

Volume 54  
Number 12  
2011  
Pages 1203 – 1312

# PHYSICS– USPEKHI

English edition of *Uspekhi Fizicheskikh Nauk*  
December 2011 Volume 181 Number 12

Russian original  
reference  
*Usp. Fiz. Nauk*  
Vol. 181, pages

## Contents

English translation  
reference  
*Phys. Usp.*  
Vol. 54, pages

	REVIEWS OF TOPICAL PROBLEMS	
1241	<b>Instability and reconstruction of a charged liquid surface</b> V B Shikin	1203
1265	<b>Evolution of the structure of amorphous alloys</b> G E Abrosimova	1227
	METHODOLOGICAL NOTES	
1313	<b>On description of a collisionless quantum plasma</b> S V Vladimirov, Yu O Tyshetskiy	1243
	CONFERENCES AND SYMPOSIA	
1329	<b>120th anniversary of the birth of Sergei Ivanovich Vavilov</b> (Scientific session of the Physical Sciences Division of the Russian Academy of Sciences, 30 March 2011):	1257
1329	<b>S I Vavilov and nonlinear optics</b> A V Masalov, <u>Z A Chizhikova</u>	1257
1334	<b>Luminescent nanophotonics, fluoride laser ceramics, and crystals</b> T T Basiev, I T Basieva, M E Doroshenko	1262
1341	<b>Advances in light sources and displays</b> A G Vitukhnovsky	1268

*Continued overleaf*

*Russian original  
reference*  
*Usp. Fiz. Nauk*  
Vol. **181**, pages

*Contents continued*

*English translation  
reference*  
*Phys. Usp.*  
Vol. **54**, pages

1345	<b>Direct experimental demonstration of the second special relativity postulate: the speed of light is independent of the speed of the source</b> E B Aleksandrov, P A Aleksandrov, V S Zapasskii, V N Korchuganov, A I Stirin	1272
1352	<b>Sergei Ivanovich Vavilov as a historian of science</b> V P Vizgin, A V Kessenikh, K A Tomilin	1278
LETTERS TO THE EDITORS		
1357	<b>Negative group velocity electromagnetic waves and the energy-momentum tensor</b> V P Makarov, A A Rukhadze	1285
PERSONALIA		
1369	<b>In memory of Viktor Nikitovich Mikhailov</b> E N Avrorin, E O Adamov, N P Voloshin, R I Ilkaev, A A Kokoshin, V P Neznamov, S F Pertsev, A Yu Rumyantsev, G N Rykovianov, L D Ryabev	1297
1371	<b>In memory of Vladimir Mikhailovich Lobashev</b> Yu G Abov, E V Geraskin, S S Gershtein, R M Djilkibaev, V F Ezhov, L V Kravchuk, V A Matveev, V A Rubakov, V M Samsonov, A P Serebrov, A N Skrinsky, V V Fedorov	1299
1282	<b>Physics news on the Internet</b> Yu N Eroshenko	1301
BIBLIOGRAPHY		
1373	<b>Authors index to Vol. 54, 2011</b>	1303
1377	<b>Subject index to Vol. 54, 2011</b>	1307
	<b>Concordance table of page numbers of papers in the English and Russian editions</b>	1312