Contents

REVIEWS OF TOPICAL PROBLEMS

Gravitational wave astronomy: in anticipation of first sources to be detected 1
L P Grishchuk, V M Lipunov, K A Postnov, M E Prokhorov,
B S Sathyaprakash

Self-organization of excitations in Ge-doped silica fibers and its role
in second harmonic generation 53
B P Antonyuk, V B Antonyuk

FROM THE HISTORY OF PHYSICS

The development of the first Soviet atomic bomb 71
G A Goncharov, L D Ryabev

INSTRUMENTS AND METHODS OF INVESTIGATION

Controlled ion-beam transformation of electrical, magnetic,
and optical materials properties 95
B A Gurovich, D I Dolgii, E A Kuleshova, E P Velikhov,
E D Ol’shanskii, A G Domantovskii, B A Aronzon, E Z Meilikhov

Physics news on the Internet 106
Yu N Eroshenko

BIBLIOGRAPHY

New books on physics and related sciences 107
E V Zakharova
Contents

Gravitational wave astronomy: in anticipation of first sources to be detected 1
L P Grishchuk, V M Lipunov, K A Postnov, M E Prokhorov, B S Sathyaprakash

Self-organization of excitations in Ge-doped silica fibers and its role in second harmonic generation 53
B P Antonyuk, V B Antonyuk

The development of the first Soviet atomic bomb 71
G A Goncharov, L D Ryabev

Controlled ion-beam transformation of electrical, magnetic, and optical materials properties 95
B A Gurovich, D I Dolgiǐ, E A Kuleshova, E P Velikhov, E D Ol'shanskiǐ, A G Domantovskii, B A Aronzon, E Z Meilikhov

Physics news on the Internet 106

New books on physics and related sciences 107

In the next issue

Double exchange model and the unique properties of the manganites
Yu A Izyumov, Yu N Skryabin

Some problems of the physics of exotic atoms
L I Men'shikov, M K Eseev

Diffuse martensite transitions and the plasticity of crystals with the shape memory effect
G A Malygin

Scientific session of the Division of General Physics and Astronomy of the Russian Academy of Sciences (27 September 2000):
Quasigravity in dust plasma
A M Ignatov

Observation of resonant atomic glow in solid state sublimation regions in the near vicinity of the Sun
R A Gulyaev, P V Shcheglov

Al'bert Nikiforovich Tavkhelidze (on his seventieth birthday)
Immanuil Lazarevich Fabelinskiǐ (on his ninetieth birthday)
Vladimir Vasil'evich Zheleznyakov (on his seventieth birthday)
Igor' Ekhielevich Dzyaloshinskii (on his seventieth birthday)
Yurii Andreevich Osip'yan (on his seventieth birthday)

New books on physics and related sciences
Physics news on the Internet