

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. 56, September 1997, Issue 3

Macroscopic coherence for a trapped electron	Stefano Mancini and Paolo Tombesi	R1679
Critical visibility for N -particle Greenberger-Horne-Zeilinger correlations to violate local realism	Marek Żukowski and Dagomir Kaszlikowski	R1682
Ultralow energy scattering of a He atom off a He dimer	E.A. Kolganova, A.K. Motovilov, and S.A. Sofianos	R1686
Azimuthal dependence of the differential cross section in electron scattering from free oriented CH ₃ Cl molecules	M. Volkmer, Ch. Meier, J. Lieschke, R. Dreier, M. Fink, and N. Böwering	R1690
S -wave model for H-like ions	Igor Bray and Bradley Clare	R1694
R matrix with pseudostates calculation for single and double ionization of helium by photon impact	Pascale J. Marchalant and Klaus Bartschat	R1697
Energy loss of slow, highly charged ions in solids	T. Schenkel, A.V. Hamza, A.V. Barnes, and D.H. Schneider	R1701
Local dynamics of laser cooling in an optical lattice	I.H. Deutsch, J. Grondalski, and P.M. Alsing	R1705
Polarized patterns in sodium vapor with single mirror feedback	A. Aumann, E. Büthe, Yu.A. Logvin, T. Ackemann, and W. Lange	R1709
Time-dependent evolution of an optical vortex in photorefractive media	A.V. Mamaev, M. Saffman, and A.A. Zozulya	R1713
Polarization instabilities and antiphase dynamics in a Brillouin fiber ring laser	S. Randoux, V. Lecoeuche, and J. Zemouri	R1717

Physical Review B, Vol. 56, 1 September 1997, Issue 10

Energy- and angle-resolved depth of origin of isotopes sputtered from an elemental target	Klaus Wittmaack	R5701
Vibrational spectra in ordered and disordered Ni ₃ Al	Jeffrey D. Althoff, Dane Morgan, Didier de Fontaine, Mark Asta, S.M. Foiles, and D.D. Johnson	R5705
Discrete nature of the orientational glass ordering in Na _{1-x} K _x CN	B. Zalar, R. Blinc, W. Albert, and J. Petersson	R5709
Relaxations and fast dynamics of the plastic crystal cyclo-octanol investigated by broadband dielectric spectroscopy	R. Brand, P. Lunkenheimer, and A. Loidl	R5713
Long-distance propagation and damping of low-frequency phonon polaritons in LiNbO ₃ ..	Tiequn Qiu and Max Maier	R5717
Reorientational tunneling and elastic-dipole properties of OH ⁻ and OD ⁻ molecular defects in alkali fluorides	C.P. An and Fritz Luty	R5721
Dissociative electron attachment of CH ₃ Cl embedded into solid krypton	I.I. Fabrikant, K. Nagesha, R. Wilde, and L. Sanche	R5725
Perpendicular magnetic anisotropy of the epitaxial fcc Co/60-Å-Ni/Cu(001) system	Jaeyong Lee, G. Lauhoff, and J.A.C. Bland	R5728
Dynamical properties of the spin-Peierls compound α' -NaV ₂ O ₅	D. Augier, D. Poilblanc, S. Haas, A. Delia, and E. Dagotto	R5732
Phase diagram of the $S = \frac{1}{2}$ frustrated coupled ladder system	B. Normand, K. Penc, M. Albrecht, and F. Mila	R5736
Ferromagnetism in Sr ₄ Ru ₃ O ₁₀ : Relationship to other layered metallic oxides	G. Cao, S.K. McCall, J.E. Crow, and R.P. Guertin	R5740
Evidence for positive polarity of the spin moment in hcp Sm determined from a magnetic Compton-scattering experiment	Hiromichi Adachi, Hiromitsu Ino, Akihisa Koizumi, Nobuhiko Sakai, Yoshikazu Tanaka, and Hiroshi Kawata	R5744
Spin-dependent tunneling with Coulomb blockade	L.F. Schelp, A. Fert, F. Fetta, P. Holody, S.F. Lee, J.L. Maurice, F. Petroff, and A. Vaurès	R5747
Twin boundaries in d -wave superconductors	D.L. Feder, A. Beardsall, A.J. Berlinsky, and C. Kallin	R5751
Metal-dielectric transition in Ba _{0.6} K _{0.4} BiO _{3-y} single crystals studied by scanning photoelectron microscopy	A.A. Zakharov, U. Johansson, M. Leandersson, H. Nylén, M. Qvarford, I. Lindau, and R. Nyholm	R5755
Nonequilibrium and parity effects in the tunneling conductance of ultrasmall superconducting grains	Oded Agam and Igor L. Aleiner	R5759
Long-range Josephson effect in mesoscopic T-shaped superconductor-normal-metal-superconductor junctions	P. Samuelsson, V.S. Shumeiko, and G. Wendin	R5763
Intrinsic pinning in the high-field C phase of UPt ₃	Brett Ellman and Louis Taillefer	R5767

