

# 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  
Suite 1N01  
2 Huntington Quadrangle  
Melville, NY 11747-4502

---

---

THIRD SERIES, VOLUME 60, NUMBER 18

CONTENTS

1 NOVEMBER 1999-II

---

---

## RAPID COMMUNICATIONS

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

- Martensitic textures: Multiscale consequences of elastic compatibility ..... R12 537  
S. R. Shenoy, T. Lookman, A. Saxena, and A. R. Bishop

### Inhomogeneous, disordered, and partially ordered systems

- Why  $\text{Pb}(B,B')\text{O}_3$  perovskites disorder at lower temperatures than  $\text{Ba}(B,B')\text{O}_3$  perovskites ..... R12 542  
B. P. Burton and E. Cockayne

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

- Consistent model for the screening of slow muons in metals ..... R12 546  
I. Nagy, B. Apagy, J. I. Juaristi, and P. M. Echenique  
Dynamic coupling of crystal-field and phonon states in  $\text{YbPO}_4$  ..... R12 549  
C.-K. Loong, M. Loewenhaupt, J. C. Nipko, M. Braden, and L. A. Boatner

### Magnetism

- Electron spin resonance of defects in the Haldane system  $\text{Y}_2\text{BaNiO}_5$  ..... R12 553  
C. D. Batista, K. Hallberg, and A. A. Aligia  
Electronic structure of the spin- $\frac{1}{2}$  chain compound  $\text{MgVO}_3$  ..... R12 557  
I. Chaplygin, R. Hayn, and K. Koepernik  
Atomic arrangement and magnetic properties of  $\text{LaFeO}_3$ - $\text{LaMnO}_3$  artificial superlattices ..... R12 561  
Kenji Ueda, Hitoshi Tabata, and Tomoji Kawai  
Infrared probe of the electronic structure and carrier scattering in  $\text{NiMnSb}$  thin films ..... R12 565  
F. B. Mancoff, B. M. Clemens, E. J. Singley, and D. N. Basov  
Soft-x-ray resonant scattering from  $\text{V/Fe}$  (001) magnetic superlattices ..... R12 569  
Maurizio Sacchi, Alessandro Mirone, Coryn F. Hague, Jean-Michel Mariot, Luca Pasquali, Peter Isberg,  
Eric M. Gullikson, and James H. Underwood

### Superfluidity and superconductivity

- Predicted giant magnetic moment on non- $\{n0m\}$  surfaces of  $d$ -wave superconductors ..... R12 573  
Chia-Ren Hu and Xin-Zhong Yan  
Nonlocal effects in angular dependence of in-plane magnetization of tetragonal superconductors ..... R12 577  
V. G. Kogan, S. L. Bud'ko, P. C. Canfield, and P. Miranović  
Charge fluctuations in a quantum point contact attached to a superconducting lead ..... R12 581  
Andrew M. Martin, Thomas Gramspacher, and Markus Büttiker



|                                                                                                                                                   |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Interstitial flux phases in a superconducting niobium film with a square lattice of artificial pinning centers .....                              | R12 585 |
| V. Metlushko, U. Welp, G. W. Crabtree, R. Osgood, S. D. Bader, L. E. DeLong, Zhao Zhang,<br>S. R. J. Brueck, B. Ilic, K. Chung, and P. J. Hesketh |         |
| Structure of flux line lattices with weak disorder at large length scales .....                                                                   | R12 589 |
| Philip Kim, Zhen Yao, Cristian A. Bolle, and Charles M. Lieber                                                                                    |         |
| Giant peak effect observed in an ultrapure $\text{YBa}_2\text{Cu}_3\text{O}_{6.993}$ crystal .....                                                | R12 593 |
| Jing Shi, X. S. Ling, Ruixing Liang, D. A. Bonn, and W. N. Hardy                                                                                  |         |
| Magnetic interactions and magnon gap in the ferromagnetic superconductor $\text{RuSr}_2\text{GdCu}_2\text{O}_8$ .....                             | R12 597 |
| A. Fainstein, E. Winkler, A. Butera, and J. Tallon                                                                                                |         |

