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 B, Vol. 60, 15 September 1999, Issue 12

Charge-order transition in the extended Hubbard model on a two-leg ladder ..... Matthias Vojta, R. E. Hetzel, and R. M. Noack R8417

Destruction of the Mott insulating ground state of Ca_2RuO_4 by a structural transition ..... C. S. Alexander, G. Cao, V. Dobrosavljevic, E. Lochner, S. McCall, J. E. Crow, and R. P. Guertin R8422

Electronic-structure evolution through the metal-insulator transition in RNiO$_3$ ..... I. Vobornik, L. Perfetti, M. Zacchigna, M. Grioni, G. Margaritondo, J. Mesot, M. Medarde, and P. Lacorre R8426

Ultrasound investigations of orbital quadrupolar ordering in UPd_3 ..... N. Lingg, D. Maurer, V. Muller, and K. A. McEwen R8430

Field scaling and exponential temperature dependence of the magnetoresistance in $(TMTSF)_2PF_6$ ..... G. Kriza, G. Szeghy, I. Kézsmárki, and G. Mihály R8434

Theoretical study of the optical conductivity of α'-NaV_2O_5 ..... Mario Cuoco, Peter Horsch, and Frank Mack R8438

Resonant enhancement effect on two-photon absorption due to excitons in alkaline-earth fluorides excited with synchrotron radiation and laser light ..... Toru Tsujibayashi, Masayuki Watanabe, Osamu Arimoto, Minoru Itoh, Shunsuke Nakanishi, Hiroshi Itoh, Shuji Asaka, and Masao Kamada R8442

Ab initio calculation of hyperfine interactions for the $^5A_2$ excited state of the neutral vacancy in diamond ..... U. Gerstmann, M. Amkreutz, and H. Overhof R8446

Instability of the high-pressure CsCl structure in most III-IV semiconductors ..... Kwiseon Kim, V. Ozoliņš, and Alex Zunger R8449

Experimental evidence for the effect of nonequilibrium acoustic plasmons on carrier relaxation in bulk semiconductors ..... J. F. Lampin, F. X. Camescasse, A. Alexandrou, M. Bonitz, and V. Thierry-Mieg R8453

Berry phase and persistent current in disordered mesoscopic rings ..... Shiro Kawabata R8457

Hydrogen-desorption kinetic measurement on the Si(100)-2 × 1:H surface by directly counting desorption sites ..... Deng-Sung Lin, and Ru-Ping Chen R8461

Adsorption process of metastable molecular oxygen on a Si(111)-(7 × 7) surface ..... Kazuyuki Sakamoto, Satoshi Doi, Yoshimitsu Ushimi, Kenichi Ohno, Han Woong Yeom, Toshiaki Ohta, Shozo Suto, and Wakio Uchida R8465

Nonuniversality in mound formation during semiconductor growth ..... G. Lengel, R. J. Phaneuf, E. D. Williams, S. Das Sarma, W. Beard, and F. G. Johnson R8469

Indium-induced changes in GaN(0001) surface morphology ..... John E. Northrup and Jörg Neugebauer R8473

Ab initio absorption spectra of gallium arsenide clusters ..... Igor Vasiliev, Serdar Öğüt, and James R. Chelikowsky R8477

Strong variation of the exciton g-factors in self-assembled $In_{0.60}Ga_{0.40}As$ quantum dots ..... M. Bayer, A. Kuther, F. Schäfer, J. P. Reithmaier, and A. Forchel R8481

Charged excitons in ZnSe-based quantum wells ..... G. V. Astakhov, D. R. Yakovlev, V. P. Kochereshko, W. Ossau, J. Nürnberger, W. Faschinger, and G. Landwehr R8485

Frequency-dependent electrical response of holes in poly(p-phenylene vinylene) ..... H. C. F. Martens, H. B. Brom, and P. W. M. Blom R8489

Surface electronic structure modifications due to buried quantum dots ..... T. Meyer, M. Klemenc, and H. von Känel R8493

Nonexponential photon echo decays from nanostructures: Strongly and weakly localized degenerate exciton states ..... J. Erland, J. C. Kim, N. H. Bonadeo, D. G. Steel, D. Gammon, and D. S. Katzer R8497

Skyrmion physics beyond the lowest Landau level approximation ..... V. Melik-Alaverdian, N. E. Bonesteel, and G. Ortiz R8501

Quenching of asymmetry-induced spontaneous spin splitting in p-type quantum wells by an applied magnetic field ..... O. Mauritz and U. Ekenberg R8505

Annular resonant Rayleigh scattering in the picosecond dynamics of cavity polaritons ..... T. Freixanet, B. Sermage, J. Bloch, J. Y. Marzin, and R. Planel R8509

Screening of coherent LO phonons by interwell plasmon oscillations along the growth direction in GaAs/AlGaAs superlattices ..... K. J. Yee, D. S. Yee, D. S. Kim, T. Dekorsy, G. C. Cho, and Y. S. Lim R8513

(Continued)

Current Rapid Communications-*Continued*

Ensemble interactions in strained semiconductor quantum dots ..... R. Leon, S. Marcinkevicius, X. Z. Liao, J. Zou, D. J. H. Cockayne, and S. Fafard R8517
van der Waals interaction in nanotube bundles: Consequences on vibrational modes ..... Luc Henrard, E. Hernández, Patrick Bernier, and Angel Rubio R8521
Single-molecule vibrational spectroscopy and microscopy: CO on Cu(001) and Cu(110) .... L. J. Lauhon and W. Ho R8525
Disappearance of the Kondo resonance for atomically fabricated cobalt dimers ..... W. Chen, T. Jamneala, V. Madhavan, and M. F. Crommie R8529