |
| K. Ruebenbauer and U. D. Wdowik                                                                                                                                                  |        |
| Neutron diffraction determination of the thermodynamic derivatives of the microscopic structure of liquid parahydrogen .....                                                     | 11 905 |
| M. Zoppi, M. Celli, and A. K. Soper                                                                                                                                              |        |
| Theory of reconstructive phase transitions between $\text{SiO}_2$ polymorphs .....                                                                                               | 11 911 |
| V. P. Dmitriev, P. Tolédano, V. I. Torgashev, and E. K. H. Salje                                                                                                                 |        |
| Phase transitions of $\text{BaSi}_2$ at high pressures and high temperatures .....                                                                                               | 11 922 |
| Motoharu Imai, Toshiyuki Hirano, Takumi Kikegawa, and Osamu Shimomura                                                                                                            |        |
| Generalized stacking-fault energetics and dislocation properties: Compact versus spread unit-dislocation structures in $\text{TiAl}$ and $\text{CuAu}$ .....                     | 11 927 |
| Oleg N. Mryasov, Yu. N. Gornostyrev, and A. J. Freeman                                                                                                                           |        |
| Elastic properties of $\text{CD}_4$ single crystals in phases I, II, and III .....                                                                                               | 11 933 |
| E. Gregoryanz and M. J. Clouter                                                                                                                                                  |        |
| Orientational phase transitions in molecular $\text{N}_2$ solids: A path-integral Monte Carlo study .....                                                                        | 11 937 |
| M. Presber, D. Löding, R. Martoňák, and P. Nielaba                                                                                                                               |        |
| Effect of pressure and temperature on $4f$ - $4f$ luminescence properties of $\text{Sm}^{2+}$ ions in $\text{MFCl}$ crystals ( $M = \text{Ba}, \text{Sr}, \text{and Ca}$ ) ..... | 11 944 |
| Yongrong Shen and Kevin L. Bray                                                                                                                                                  |        |
| Applications of the generalized gradient approximation to ferroelectric perovskites .....                                                                                        | 11 959 |
| S. Tinte, M. G. Stachiotti, C. O. Rodriguez, D. L. Novikov, and N. E. Christensen                                                                                                |        |
| Lattice distortions around a $\text{Tl}^+$ impurity in $\text{NaI:Tl}^+$ and $\text{CsI:Tl}^+$ scintillators: An <i>ab initio</i> study involving large active clusters .....    | 11 964 |
| Andrés Aguado, Andrés Ayuela, José M. López, and Julio A. Alonso                                                                                                                 |        |

|                                                                                                                                                           |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Measurement and models of electron-energy-loss spectroscopy core-level shifts in nickel aluminum intermetallics .....                                     | 11 970 |
| David A. Muller, Philip E. Batson, and John Silcox                                                                                                        |        |
| <b>Inhomogeneous, disordered, and partially ordered systems</b>                                                                                           |        |
| Atomic ordering in $\text{Ca}_{x/2}\text{Al}_x\text{Si}_{1-x}\text{O}_2$ glasses ( $x=0,0.34,0.5,0.68$ ) by energy-dispersive x-ray diffraction .....     | 11 982 |
| V. Petkov, Th. Gerber, and B. Himmel                                                                                                                      |        |
| Nonperiodic hexagonal square-triangle tilings .....                                                                                                       | 11 990 |
| R. Paredes, J. L. Aragón, and R. A. Barrio                                                                                                                |        |
| Persistent spectral hole burning spectroscopy of the $T_{1u} \leftarrow A_{1g}$ (690 nm) line in the $\text{CaF}_2\text{:Sm}^{2+}$ system .....           | 11 996 |
| W. Beck, D. Ricard, and C. Flytzanis                                                                                                                      |        |
| Negative correlation energy and valence alternation in amorphous selenium: An <i>in situ</i> optically induced ESR study .....                            | 12 004 |
| A. V. Kolobov, M. Kondo, H. Oyanagi, A. Matsuda, and K. Tanaka                                                                                            |        |
| <b>Dynamics, dynamical systems, lattice effects, quantum solids, etc.</b>                                                                                 |        |
| Existence of free and self-trapped positronium states in alkali halide crystals: Theoretical analysis and comparison with experiment .....                | 12 011 |
| I. V. Bondarev                                                                                                                                            |        |
| Site symmetries, bleaching behavior, and thermal stability of hydrogenic centers in $\text{SrF}_2\text{:Pr}^{3+}$ and $\text{CaF}_2\text{:Pr}^{3+}$ ..... | 12 020 |
| K. M. Murdoch and G. D. Jones                                                                                                                             |        |