## ARTICLES

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

|                                                                                                                                  |        |
|----------------------------------------------------------------------------------------------------------------------------------|--------|
| Interaction and energy transfer between divalent Sm ions and $\text{CN}^-$ molecular defects in KCl .....                        | 12 601 |
| V. Dierolf                                                                                                                       |        |
| Direct simulation of ion-beam-induced stressing and amorphization of silicon .....                                               | 12 610 |
| Keith M. Beardmore and Niels Grønbech-Jensen                                                                                     |        |
| Electronic structure and spectral properties of paramagnetic point defects in $\text{Si}_3\text{N}_4$ .....                      | 12 617 |
| Gianfranco Pacchioni and Davide Erbetta                                                                                          |        |
| Stimulated emission at 326 nm and an ultrafast 100-ps-lived luminescence component by ion irradiation of $\alpha$ -alumina ..... | 12 626 |
| Kazuie Kimura, Junichi Kaneko, Sumit Sharma, Wan Hong, and Noriaki Itoh                                                          |        |
| High-pressure Raman investigation of mutual solubility and compound formation in $\text{Xe-N}_2$ and $\text{Ne-N}_2$ .....       | 12 635 |
| M. E. Kooi and J. A. Schouten                                                                                                    |        |
| Infrared absorption study of Fermi resonance and hydrogen-bond symmetrization of ice up to 141 GPa .....                         | 12 644 |
| M. Song, H. Yamawaki, H. Fujihisa, M. Sakashita, and K. Aoki                                                                     |        |
| High-pressure phase transition and properties of spinel $\text{ZnMn}_2\text{O}_4$ .....                                          | 12 651 |
| S. Asbrink, A. Waśkowska, L. Gerward, J. Staun Olsen, and E. Talik                                                               |        |

**Inhomogeneous, disordered, and partially ordered systems**

|                                                                                                                                                                 |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Adsorption-desorption isotherms and x-ray diffraction of Ar condensed into a porous glass matrix .....                                                          | 12 657 |
| P. Huber and K. Knorr                                                                                                                                           |        |
| Solid $\text{N}_2$ and CO in nanoporous glasses .....                                                                                                           | 12 666 |
| P. Huber, D. Wallacher, and K. Knorr                                                                                                                            |        |
| Helical single-lamellar crystals thermotropically formed in a synthetic nonracemic chiral main-chain polyester ....                                             | 12 675 |
| Christopher Y. Li, Donghang Yan, Stephen Z. D. Cheng, Feng Bai, Jason J. Ge, Bret H. Calhoun,<br>Tianbai He, Liang-Chy Chien, Frank W. Harris, and Bernard Lotz |        |
| Neutron-diffraction study of bulk amorphous $\text{Al}_{32}\text{Ge}_{68}$ alloy .....                                                                          | 12 681 |
| A. I. Kolesnikov, U. Dahlborg, M. Calvo-Dahlborg, O. I. Barkalov, E. G. Ponyatovsky, W. S. Howells, and<br>A. I. Harkunov                                       |        |
| Symmetry of the atomic displacement field at the quasicrystal-to-crystal phase transition .....                                                                 | 12 687 |
| S. B. Rochal                                                                                                                                                    |        |
| Scattering of light from an amplifying medium bounded by a randomly rough surface .....                                                                         | 12 692 |
| Andriy V. Tutov, Alexei A. Maradudin, Tamara A. Leskova, Andreas P. Mayer, and José A. Sánchez-Gil                                                              |        |
| Effective dielectric function of a random medium .....                                                                                                          | 12 705 |
| S. E. Skipetrov                                                                                                                                                 |        |

