

Current Rapid Communications

Rapid Communications in Physical Review are short reports of important new work which are of sufficient interest to be given priority handling in the publication process. The following papers have been accepted for publication as Rapid Communications and appear as indicated in the designated Physical Review issues.

Physical Review A, Vol. 51, January 1995, Issue 1

Zero-kinetic-energy electron spectroscopy of the predissociating $A^2\Sigma^+$ state of HBr^2	1
..... A. Mank, T. Nguyen, J.D.D. Martin, and J.W. Hepburn	
Dimensional perturbation theory for weakly bound systems	5
..... Deborah K. Watson and David Z. Goodson	
Effect of the Møller interaction on electron-impact ionization of high-Z hydrogenlike ions	9
..... D.L. Moores and K.J. Reed	
Relativistic calculations of cross sections for ionization of U^{90+} and U^{91+} ions by electron impact	12
..... Christopher J. Fontes, Douglas H. Sampson, and Hong Lin Zhang	
Near-field imaging of atom diffraction gratings: The atomic Talbot effect	14
.... Michael S. Chapman, Christopher R. Ekstrom, Troy D. Hammond, Jörg Schmiedmayer, Bridget E. Tannian, Stefan Wehinger, and David E. Pritchard	
Ultracold photoassociative ionization collisions in an atomic beam: Optical field intensity and polarization dependence of the rate constant	18
..... C.-C. Tsao, R. Napolitano, Y. Wang, and J. Weiner	
Permanent magnet trap for cold atoms	22
..... J.J. Tollett, C.C. Bradley, C.A. Sackett, and R.G. Hulet	
Superdressed H_2^+ and H_3^{2+} molecular ions in intense, high-frequency laser fields	26
..... T. Zuo and A.D. Bandrauk	
Dynamic Kingdon trap	30
..... R. Blümel	
Field-induced dipole effects in laser-assisted elastic electron-atom scattering	34
..... Sydney Geltman	
Bright spatiotemporal optical solitons in a planar optical waveguide	38
..... Shan-liang Liu, Wen-zheng Wang, and Jing-zhi Xu	
Twin-hole dark soliton	41
..... Alexander V. Buryak and Yuri S. Kivshar	

Physical Review B, Vol. 51, 1 January 1995, Issue 2

^{35}Cl spin-lattice relaxation in incommensurate bis(4-chlorophenyl)sulfone	1354
..... R. Blinc, T. Apih, J. Dolinšek, U. Mikac, D.C. Ailion, and P.-H. Chan	
Orientationally ordered states in solid C_{60}	1358
..... J.Q. You, Tiansheng Xie, and B.Y. Tang	
Fast oscillations in the surface impedance of $(\text{TMTSF})_2\text{ClO}_4$ in a magnetic field	1362
..... L.P. Gor'kov and A.G. Lebed	
Complete optical response of the magnetic fullerene derivative tetrakis(dimethylamino)ethylene- C_{60}	1366
..... F. Bommeli, L. Degiorgi, P. Wachter, D. Mihailovic, A. Hassanien, P. Venturini, M. Schreiber, and F. Diederich	
Coster-Kronig contributions to magnetic circular dichroism in the $L_{2,3}$ x-ray fluorescence of iron	1370
..... C.F. Hague, J.-M. Mariot, G.Y. Guo, K. Hricovini, and G. Krill	
Interference effects on the critical current in a clean-limit superconductor-normal-metal-superconductor junction	1374
..... Hideaki Takayanagi, Tatsushi Akazaki, and Junsaku Nitta	
Spin-paramagnetic transition of ultrathin granular Al films in a tilted magnetic field	1378
..... Wenhao Wu, R.G. Goodrich, and P.W. Adams	
Quasiparticle spectrum in the high- T_c superconducting state	1381
..... Georgios Varelogiannis	
Electronic band structure of the superconductor Sr_2RuO_4	1385
..... Tamio Oguchi	
Vortex channeling along twin planes in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$	1389
..... M. Oussena, P.A.J. de Groot, S.J. Porter, R. Gagnon, and L. Taillefer	
Transport studies of bulk $\text{Pb}_{0.2}\text{Hg}_{0.8}\text{Ba}_2\text{Ca}_{1.75}\text{Cu}_3\text{O}_x$	1393
..... R.J. Soulen, Jr., T.L. Francavilla, A.R. Drews, L. Toth, M.S. Osofsky, W.L. Lechter, and E.F. Skelton	
Superconducting energy gap in $\text{Bi}_{1.8}\text{Pb}_{0.4}\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+\delta}$ studied by photoemission spectroscopy	1397
..... C. Gu, B.W. Veal, R. Liu, A.P. Paulikas, P. Kostic, H. Ding, J.C. Campuzano, B.A. Andrews, R.I.R. Blyth, A.J. Arko, P. Manuel, D.Y. Kaufman, and M.T. Lanagan	
c-axis microwave conductivity of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ in the superconducting state	1401
..... H. Kitano, T. Shibauchi, K. Uchinokura, A. Maeda, H. Asaoka, and H. Takei	

Physical Review D, Vol. 51, 1 January 1995, Issue 1

Minimal family unification	1
..... P.H. Frampton and T.W. Kephart	