

PHYSICS- USPEKHI

English edition of *Uspekhi Fizicheskikh Nauk*
July 2000 Volume 170 Number 7

Contents

Volume 43

Number 7

2000

Pages 647–754

REVIEWS OF TOPICAL PROBLEMS

Induced domains and periodic domain structures in electrically and magnetically ordered materials 647

A V Golenishchev-Kutuzov, V A Golenishchev-Kutuzov,
R I Kalimullin

Vortex ring oscillations, the development of turbulence in vortex rings and generation of sound 663

V F Kop'ev, S A Chernyshev

PHYSICS OF OUR DAYS

Gravitational-wave astronomy: new methods of measurements 691

V B Braginskiĭ

The mechanism of lightning attraction and the problem of lightning initiation by lasers 701

É M Bazelyan, Yu P Raĭzer

METHODOLOGICAL NOTES

Simple example of the development of cluster structure of a passive tracer field in random flows 717

V I Klyatskin, K V Koshel'

Physics news on the Internet 724

Yu N Eroshenko

Continued overleaf

Contents continued

FROM THE HISTORY OF PHYSICS

- Electrolysis and surface phenomena.** 725
To the bicentenary of Volta's publication on the first direct-current source
A Ya Gokhshteĭn

PERSONALIA

- In memory of David Nikolaevich Klyshko** 751
A V Burlakov, V L Ginzburg, L V Keldysh, G Kh Kitaeva,
S P Kulik, T V Laptinskaya, L P Pitayevskii, P A Prudkovskii,
A N Penin, V I Trukhin, V V Fadeev, M V Chekhova

BIBLIOGRAPHY

- New books on physics and related sciences** 753
E V Zakharova

Contents

Induced domains and periodic domain structures in electrically and magnetically ordered materials A V Golenishchev-Kutuzov, V A Golenishchev-Kutuzov, R I Kalimullin	647
Vortex ring oscillations, the development of turbulence in vortex rings and generation of sound V F Kop'ev, S A Chernyshev	663
Gravitational-wave astronomy: new methods of measurements V B Braginskii	691
The mechanism of lightning attraction and the problem of lightning initiation by lasers É M Bazelyan, Yu P Raizer	701
Simple example of the development of cluster structure of a passive tracer field in random flows V I Klyatskin, K V Koshel'	717
Physics news on the Internet Yu N Eroshenko	724
Electrolysis and surface phenomena. To the bicentenary of Volta's publication on the first direct-current source A Ya Gokhshtein	725
In memory of David Nikolaevich Klyshko	751
New books on physics and related sciences E V Zakharova	753

◇ ◇ ◇

In the next issue

Diffraction and diffraction radiation
B M Bolotovskii, E A Galst'yan

Critical points of condensation in Coulomb systems
A A Likal'ter

Exotic nuclear physics
K N Mukhin, O O Patarakin

Conferences and symposia

Personalia

New books on physics and related sciences

Physics news on the Internet