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

|                                                                                                                                          |        |
|------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Common force field for graphite and polycyclic aromatic hydrocarbons .....                                                               | 12 710 |
| C. Mapelli, C. Castiglioni, G. Zerbi, and K. Müllen                                                                                      |        |
| <i>Ab initio</i> study of the $\text{Se}_8$ local oscillator in zinc sulfide .....                                                       | 12 726 |
| K. Petzke                                                                                                                                |        |
| Quasielastic light scattering from rutile .....                                                                                          | 12 730 |
| A. Koreeda, M. Yoshizawa, S. Saikan, and M. Grimsditch                                                                                   |        |
| Sliding mode and breaking of analyticity in the double-chain model of incommensurate composites .....                                    | 12 737 |
| O. Radulescu and T. Janssen                                                                                                              |        |
| Complex ac conductivity of a carbon black composite as a function of frequency, composition, and temperature ..                          | 12 746 |
| D. S. McLachlan and Michael B. Heaney                                                                                                    |        |
| Exact results for thermodynamics of the classical field theories: Sine-Gordon and sinh-Gordon models .....                               | 12 752 |
| Emiliano Papa and Alexei M. Tsvelik                                                                                                      |        |
| Local lattice distortions and Raman spectra in the $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ system .....                                 | 12 758 |
| E. Liarokapis, Th. Leventouri, D. Lampakis, D. Palles, J. J. Neumeier, and D. H. Goodwin                                                 |        |
| Distribution of relaxation times from dielectric spectroscopy using Monte Carlo simulated annealing: Application to $\alpha$ -PVDF ..... | 12 764 |
| A. Bello, E. Laredo, and M. Grimaud                                                                                                      |        |
| Dipole moments of $\text{H}_2$ , $\text{D}_2$ , and HD molecules in Czochralski silicon .....                                            | 12 775 |
| R. C. Newman, R. E. Pritchard, J. H. Tucker, and E. C. Lightowers                                                                        |        |

**Magnetism**

|                                                                                                                                                                  |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Ground state and excitations of a spin chain with orbital degeneracy .....                                                                                       | 12 781 |
| You-Quan Li, Michael Ma, Da-Ning Shi, and Fu-Chun Zhang                                                                                                          |        |
| Improved approach to spin-polarized relativistic LMTO formalism: Application to the electronic structure of Fe-Ni compounds at the Earth's core conditions ..... | 12 788 |
| A. E. Krasovskii                                                                                                                                                 |        |
| Low-lying magnetic excitations in $\text{Ni}_3\text{Al}$ and their suppression by a magnetic field .....                                                         | 12 799 |
| Anita Semwal and S. N. Kaul                                                                                                                                      |        |
| Localized modes in two-dimensional square anisotropic ferromagnets with a hole .....                                                                             | 12 810 |
| Mari Kubota, Kazuko Kawasaki, and Shozo Takeno                                                                                                                   |        |
| Theoretical treatment of the mixed ferro-ferrimagnets composed of ternary-metal Prussian blue analogs in a paramagnetic region .....                             | 12 820 |
| Shin-ichi Ohkoshi and Kazuhito Hashimoto                                                                                                                         |        |
| Growth-induced magnetic anisotropy and clustering in vapor-deposited Co-Pt alloy films .....                                                                     | 12 826 |
| A. L. Shapiro, P. W. Rooney, M. Q. Tran, F. Hellman, K. M. Ring, K. L. Kavanagh, B. Rellinghaus, and D. Weller                                                   |        |
| Competing interfacial exchange and Zeeman energies in exchange biased bilayers .....                                                                             | 12 837 |
| C. Leighton, J. Nogués, Harry Suhl, and Ivan K. Schuller                                                                                                         |        |
| Magnetic anisotropy of 4 <i>d</i> -transition-metal monolayers: The role of low-energy valence bands .....                                                       | 12 841 |
| R. Gómez-Abal and A. M. Llois                                                                                                                                    |        |
| Field-induced transition in the paramagnetic state of $(\text{Sm}_{0.65}\text{Sr}_{0.35})\text{MnO}_3$ associated with magnetic clusters .....                   | 12 847 |
| R. P. Borges, F. Ott, R. M. Thomas, V. Skumryev, J. M. D. Coey, J. I. Arnaudas, and L. Ranno                                                                     |        |
| Electronic and magnetic structure of thin Ni films on Co/Cu(001) .....                                                                                           | 12 852 |
| S. S. Dhesi, H. A. Dürr, G. van der Laan, E. Dudzik, and N. B. Brookes                                                                                           |        |
| Magnetic stability at the surface in strongly correlated electron systems .....                                                                                  | 12 861 |
| T. Herrmann and W. Nolting                                                                                                                                       |        |