| Universal critical-scattering function: An experimental approach .....                                                                                    | 12 038 |
| Pierre Damay, Françoise Leclercq, Renato Magli, Ferdinando Formisano, and Peter Lindner                                                                   |        |
| Frequency-dependent hopping conductivity between silicon nanocrystallites: Application to porous silicon .....                                            | 12 044 |
| E. Lampin, C. Delerue, M. Lannoo, and G. Allan                                                                                                            |        |
| <b>Magnetism</b>                                                                                                                                          |        |
| Low-temperature properties of classical geometrically frustrated antiferromagnets .....                                                                   | 12 049 |
| R. Moessner and J. T. Chalker                                                                                                                             |        |
| Diagonalization in reduced Hilbert spaces using a systematically improved basis: Application to spin dynamics in lightly doped ladders .....              | 12 063 |
| E. Dagotto, G. B. Martins, J. Riera, A. L. Malvezzi, and C. Gazza                                                                                         |        |
| Magnetic properties of hard/soft composites: $\text{SmCo}_5/\text{Co}_{1-x}\text{Fe}_x$ .....                                                             | 12 071 |
| R. F. Sabiryanov and S. S. Jaswal                                                                                                                         |        |
| High-energy paramagnetic spin fluctuations in nickel .....                                                                                                | 12 075 |
| P. Rusek and J. A. Blackman                                                                                                                               |        |
| Numerical study of a short-range $p$ -spin glass model in three dimensions .....                                                                          | 12 081 |
| Matteo Campellone, Barbara Coluzzi, and Giorgio Parisi                                                                                                    |        |
| Effect of exchange interactions at antiferromagnetic/ferromagnetic interfaces on exchange bias and coercivity .....                                       | 12 090 |
| D. V. Dimitrov, Shufeng Zhang, J. Q. Xiao, G. C. Hadjipanayis, and C. Prados                                                                              |        |
| Low-temperature specific heat and magnetic susceptibility near the pressure-induced quantum phase transition in $\text{Ce}_7\text{Ni}_3$ .....            | 12 095 |
| K. Umeo, T. Takabatake, H. Ohmoto, T. Pietrus, H. v. Löhneysen, K. Koyama, S. Hane, and T. Goto                                                           |        |
| Analysis realized by means of unitary transformations of the Kondo Hamiltonian of the different phases in the Kondo lattices .....                        | 12 100 |
| F. López-Aguilar                                                                                                                                          |        |
| Influence of the crystalline electrical field on the magnetocaloric effect of $\text{DyAl}_2$ , $\text{ErAl}_2$ , and $\text{DyNi}_2$ .....               | 12 110 |
| P. J. von Ranke, V. K. Pecharsky, and K. A. Gschneidner, Jr.                                                                                              |        |

|                                                                                                                                                                                                             |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Magnetic response function of the itinerant ferromagnet $\text{CeFe}_2$ .....                                                                                                                               | 12 117 |
| L. Paolasini, P. Dervenagas, P. Vulliet, J.-P. Sanchez, G. H. Lander, A. Hiess, A. Panchula, and P. Canfield                                                                                                |        |
| Lattice dynamics of cubic Laves phase ferromagnets .....                                                                                                                                                    | 12 125 |
| L. Paolasini, B. Hennion, A. Panchula, K. Myers, and P. Canfield                                                                                                                                            |        |
| Spin dynamics in $\text{CoPt}_3$ alloy films: A magnetic phase transition in the femtosecond time scale .....                                                                                               | 12 134 |
| E. Beaurepaire, M. Maret, V. Halté, J.-C. Merle, A. Daunois, and J.-Y. Bigot                                                                                                                                |        |
| Quantum depinning of a domain wall in a magnetic field .....                                                                                                                                                | 12 138 |
| Gwang-Hee Kim                                                                                                                                                                                               |        |
| Model of exchange-field penetration in nanocrystalline $\text{Fe}_{87}\text{Zr}_6\text{B}_6\text{Cu}$ alloys from magnetic and Mössbauer studies .....                                                      | 12 147 |
| J. S. Garitaonandia, D. S. Schmool, and J. M. Barandiarán                                                                                                                                                   |        |
| Magnetic evolution of the amorphous and nanocrystalline phases and interphase coupling during the crystallization of $\text{Fe}_{87}\text{Zr}_6\text{B}_6\text{Cu}$ : A ferromagnetic resonance study ..... | 12 159 |
