PHYSICS—USPEKHI

English edition of Uspekhi Fizicheskikh Nauk
June 2010 Volume 180 Number 6

Contents

REVIEW OF TOPICAL PROBLEMS

Quasicrystals
Yu Kh Vekilov, M A Chernikov
537

Application and electronic structure of high-permittivity dielectrics
T V Perevalov, V A Gritsenko
561

INSTRUMENTS AND METHODS OF INVESTIGATION

Dynamic compression of hydrogen isotopes at megabar pressures
R F Trunin, V D Urlin, A B Medvedev
577

METHODOLOGICAL NOTES

On energy and momentum conservation laws for an electromagnetic field
in a medium or at diffraction on a conducting plate
M V Davidovich
595

Parametric coupling of frequency components
at stimulated Raman scattering in solids
T T Basiev, S N Smetanin, A S Shurygin, A V Fedin
611

Continued overleaf
CONFERENCES AND SYMPOSIA

Nuclear physics, lasers, and medicine (Scientific session of the General Meeting of the Physical Sciences Division of the Russian Academy of Sciences, 14 December 2009):

High-energy solar flare processes and their investigation onboard Russian satellite missions CORONAS
Yu D Kotov

Laser physics in medicine
I A Shcherbakov

Development of nuclear physics medicine at the Institute for Nuclear Research, RAS
L V Kravchuk

PERSONALIA

In memory of Georgii Timofeevich Zatsepin

Physics news on the Internet
Yu N Eroshenko