|                                                                                                                                                                                         |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Neutron diffraction studies on a ferromagnetic layered manganite $\text{La}_{2-2x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$ ( $x=0.3$ ) prepared by a ceramic method .....                 | 12 867 |
| Eun-Ok Chi, Kun-Pyo Hong, Young-Uk Kwon, N. P. Raju, John E. Greedan, Jeong-Soo Lee, and Nam Hwi Hur                                                                                    |        |
| Spin dynamics of the spin-Peierls transition in a quantum Heisenberg antiferromagnetic chain .....                                                                                      | 12 874 |
| Atsuko Kouzuki, Kazuko Kawasaki, and Katsuhiko Nakamura                                                                                                                                 |        |
| Quantum-classical phase transition of escape rates in biaxial spin particles .....                                                                                                      | 12 886 |
| Y.-B. Zhang, J.-Q. Liang, H. J. W. Müller-Kirsten, S.-P. Kou, X.-B. Wang, and F.-C. Pu                                                                                                  |        |
| Nonlinear magnetization dynamics of the classical ferromagnet with two single-ion anisotropies in an external magnetic field .....                                                      | 12 893 |
| Wu-Ming Liu, Wu-Shou Zhang, Fu-Cho Pu, and Xin Zhou                                                                                                                                     |        |
| Site-diluted three-dimensional Ising model with long-range correlated disorder .....                                                                                                    | 12 912 |
| H. G. Ballesteros and G. Parisi                                                                                                                                                         |        |
| Spin-glass-like behavior in mechanically alloyed nanocrystalline Fe-Al-Cu .....                                                                                                         | 12 918 |
| J. A. De Toro, M. A. López de la Torre, J. M. Riveiro, R. Sáez Puche, A. Gómez-Herrero, and L. C. Otero-Díaz                                                                            |        |
| Magnetic properties of low-dimensional quantum spin systems made of stable organic biradicals PNNNO, $\text{F}_2\text{PNNNO}$ , and PIMNO .....                                         | 12 924 |
| Yuko Hosokoshi, Yasuhiro Nakazawa, Katsuya Inoue, Kohichi Takizawa, Hiroki Nakano, Minoru Takahashi, and Tsuneaki Goto                                                                  |        |
| Induced ferromagnetism and anisotropy of Pt layers in Fe/Pt(001) multilayers .....                                                                                                      | 12 933 |
| W. J. Antel, Jr., M. M. Schwickert, Tao Lin, W. L. O'Brien, and G. R. Harp                                                                                                              |        |
| Magnetic properties of the Fe-intercalated misfit-layer compounds $(\text{RS})_x[\text{Fe}_{0.33}(\text{NbS}_2)_2]$ ( $R=\text{La,Ce}$ ) .....                                          | 12 941 |
| Chishiyo Michioka and Kazuya Suzuki                                                                                                                                                     |        |
| Antiferromagnetic coupling in fcc Fe overlayers on Ni/Cu(100) .....                                                                                                                     | 12 945 |
| B. Schirmer and M. Wuttig                                                                                                                                                               |        |
| Temperature dependence of exchange bias in polycrystalline ferromagnet-antiferromagnet bilayers .....                                                                                   | 12 950 |
| M. D. Stiles and R. D. McMichael                                                                                                                                                        |        |
| Aperiodical oscillation of interlayer coupling in epitaxial Co/Ir(001) superlattices .....                                                                                              | 12 957 |
| H. Yanagihara, Eiji Kita, and M. B. Salamon                                                                                                                                             |        |
| Microscopic electronic phase separation and metal-insulator transition in $\text{Nd}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$ .....                                                            | 12 963 |
| N. Fukumoto, S. Mori, N. Yamamoto, Y. Moritomo, T. Katsufuji, C. H. Chen, and S-W. Cheong                                                                                               |        |
| Effective transfer integrals for the Jahn-Teller distortion in $\text{LaMnO}_3$ .....                                                                                                   | 12 968 |
| J. W. Liu, Z. Zeng, Q. Q. Zheng, and H. Q. Lin                                                                                                                                          |        |
| Critical behavior of the random Potts chain .....                                                                                                                                       | 12 974 |
| E. Carlon, C. Chatelain, and B. Berche                                                                                                                                                  |        |
| Fully relativistic description of the magneto-optical properties of arbitrary layered systems .....                                                                                     | 12 982 |
| T. Huhne and H. Ebert                                                                                                                                                                   |        |
| <i>Ab initio</i> calculations on the mechanism of charge transfer in Co-Fe Prussian-blue compounds .....                                                                                | 12 990 |
| T. Kawamoto, Y. Asai, and S. Abe                                                                                                                                                        |        |
| Scaling functions of interfacial tensions for a class of Ising cylinders .....                                                                                                          | 12 994 |
| T. M. Liaw, M. C. Huang, S. C. Lin, and M. C. Wu                                                                                                                                        |        |
| Half-metallic ferrimagnetism in $\text{Mn}_2\text{VAl}$ .....                                                                                                                           | 13 006 |
| Ruben Weht and Warren E. Pickett                                                                                                                                                        |        |
| Incoherent-to-coherent crossover of optical spectra in $\text{La}_{0.825}\text{Sr}_{0.175}\text{MnO}_3$ : Temperature-dependent reflectivity spectra measured on cleaved surfaces ..... | 13 011 |
| K. Takenaka, Y. Sawaki, and S. Sugai                                                                                                                                                    |        |

