

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 56, NUMBER 2

AUGUST 1997

Insecurity of quantum secure computations	1154
Hoi-Kwong Lo	
Optimal eavesdropping in quantum cryptography. I. Information bound and optimal strategy	1163
Christopher A. Fuchs, Nicolas Gisin, Robert B. Griffiths, Chi-Sheng Niu, and Asher Peres	
Optimal eavesdropping in quantum cryptography. II. A quantum circuit	1173
Robert B. Griffiths and Chi-Sheng Niu	
Effects of noise on quantum error correction algorithms	1177
Adriano Barenco, Todd A. Brun, Rüdiger Schack, and Timothy P. Spiller	
Quartic, sextic, and octic anharmonic oscillators: Precise energies of ground state and excited states by an iterative method based on the generalized Bloch equation	1189
Holger Meißner and E. Otto Steinborn	
Substituting quantum entanglement for communication	1201
Richard Cleve and Harry Buhrman	
Determination of entangled quantum states of a trapped atom	1205
S. Wallentowitz, R. L. de Matos Filho, and W. Vogel	
Quantum copying: Fundamental inequalities	1212
M. Hillery and V. Bužek	
Locality and causality in hidden-variables models of quantum theory	1217
Stefan Teufel, Karin Berndl, Detlef Dürr, Sheldon Goldstein, and Nino Zanghì	

Atomic and molecular structure and dynamics

Si $2p$ photoabsorption in SiH_4 and SiD_4 : Molecular distortion in core-excited silane	1228
R. Püttner, M. Domke, D. Lentz, and G. Kaindl	
Two methods for solving the Dirac equation without variational collapse	1240
P. Falsaperla, G. Fonte, and J. Z. Chen	
Characteristics of large electric-dipole moment states in crossed electric and magnetic fields studied by quantum calculations	1249
Sihong Gu, Wenyu Liu, Shunsheng Gong, and Baiwen Li	
Long-range interactions in planetary three-body Coulomb systems	1255
K.-D. Heber, M. Seng, M. Halka, U. Eichmann, and W. Sandner	
Mean lifetime measurements and calculations of long-lived HeNe^{2+} isotopes	1268
I. Ben-Itzhak, J. P. Bouhnik, Z. Chen, B. D. Esry, I. Gertner, C. Heinemann, W. Koch, C. D. Lin, and B. Rosner	
Adiabatic approximation in atomic three-body systems	1281
Rakhi Chattopadhyay and Tapan Kumar Das	
Two-photon decay of 2^1S_0 and 2^3S_1 states of heliumlike ions	1288
A. Derevianko and W. R. Johnson	
Relativistic many-body perturbation calculations for open-shell systems	1295
Yasuyuki Ishikawa and Konrad Koc	

Atomic and molecular collisions and interactions

Absolute cross sections with polarization effects in $\text{Ne}^*(2p^53p) + \text{He}$ collisions: A detailed comparison between theory and experiment	1305
Cristian Bahrim, Hélène Kucal, and Françoise Masnou-Seeuws	
Symmetric-eikonal theory of excitation with Hartree-Fock-Slater description of the target	1321
László Gulyás and Pablo D. Fainstein	
Photoion spectroscopy of atomic tantalum and rhenium in the region of the $5p$ and $4f$ excitation	1329
M. Martins, P. Sladeczek, K. Tiedtke, and P. Zimmermann	

(Continued)