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. 58, October 1998, Issue 4

Embedded Bell-state analysis ..... Paul G. Kwiat and Harald Weinfurter R2623
Entanglement engineering of one-photon wave packets using a single-atom source ..... K. M. Gheri, C. Saavedra, P. Törma, J. I. Cirac, and P. Zoller R2627
Two-photon optical Ramsey spectroscopy of the $1S$-$2S$ transition in atomic hydrogen ..... A. Huber, B. Gross, M. Weitz, and T. W. Hänsch R2631
Photoionization experiments yielding "complete" information ..... Valery K. Dolmatov and Steven T. Manson R2635
Fine-structure effect in the relativistic $(e,2e)$ process ..... K.-H. Besch, M. Sauter, and W. Nakel R2638
Ab initio approach to multidimensional quantum scattering based on an infinite-order discrete-variable representation ..... Nark Nyul Choi, Min-Ho Lee, and Sung Ho Suck Salk R2641
Feshbach resonances in ultracold atom-diatom scattering ..... R. C. Forrey, N. Galakrishnan, V. Kharchenko, and A. Dalgarno R2645
Observation of Rabi oscillations between Bloch bands in an optical potential ..... M. C. Fischer, K. W. Madison, Qian Niu, and M. G. Raizen R2648
Stabilization with arbitrary laser polarizations ..... A. Patel, M. Protopapas, D. G. Lappas, and P. L. Knight R2652
Generation of circularly polarized multiple high-order harmonic emission from two-color crossed laser beams ..... Xiao-Min Tong and Shih-I Chu R2656
Magnetization and spin-flip dynamics of atoms in optical lattices ..... G. Raithel, W. D. Phillips, and S. L. Rolston R2660
Bose-Einstein condensation in a quadrupole-Ioffe-configuration trap ..... Tilman Esslinger, Immanuel Bloch, and Theodor W. Hánsch R2664
Wavelengths of the Ni-like $4d\,^1\mathrm{S}_0$-$4p\,^1\mathrm{P}_1$ x-ray laser line ..... Yuelin Li, Joseph Nilsen, James Dunn, Albert L. Osterheld, Alexander Ryabtsev, and Sergey Churilov R2668
Coexistence of low-frequency fluctuations and stable emission on a single high-gain mode in semiconductor lasers with external optical feedback ..... T. Heil, I. Fischer, and W. Elässer R2672
Multidimensional parametric quantum solitons ..... K. V. Kheruntsyan and P. D. Drummond R2676
Photon trains and lasing: The periodically pumped quantum dot ..... Christian Wiele, Fritz Haake, Carsten Rocke, and Achim Wixforth R2680