|                                                                                                                                                                                    |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Magnetotransport in conducting composite films with a disordered columnar microstructure and an in-plane magnetic field .....                                                      | 13 016 |
| David J. Bergman and Yakov M. Strelniker                                                                                                                                           |        |
| <b>Superfluidity and superconductivity</b>                                                                                                                                         |        |
| Variational approach to the many-boson problem in one dimension .....                                                                                                              | 13 028 |
| E. Krotscheck, M. D. Miller, and J. Wojdylo                                                                                                                                        |        |
| Properties of $^4\text{He}$ in one dimension .....                                                                                                                                 | 13 038 |
| E. Krotscheck and M. D. Miller                                                                                                                                                     |        |
| Comparison of bulk $R_{2-z}\text{Ce}_z\text{CuO}_4$ with superlattice $R_{2-z}\text{Ce}_z\text{CuO}_4/\text{SrO}/\text{NbO}_2/\text{SrO}/\text{CuO}_2$ .....                       | 13 051 |
| Howard A. Blackstead and John D. Dow                                                                                                                                               |        |
| Relationship between incommensurability and superconductivity in Peierls-distorted charge-density-wave systems .....                                                               | 13 056 |
| G. Seibold and S. Varlamov                                                                                                                                                         |        |
| Anisotropic impurities in anisotropic superconductors .....                                                                                                                        | 13 062 |
| Miodrag L. Kulić and Oleg V. Dolgov                                                                                                                                                |        |
| Projected $\text{SO}(5)$ models .....                                                                                                                                              | 13 070 |
| Shou-Cheng Zhang, Jiang-Ping Hu, Enrico Arrigoni, Werner Hanke, and Assa Auerbach                                                                                                  |        |
| Pseudogap formation in an electronic system with $d$ -wave attraction at low density .....                                                                                         | 13 085 |
| Takashi Hotta, Matthias Mayr, and Elbio Dagotto                                                                                                                                    |        |
| Effects of Sr substitution on dimensionality and superconducting properties of $\text{Hg}_{0.7}\text{Pb}_{0.3}\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_y$ .....                   | 13 094 |
| Yi Zhuo, Su-Mi Oh, Jae-Hyuk Choi, Mun-Seog Kim, Sung-Ik Lee, N. P. Kiryakov, M. S. Kuznetsov, and Sergey Lee                                                                       |        |
| Vortex liquid entanglement in twinned $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}/\text{Y}_2\text{BaCuO}_5$ composite superconductors .....                                             | 13 099 |
| T. Puig, F. Galante, E. M. González, J. L. Vicent, B. Martínez, and X. Obradors                                                                                                    |        |
| Upper critical field $H_{c3}$ for a thin-film superconductor with a ferromagnetic dot .....                                                                                        | 13 107 |
| Sa-Lin Cheng and H. A. Fertig                                                                                                                                                      |        |
| Thin superconducting disk with $B$ -dependent $J_c$ : Flux and current distributions .....                                                                                         | 13 112 |
| D. V. Shantsev, Y. M. Galperin, and T. H. Johansen                                                                                                                                 |        |
| Correlation between weak ferromagnetism and crystal symmetry in $\text{Gd}_2\text{CuO}_4$ -type cuprates .....                                                                     | 13 119 |
