

PHYSICS- USPEKHI

English edition of *Uspekhi Fizicheskikh Nauk*
July 2009 Volume 179 Number 7

Contents

Volume 52 Number 7 2009 Pages 659–764	REVIEWS OF TOPICAL PROBLEMS	
	Energy losses in relativistic plasmas: QCD versus QED	659
	S Peigné, A V Smilga	
	FROM THE CURRENT LITERATURE	
	Positronium in a cavity in a high-T_c superconductor	687
	V L Sedov	
	FROM THE HISTORY OF PHYSICS	
	Magnetic resonance: discovery, investigations, and applications	695
	A V Kessenikh	
	CONFERENCES AND SYMPOSIA	
	Commemoration of the 80th anniversary of the birth of Academician B B Kadomtsev	723
	(Scientific session of the Physical Sciences Division of the Russian Academy of Sciences, 10 December 2008):	
	Commemorating the 80th anniversary of the birth of Boris Borisovich Kadomtsev (opening address)	723
	V P Smirnov	
	Academician B B Kadomtsev and the International Thermonuclear Experimental Reactor (ITER)	725
	S V Mirnov	

Continued overleaf

Contents continued

The current status of the stellarator program L M Kovrizhnykh	730
Nonlinear phenomena in the ionospheric plasma. Effects of cosmic rays and runaway breakdown on thunderstorm discharges A V Gurevich, A N Karashtin, V A Ryabov, A P Chubenko, A L Shepetov	735
B B Kadomtsev's classical results and the plasma rotation in modern tokamaks V I Ilgisonis	746
LETTERS TO THE EDITORS	
On the existence and physical meaning of the Zenneck wave A V Kukushkin	755
PERSONALIA	
Lev Borisovich Okun (on his 80th birthday) M I Vysotsky, S S Gershtein, V I Zakharov, V S Imshennik, A V Kaidalov, V I Kogan, A Yu Morozov, V A Novikov, V A Rubakov, Yu A Simonov, A N Skrinsky, N E Tyurin	757
Semen Solomonovich Gershtein (on his 80th birthday) S P Alliluev, A F Andreev, S T Belyaev, S P Denisov, V G Kadyshevsky, A K Likhoded, A A Logunov, V A Matveev, L B Okun, L I Ponomarev, A N Skrinsky, N E Tyurin	759
Physics news on the Internet Yu N Eroshenko	763