

COLLECTED SCIENTIFIC TRANSACTIONS

NANOSISTEMI, NANOMATERIALI, NANOTEHNOLOGII

FOUNDED IN OCTOBER, 2003

Volume **13**, Issue **3** (2015)

CONTENTS

Editorial Announcements	Information for Subscribers	VIII
	Information for Contributors	XI
	Zeta Potential and Degree of the Aggregation of Nanoparticles of the Pyrogenic Silica in the Presence of the Dissolved Metal Chlorides in the Aqueous Medium <i>L. S. ANDRIYKO, V. I. ZARKO, A. I. MARYNIN, V. V. OLISHEVSKYI, A. A. KRAVCHENKO, and E. M. DEMJANENKO</i>	389
	Impedance Anisotropy and Quantum Photocapacity of Bio/Inorganic Clathrates InSe<HISTIDINE> and GaSe<HISTIDINE> <i>F. O. IVASHCHYSHYN, I. I. GRYGORCHAK, and M. I. KLAPCHUK</i>	403
	Synthesis, Structure, Optical and Photocatalytic Properties of Radiation-Resistant Ternary TiO ₂ /ZrO ₂ /SiO ₂ Sol-Gel Films and Powders <i>N. V. VITYUK, N. P. SMIRNOVA, G. M. EREMENKO, T. O. BUSKO, O. P. DMYTRENKO, and M. P. KULISH</i>	415
	Perspective Materials Based on Copper and Carbon Nanostructures <i>O. D. ZOLOTARENKO</i>	433
	Schottky-Barrier Au-TiB _x -n-GaN Contacts <i>R. Ya. KUDRYK</i>	449
	Influence of Germanium Sublayers on the Structure of Gold Films with Nanometer Thickness <i>R. I. BIHUN, Z. V. STASYUK, O. V. STROGANOV, V. M. GAVRYLYUKH, and D. S. LEONOV</i>	459
	The New Opportunities for Development of Phase-Contrast Tomographs for Medicine <i>V. B. MOLODKIN, V. Yu. STORIZHKO, S. V. LIZUNOVA, B. V. SHELUDCHENKO, V. V. LIZUNOV, M. G. TOLMACHOV, E. M. KYSLOVSKYI,</i>	

<i>S. J. OLIKHOVSKYI, S. O. VERSHYNSKYI, V. L. DENYSENKO, K. V. FUZIK, G. O. VELIKHOVSKYI, R. V. LEKHNYAK, E. G. LEN, L. M. SKAPA, and S. M. BROVCHUK</i>	469
Investigation of Structural Transformations at a Nickel Glass Transition	
<i>O. B. MELNYK, V. Ya. BILOSHAPKA, and V. K. SOOLSHENKO</i>	503
Influence of Dynamic Loads on Nanostructural Changes of Aluminium 2024-T3 Alloy Destroyed under Fatigue Deformation	
<i>O. Eh. ZASIMCHUK, M. G. CHAUSOV, T. V. TURCHAK, O. S. GATSENKO, O. I. BASKOVA, E. M. VOLIANSKA, R. G. GONTAREVA, and V. B. HUTSAYLYUK</i>	511
Fullerides of the Alkali-Earth and Rare-Earth Metals: Structure and Properties	
<i>D. V. SCHUR, S. Yu. ZAGINAICHENKO, Z. A. MATYSINA, N. P. BOTS'VA, E. V. ELINA, and E. V. ILCHENKO</i>	525
Heat Flux by Phonons within the Scope of the Landauer– Datta–Lundstrom Transport Model	
<i>Yu. O. KRUGLYAK</i>	549

Scientific Editors of Issue—*V. B. Molodkin, V. A. Tatarenko*

Executive Managing Editor—*V. A. Tatarenko*

Technical Editor—*D. S. Leonov*

Editorial-Publishing Department, G. V. Kurdyumov Institute for Metal Physics, N.A.S. of Ukraine

Editorial Office: 36 Academician Vernadsky Boulevard, UA-03680 Kyiv-142, Ukraine

Telephone: +380 44 4229551, +380 44 4241221. Fax: +380 44 4242561

E-mail: tatar@imp.kiev.ua; dsleonov@gmail.com