| D. S. Schmool, J. S. Garitaonandia, and J. M. Barandiarán                                                                                                                                                   |        |
| Magnetic properties of dipolar interacting single-domain particles .....                                                                                                                                    | 12 169 |
| D. Kechrakos and K. N. Trohidou                                                                                                                                                                             |        |
| Static magnetic properties and relaxation of the insulating spin glass $\text{Co}_{1-x}\text{Mn}_x\text{Cl}_2 \cdot \text{H}_2\text{O}$ .....                                                               | 12 178 |
| G. C. DeFotis, G. S. Coker, J. W. Jones, C. S. Branch, H. A. King, J. S. Bergman, S. Lee, and J. R. Goodey                                                                                                  |        |
| Exchange-spring behavior in epitaxial hard/soft magnetic bilayers .....                                                                                                                                     | 12 193 |
| Eric E. Fullerton, J. S. Jiang, M. Grimsditch, C. H. Sowers, and S. D. Bader                                                                                                                                |        |
| Memory effects in individual submicrometer ferromagnets .....                                                                                                                                               | 12 201 |
| J. G. S. Lok, A. K. Geim, J. C. Maan, S. V. Dubonos, L. Theil Kuhn, and P. E. Lindelof                                                                                                                      |        |
| Simulations of spin dynamics in cobalt-based magnetic multilayers .....                                                                                                                                     | 12 207 |
| M. A. Wongsam and R. W. Chantrell                                                                                                                                                                           |        |
| Magnetic properties of 3d transition-metal nanostructures: Cr and V clusters embedded in bulk Fe .....                                                                                                      | 12 216 |
| P. Alvarado, J. Dorantes-Dávila, and G. M. Pastor                                                                                                                                                           |        |
| Pressure effects on the transport and magnetic properties of $\text{La}_{1.4}\text{Sr}_{1.6}\text{Mn}_2\text{O}_7$ .....                                                                                    | 12 224 |
| C. F. Chang, P. H. Chou, H. L. Tsay, S. S. Weng, S. Chatterjee, H. D. Yang, R. S. Liu, C. H. Shen, and W.-H. Li                                                                                             |        |
| Giant magnetoresistance of copper/permalloy multilayers .....                                                                                                                                               | 12 230 |
| P. Holody, W. C. Chiang, R. Loloee, J. Bass, W. P. Pratt, Jr., and P. A. Schroeder                                                                                                                          |        |
| NMR in manganese perovskites: Detection of spatially varying electron states in domain walls .....                                                                                                          | 12 237 |
| G. Papavassiliou, M. Fardis, F. Milia, M. Pissas, G. Kallias, D. Niarchos, C. Dimitropoulos, and P. Scherrer                                                                                                |        |
| Mechanisms for giant isotope effects in manganites and other oxide semiconductors .....                                                                                                                     | 12 242 |
| E. L. Nagaev                                                                                                                                                                                                |        |
| Size effect on the electron-spin resonance of $\text{Pr}_{0.7}\text{Sr}_{0.3-x}\text{Ca}_x\text{MnO}_3$ .....                                                                                               | 12 247 |
| R. Gundakaram, J. G. Lin, and C. Y. Huang                                                                                                                                                                   |        |
| Critical phenomena at the spin-Peierls transition in doped $\text{CuGeO}_3$ .....                                                                                                                           | 12 252 |
| M. D. Lumsden, B. D. Gaulin, and H. Dabkowska                                                                                                                                                               |        |
| Magnetic properties of multiband $U=\infty$ Hubbard model on anisotropic triangular and rectangular lattice strips ...                                                                                      | 12 260 |
| V. O. Chervanovskii, O. Esenturk, and H. O. Pamuk                                                                                                                                                           |        |
| Onsager-field study of the magnetism of the Hubbard model .....                                                                                                                                             | 12 267 |
| Hiroyuki Kaga and Michel Cyrot                                                                                                                                                                              |        |
| Rare-earth contributions to the x-ray magnetic circular dichroism at the Co K edge in rare-earth-cobalt compounds investigated by multiple-scattering calculations .....                                    | 12 271 |