(Continued)

Current Rapid Communications-Continued

Field penetration and surface barriers in superconducting $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ whiskers	
..... M. S. James, S. T. Stoddart, S. J. Bending, S. Aukkaravittayapun, P. J. King, and M. Henini	R5771
Vortex bending in a tilted $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ crystal	I. M. Obaidat, S. J. Park, H. Safar, and J. S. Kouvel R5774

Physical Review C, Vol. 56, September 1997, Issue 3

$K^\pi = 4^+$ double- γ vibration in ^{164}Dy	
..... F. Corminboeuf, J. Jolie, H. Lehmann, K. Föhl, F. Hoyler, H. G. Börner, C. Doll, and P. E. Garrett,	R1201
Proton scattering on the unstable ^{38}S nucleus: Isovector contribution to the 2_1^+ state	
..... J. H. Kelley, T. Suomijärvi, S. E. Hirzebruch, A. Azhari, D. Bazin, Y. Blumenfeld, J. A. Brown,	
P. D. Cottle, S. Danczyk, M. Fauerbach, T. Glasmacher, J. K. Jewell, K. W. Kemper, F. Maréchal,	
D. J. Morrissey, S. Ottini, J. A. Scarpaci, and P. Thirolf	R1206
$\pi g_{9/2}$ structures in odd-odd ^{130}Pr and alignment processes in superdeformed praseodymium nuclei	
..... T. B. Brown, J. Pfohl, M. A. Riley, D. J. Hartley, D. G. Sarantites, M. Devlin, D. R. LaFosse, F. Lerma,	
D. E. Archer, R. M. Clark, P. Fallon, I. M. Hibbert, D. T. Joss, P. J. Nolan, N. J. O'Brien, E. S. Paul,	
R. K. Sheline, J. Simpson, R. Wadsworth, and Y. Sun	R1210
Unitarity constraint for threshold coherent pion photoproduction on the deuteron	P. Wilhelm R1215

Physical Review D, Vol. 56, 1 September 1997, Issue 5

$\Lambda\bar{\Lambda}$ production in two-photon interactions	S. Anderson <i>et al.</i> (CLEO Collaboration) R2485
Has the substructure of quarks and leptons been found also by the H1 and ZEUS detectors at DESY HERA?	
..... Keiichi Akama, Kazuo Katsuura, and Hidezumi Terazawa	R2490
Color-octet intrinsic charm in η' and $B \rightarrow \eta' X$ decays	Feng Yuan and Kuang-Ta Chao R2495
Diffraction mass spectra at DESY HERA in the interacting gluon model	F. O. Duñaes, F. S. Navarra, and G. Wilk R2499
Two-loop anomalous dimensions for the structure function h_1	S. Kumano and M. Miyama R2504