

Contents

337	Nanotransport controlled by means of the ratchet effect Yu V Gulyaev, A S Bugaev, V M Rozenbaum, L I Trakhtenberg	311
355	Nature of Poisson's ratio of amorphous polymers and glasses and its relation to structure-sensitive properties D S Sanditov	327
371	High-energy ball milling of nonstoichiometric compounds A I Gusev	342
396	Low-power-threshold parametric decay instabilities of powerful microwave beams in toroidal fusion devices E Z Gusakov, A Yu Popov	365
421	Method of detection and spectrometry of charged particles produced in a superstrong electromagnetic field based on their transport by the magnetic field of a coaxial line S I Moshkunov, V Yu Khomich	388
429	Particles in finite and infinite one-dimensional periodic chains I F Ginzburg	395
441	Ballistic and shift currents in the bulk photovoltaic effect theory B I Sturman	407
447	In memory of Leonid Ivanovich Ponomarev	412
446	Physics news on the Internet Yu N Eroshenko	414

◇ ◇ ◇

In the next issue

*Complex phase diagrams of systems with isotropic potentials:
results of computer simulations*

V N Ryzhov, E E Tareyeva, Yu D Fomin, E N Tsiok

Effects of action at a distance in water

L I Menshikov, P L Menshikov, P O Fedichev

Desorption processes in the measurement of weak currents

V G Lukin, O G Khvostenko

*Interaction of a wave with an accelerating object
and the equivalence principle*

A I Frank

Traveling wave tubes: a history of people and fates

D I Trubetskov, G M Vdovina

In memory of Mikhail Borisovich Voloshin

New books on physics and related sciences

E V Zakharova

Physics news on the Internet

Yu N Eroshenko



April 2020
Volume 63, Number 4

Translation of the Russian journal
Успехи физических наук, Uspekhi Fizicheskikh Nauk
April 2020, Volume 190, No. 4