Contents

REVIEWS OF TOPICAL PROBLEMS

Abstract
The confinement
Yu A Simonov
Full text
313

Synchronisation in neural networks
H D I Abarbanel, M I Rabinovich, A Selverston, M V Bazhenov, R Huerta, M M Sushchik, L L Rubchinski
Full text
337

PHYSICS OF OUR DAYS

Abstract
Collision of comet Shoemaker–Levy 9 with Jupiter: what did we see
V E Fortov, Yu N Gnedin, M F Ivanov, A V Ivlev, B A Klumov
Full text
363

CONFERENCES AND SYMPOSIA

Abstract
Scientific session of the Division of General Physics and Astronomy of the Russian Academy of Sciences (29 November 1995):
Ordered semiconducting-matrix quantum dot arrays
N N Ledentsov, V M Ustinitov, S V Ivanov, B Ya Mel'tser, M V Maksimov, P S Kop'ev, D Bimberg, Zh I Alferov
Full text
393

Percolation metal-dielectric transitions in two-dimensional electron system
V T Dolgopolov
Full text
398

Nonlinear optical properties of semiconducting quantum wires and dots
V S Dneprovskii
Full text
401

Continued overleaf
Quasi-one-dimensional conductors with a charge density wave
S N Artemenko, A F Volkov, S V Zaïtsev-Zotov 403

Giant magnetoresistance, spin-reorientation transitions, and macroscopic quantum phenomena in low-dimensional magnetic structures
V V Dobrovitskiï, A K Zvezdin, A F Popkov 407

Controlled modulation of the coupling energy of impurity states in a quantum wall system
V I Belyavskiï, Yu V Kopaev, N V Kornyakov 415