

PHYSICS- USPEKHI

English edition of *Uspekhi Fizicheskikh Nauk*
August 2001 Volume 171 Number 8

Contents

Volume 44
Number 8
2001
Pages 761–869

REVIEWS OF TOPICAL PROBLEMS

- β -SiC(100) surface: atomic structures and electronic properties** 761
V Yu Aristov
- Effect of isotopic composition on phonon modes.** 785
Static atomic displacements in crystals
A P Zhernov, A V Inyushkin
- Physics news on the Internet** 812
Yu N Eroshenko

CONFERENCES AND SYMPOSIA

- Scientific session of the Division of General Physics and Astronomy
of the Russian Academy of Sciences (31 January, 2001):**
- Vertical-cavity emitting devices with quantum-dot structures** 813
V M Ustinov, N A Maleev, A E Zhukov, A R Kovsh, A V Sakharov,
B V Volovik, A F Tsatsul'nikov, N N Ledentsov, Zh I Alferov,
J A Lott, D Bimberg
- Heterostructures based on nitrides of group III elements:
technical processes, properties, and light-emitting devices** 815
I L Krestnikov, V V Lundin, A V Sakharov, D A Bedarev,
E E Zavarin, Yu G Musikhin, N M Shmidt, A F Tsatsul'nikov,
A S Usikov, N N Ledentsov, Zh I Alferov
- Scientific session of the Division of General Physics and Astronomy
of the Russian Academy of Sciences (28 February 2001):**
- 'Big Bang' echo (cosmic microwave background observations)** 817
I D Novikov

Continued overleaf

Contents continued

Hidden mass in the Local Universe I D Karachentsev	818
Searches for black holes: the recent data A M Cherepashchuk	821
Superfluidity in neutron stars D G Yakovlev	823
International Conference ‘Quantization, Gauge Theories, and Strings’ devoted to the memory of Efim Samoïlovich Fradkin (Moscow, 5–10 June 2000): On the International Conference ‘Quantization, Gauge Theories, and Strings’ B L Voronov	827
About Efim Fradkin V L Ginzburg	831
E S Fradkin as a person E L Feinberg	833
FROM THE HISTORY OF PHYSICS	
On the history of the research into controlled thermonuclear fusion: The initial period in the history of nuclear fusion research at the Kurchatov Institute V D Shafranov	835
Role played by O A Lavrent’ev in the formulation of the problem and the initiation of research into controlled nuclear fusion in the USSR B D Bondarenko	844
The 50th anniversary of the beginning of research in the USSR on the potential creation of a nuclear fusion reactor G A Goncharov	851
From the Archive of the President, Russian Federation	859
PERSONALIA	
Vladimir Borisovich Braginskii (on his seventieth birthday) A F Andreev, V Yu Baranov, S N Bagaev, F V Bunkin, H Walther, V L Ginzburg, V A Il’in, N S Kardashev, I D Novikov, O V Rudenko, K S Thorn, A M Cherepashchuk	867
BIBLIOGRAPHY	
New books on physics and related sciences E V Zakharova	869

Contents

β-SiC(100) surface: atomic structures and electronic properties V Yu Aristov	761
Effect of isotopic composition on phonon modes. Static atomic displacements in crystals A P Zhernov, A V Inyushkin	785
Physics news on the Internet	812
Scientific session of the Division of General Physics and Astronomy of the Russian Academy of Sciences (31 January 2001): contributions by V M Ustinov et al., I L Krestnikov et al.	813
Scientific session of the Division of General Physics and Astronomy of the Russian Academy of Sciences (28 February 2001): contributions by I D Novikov, I D Karachentsev, A M Cherepashchuk, D G Yakovlev	817
International Conference ‘Quantization, Gauge Theories, and Strings’ devoted to the memory of Efim Samoïlovich Fradkin (Moscow, 5–10 June 2000): contributions by B L Voronov, V L Ginzburg, E L Feinberg	827
On the history of the research into controlled thermonuclear fusion: contributions by V D Shafranov, B D Bondarenko, G A Goncharov, O A Lavrent’ev, A D Sakharov and some documents from the Russian Presidential Archive	835
Vladimir Borisovich Braginskii (on his seventieth birthday)	867
New books on physics and related sciences	869

◇ ◇ ◇

In the next issue

Large and infinite extra dimensions
V A Rubakov

Selected problems in SUSY phenomenology
M I Vysotskii, R B Nevzorov

What future for CP- and T-violation studies and CPT-invariance tests?
E P Shabalin

Physics beyond the Standard Model: experiments at the Gran Sasso Laboratory
A Bettini

Correspondence between supersymmetric Yang–Mills and supergravity theories
É T Akhmedov

Supersymmetry: 30 years ago
E P Likhtman

Physics news on the Internet

