

ARTICLES

Fundamental concepts

Continuous and pulsed observations in the quantum Zeno effect	1509
L. S. Schulman	
Dispersion relation for the ground-state energy of a two-electron atom	1516
I. A. Ivanov and J. Dubau	
Position-momentum entropic uncertainty relation and complementarity in single-slit and double-slit experiments	1519
Jorge Sánchez-Ruiz	
Wigner phase-space distribution function for the hydrogen atom	1526
S. Nouri	
Interference in hyperbolic space	1529
S. Chaturvedi, G. J. Milburn, and Zhongxi Zhang	
Uniform semiclassical expansions for the direct part of Franck-Condon transitions	1536
Bruno Hüpper and Bruno Eckhardt	
Fourth-order self-energy contribution to the Lamb shift	1548
S. Mallampalli and J. Sapirstein	
Quantum stochastic motion in complex space	1565
M. S. Wang	
Consistency, amplitudes, and probabilities in quantum theory	1572
Ariel Caticha	
Strict bounds on the Franson inequality	1583
Lev Vaidman and Ori Belkind	
Renormalization-group method for simple operator problems in quantum mechanics	1586
I. L. Egusquiza and M. A. Valle Basagoiti	
Radiative level shifts of an accelerated hydrogen atom and the Unruh effect in quantum electrodynamics	1590
R. Passante	
Limits of the measurability of the local quantum electromagnetic-field amplitude	1595
G. Compagno and F. Persico	
Choice of consistent family, and quantum incompatibility	1604
Robert B. Griffiths	

Quantum information

Entanglement measures and purification procedures	1619
V. Vedral and M. B. Plenio	
Using a quantum computer to investigate quantum chaos	1634
Rüdiger Schack	

Atomic and molecular structure and dynamics

Resonant formation of $dd\mu$ mesomolecules at low D_2 gas density	1636
Yu. V. Petrov, V. V. Kuzminov, V. Yu. Petrov, W. H. Breunlich, M. Cargnelli, J. Marton, and J. Zmeskal	
Valence and excited states of LiH^-	1646
Gennady L. Gutsev, Marcel Nooijen, and Rodney J. Bartlett	
Energies and oscillator strengths for lithiumlike ions	1652
Zong-Chao Yan, M. Tambasco, and G. W. F. Drake	
Hyperfine structure of antiprotonic helium energy levels	1662
D. Bakalov and V. I. Korobov	