| H. M. Luo, Y. Y. Hsu, B. N. Lin, Y. P. Chi, T. J. Lee, and H. C. Ku                                                                                                                |        |
| Nonlinear current response of a $d$ -wave superfluid .....                                                                                                                         | 13 125 |
| T. Dahm and D. J. Scalapino                                                                                                                                                        |        |
| Nonequilibrium in Josephson junctions: A possibility for low-energy radiation/particle detection .....                                                                             | 13 131 |
| G. Pepe, G. Ammendola, G. Peluso, A. Barone, E. Esposito, L. Parlato, and B. Ivlev                                                                                                 |        |
| Critical currents in ballistic two-dimensional InAs-based superconducting weak links .....                                                                                         | 13 135 |
| J. P. Heida, B. J. van Wees, T. M. Klapwijk, and G. Borghs                                                                                                                         |        |
| Superfluid flow past an array of scatterers .....                                                                                                                                  | 13 139 |
| D. Taras-Semchuk and J. M. F. Gunn                                                                                                                                                 |        |
| Resonances in spatially modulated long Josephson junctions .....                                                                                                                   | 13 152 |
| M. V. Fistul, P. Caputo, and A. V. Ustinov                                                                                                                                         |        |
| Matching fields of a long superconducting film .....                                                                                                                               | 13 158 |
| Edson Sardella, M. M. Doria, and P. R. S. Netto                                                                                                                                    |        |
| Magnetic properties of the transition to localized superconductivity around columnar defects .....                                                                                 | 13 164 |
| Mauro M. Doria and Sarah C. B. de Andrade                                                                                                                                          |        |
| X-ray fluorescence measurements of organic superconductors $\kappa\text{-(ET)}_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$ and $\kappa\text{-(ET)}_2\text{Cu}(\text{NCS})_2$ ..... | 13 169 |
| E. Z. Kurmaev, S. N. Shamin, Y.-N. Xu, W. Y. Ching, A. Moewes, D. L. Ederer, E. B. Yagubskii, and N. D. Kushch                                                                     |        |
| Large pinning efficiency of orthogonal columnar defects in a weakly anisotropic high- $T_c$ superconductor .....                                                                   | 13 175 |
| S. Hébert, V. Hardy, Ch. Simon, and J. Provost                                                                                                                                     |        |

# CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 60, NUMBER 18

1 NOVEMBER 1999-II

|                                                                                                                                                                                               |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Shape of a moving fluxon in stacked Josephson junctions .....                                                                                                                                 | 13 179 |
| V. M. Krasnov and D. Winkler                                                                                                                                                                  |        |
| Anomalous behavior of the irreversible magnetization and time relaxation in $\text{YBa}_2\text{Cu}_3\text{O}_7$ single crystals with<br>splayed tracks .....                                  | 13 189 |
| A. Silhanek, D. Niebieskikwiat, L. Civale, M. A. Avila, O. Billoni, and D. Casa                                                                                                               |        |
| Systematics of $c$ -axis phonons in the thallium- and bismuth-based cuprate superconductors .....                                                                                             | 13 196 |
| A. A. Tsvetkov, D. Dulić, D. van der Marel, A. Damascelli, G. A. Kaljushnaia, J. I. Gorina, N. N. Senturina,<br>N. N. Kolesnikov, Z. F. Ren, J. H. Wang, A. A. Menovsky, and T. T. M. Palstra |        |
| Cumulative Author Index .....                                                                                                                                                                 | 13 206 |