| J. P. Rueff, R. M. Galéra, Ch. Giorgetti, E. Dartyge, Ch. Brouder, and M. Alouani                                                                                                                           |        |

**Superfluidity and superconductivity**

|                                                                                                                                                                                                                                           |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Single-particle and Fermi-liquid properties of $^3\text{He}$ - $^4\text{He}$ mixtures: A microscopic analysis .....                                                                                                                       | 12 282 |
| E. Krotscheck, J. Paaso, M. Saarela, K. Schörkhuber, and R. Zillich                                                                                                                                                                       |        |
| Spin-polarized $^3\text{He}$ in a density-functional frame .....                                                                                                                                                                          | 12 300 |
| S. M. Gatica, E. S. Hernández, and J. Navarro                                                                                                                                                                                             |        |
| Interband pairing theory of superconductivity .....                                                                                                                                                                                       | 12 307 |
| Jamil Tahir-Kheli                                                                                                                                                                                                                         |        |
| Electronic structure of $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ : Characterization of a Fermi-level band crossing .....                                                                                                            | 12 323 |
| Jason K. Perry and Jamil Tahir-Kheli                                                                                                                                                                                                      |        |
| Parity effect in a small superconducting grain: A rigorous result .....                                                                                                                                                                   | 12 333 |
| Guang-Shan Tian and Lei-Han Tang                                                                                                                                                                                                          |        |
| Conductance suppression in normal-metal-superconductor mesoscopic structures .....                                                                                                                                                        | 12 338 |
| R. Seviour, C. J. Lambert, and A. F. Volkov                                                                                                                                                                                               |        |
| Thermopower measurements of high-temperature superconductors: Experimental artifacts due to applied thermal gradient and a technique for avoiding them .....                                                                              | 12 344 |
| M. Putti, M. R. Cimberle, A. Canesi, C. Foglia, and A. S. Siri                                                                                                                                                                            |        |
| Microscopic phase separation in $\text{La}_2\text{CuO}_{4+x}$ induced by the superconducting transition .....                                                                                                                             | 12 350 |
| V. Yu. Pomjakushin, A. A. Zakharov, A. M. Balagurov, F. N. Gygax, A. Schenck, A. Amato, D. Herlach, A. I. Beskrovny, V. N. Duginov, Yu. V. Obukhov, A. N. Ponomarev, and S. N. Barilo                                                     |        |
| Scaling of magnetization and some basic parameters of $\text{Ba}_{1-x}\text{K}_x\text{BiO}_{3+y}$ superconductors near $T_c$ .....                                                                                                        | 12 355 |
| S. N. Barilo, S. V. Shiryayev, V. I. Gatskaya, J. W. Lynn, M. Baran, H. Szymczak, R. Szymczak, and D. Dew-Hughes                                                                                                                          |        |
| Phonon Raman study of the $\text{NdBa}_2\text{Cu}_3\text{O}_y$ - $\text{Nd}_2\text{Ba}_1\text{Cu}_3\text{O}_y$ system .....                                                                                                               | 12 368 |
| M. F. Limonov, E. A. Goodilin, X. Yao, S. Tajima, Y. Shiohara, and Yu. E. Kitaev                                                                                                                                                          |        |
| Fiske modes and Eck steps in long Josephson junctions: Theory and experiments .....                                                                                                                                                       | 12 377 |
| M. Cirillo, N. Grønbech-Jensen, M. R. Samuelsen, M. Salerno, and G. Verona Rinati                                                                                                                                                         |        |
| Vortex pinning and the non-Hermitian Mott transition .....                                                                                                                                                                                | 12 385 |
| Raphael A. Lehrer and David R. Nelson                                                                                                                                                                                                     |        |
| Low-temperature renormalization-group study of uniformly frustrated models for type-II superconductors .....                                                                                                                              | 12 404 |
| Giancarlo Jug and Boris N. Shalaev                                                                                                                                                                                                        |        |
| Vortex-glass transition in the $(\text{K},\text{Ba})\text{BiO}_3$ cubic superconductor .....                                                                                                                                              | 12 411 |
| T. Klein, A. Conde-Gallardo, J. Marcus, C. Escribe-Filippini, P. Samuely, P. Szabó, and A. G. M. Jansen                                                                                                                                   |        |
| Nonstationary state of superconductors: Application to nonequilibrium tunneling detectors .....                                                                                                                                           | 12 416 |
| Yu. N. Ovchinnikov and V. Z. Kresin                                                                                                                                                                                                       |        |
| Influence of cluster size on the normal- and superconducting-state properties of granular Bi films .....                                                                                                                                  | 12 422 |
| C. Vossloh, M. Holdenried, and H. Micklitz                                                                                                                                                                                                |        |
| Depression of superconductivity and the phonon-drag effect in glass-ceramic superconductors obtained by annealing the Fe-doped $(\text{Bi},\text{Pb})_4\text{Sr}_3\text{Ca}_3\text{Cu}_{4-m}\text{Fe}_m\text{O}_x$ glassy precursor ..... | 12 427 |
| S. Chatterjee, P. K. Pal, S. Bhattacharya, and B. K. Chaudhuri                                                                                                                                                                            |        |
| Analysis of $^{13}\text{C}$ -NMR spectra in $\text{C}_{60}$ superconductors: Hyperfine coupling constants, electronic correlation effect, and magnetic penetration depth .....                                                            | 12 433 |
| N. Sato, H. Tou, Y. Maniwa, K. Kikuchi, S. Suzuki, Y. Achiba, M. Kosaka, and K. Tanigaki                                                                                                                                                  |        |
| Effect of anisotropic impurity scattering in superconductors .....                                                                                                                                                                        | 12 441 |
| Grzegorz Harań and A. D. S. Nagi                                                                                                                                                                                                          |        |
| Collective modes in high-temperature superconductors .....                                                                                                                                                                                | 12 454 |
| T. Dahm, D. Manske, and L. Tewordt                                                                                                                                                                                                        |        |
| Photoinduced oxygen reordering in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ single crystals .....                                                                                                                                           | 12 459 |
| A. G. Panfilov, A. I. Rykov, S. Tajima, and A. Yamanaka                                                                                                                                                                                   |        |
| Crossover between fractal and nonfractal flux penetration in high-temperature superconducting thin films .....                                                                                                                            | 12 467 |
| R. Surdeanu, R. J. Wijngaarden, B. Dam, J. Rector, R. Griessen, C. Rossel, Z. F. Ren, and J. H. Wang                                                                                                                                      |        |

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 58, NUMBER 18

1 NOVEMBER 1998-II

|                                                                                                                                               |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Effects of strong correlation on photoemission spectroscopy .....                                                                             | 12 478 |
| Da-ning Shi, Ming-wen Xiao, and Zheng-zhong Li                                                                                                |        |
| Evolution of antiferromagnetic short-range order with doping in high- $T_c$ superconductors .....                                             | 12 486 |
| A. Yu. Zavidonov and D. Brinkmann                                                                                                             |        |
| Structural and superconducting properties of $R_{1-x}\text{Ca}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ with $0.50 \geq x \geq 0.00$ ..... | 12 495 |
| A. Sedky, Anurag Gupta, V. P. S. Awana, and A. V. Narlikar                                                                                    |        |
| <b>Cumulative Author Index</b> .....                                                                                                          | 12 503 |