

COLLECTED SCIENTIFIC TRANSACTIONS

NANOSISTEMI, NANOMATERIALI, NANOTEHNOLOGII

FOUNDED IN OCTOBER, 2003

Volume 20, Issue 3 (2022)

CONTENTS

Editorial Announcements	Information for Subscribers	X
	Information for Contributors	XIII
	Publication Ethics	XVI
	Sensory Sensitivity to the Form of β -Ga ₂ O ₃ Nanoparticles <i>R. BALABAI and M. NAUMENKO</i>	617
	The Local Trap Centres in Thin β -Ga ₂ O ₃ :Cr ³⁺ Films <i>O. M. BORDUN, I. Yo. KUKHARSKYY, I. I. MEDVID, D. M. MAKSYMCHUK, I. M. BORDUN, P. CHABETSKY, and D. S. LEONOV</i>	631
	Deposition of Thin Y ₂ O ₃ :Eu Films by Radio-Frequency Sputtering <i>O. M. BORDUN, I. O. BORDUN, I. M. KOFLIUK, I. Yo. KUKHARSKYY, I. I. MEDVID, I. M. KRAVCHUK, M. S. KARKULOVSKA, and D. S. LEONOV</i>	639
	ZnO/SiC/porous-Si/Si Heterostructure: Obtaining and Properties <i>V. V. KIDALOV, V. P. KLADKO, A. F. DYADENCHUK, O. I. GUDYMENKO, V. A. BATURIN, A. Yu. KARPENKO, and V. V. KIDALOV</i>	647
	Experimental Measurement of Film Thicknesses on a Static Film Former and a Film Centrifugal Sprayer <i>P. E. TROFIMENKO, M. V. NAIDA, A. V. KHOMENKO, and Yu. I. PUSHKAROV</i>	657
	Influence of the Nano- and Submicron Structure of Magnesium–Aluminosilicate Glasses on the Crack Resistance of High-Strength Glass Ceramics <i>O. V. SAVVOVA, H. K. VORONOV, O. I. FESENKO, V. D. TYMOFIEIEV, and O. I. PYLYPENKO</i>	667
	Massive Dispersion-Strengthened Composition Materials with Metal Matrix Condensed from the Vapour Phase <i>M. I. GRECHANYUK, V. G. GRECHANYUK,</i>	

<i>A. M. MANULYK, I. M. GRECHANYUK, A. V. KOZYREV, and V. I. GOTS</i>	683
Strengthening of the Pipe-Pressing Tool for Production of Corrosion-Resistant Pipes by Drawing Wear- Resistant Nanocoatings	
<i>L. S. KRYVCHYK, T. S. KHOKHLOVA, V. L. PINCHUK, L. M. DEINEKO, and V. O. STOLBOVYI</i>	693
Peculiarities of the Formation of Carbon Nanotubes from the Products of the Air Conversion of Methane by the Method of Chemical Deposition	
<i>O. I. KHOVAVKO, A. A. NEBESNYI, D. S. FILONENKO, M. Yu. BARABASH, D. S. LEONOV, and O. M. SVYATENKO</i>	715
Comparative Analysis of Products of the Fullerenes' and Carbon-Nanostructures' Synthesis Using the SIGE and FGDG-7 Grades of Graphite	
<i>Ol. D. ZOLOTARENKO, E. P. RUDAKOVA, N. Yu. AKHANOVA, An. D. ZOLOTARENKO, D. V. SHCHUR, Z. A. MATYSINA, M. T. GABDULLIN, M. UALKHANOVA, N. A. GAVRYLYUK, A. D. ZOLOTARENKO, M. V. CHYMBAI, and I. V. ZAGORULKO</i>	725
Express Method of Experimental Investigation of the Effect of Carbon Nanostructures on the Caloric Properties of Paraffin Wax	
<i>Yana HLEK, Olga KHLIYEVA, Dmytro IVCHENKO, Nikolay LAPARDIN, Viacheslav KHALAK, and Vitaly ZHELEZNY</i>	745
Synthesis and Optical Characteristics of PVP/NiO Nanocomposites for Optoelectronics Applications	
<i>Maithem Hussein RASHEED, Abdulsattar Khudhair ABBAS, Farhan Lafta RASHID, and Ahmed HASHIM</i>	761
Effect on Polymer Concentration on Size and Optical Properties of PbS Quantum Dots Embedded in PVA	
<i>Abhigyan GANGULY, Saradindu PANDA, and Siddhartha SANKAR NATH</i>	769
Solubilization and Tautomeric Transformations of Natural Curcumin Dye into Aqueous Solution of Cationic Dimeric Surfactant Decamethoxine	
<i>V. M. BARVINCHENKO and N. O. LIPKOVSKA</i>	777
Comparative Poly2-Formyl (Pyrrole, Furan, & Thiophen): Synthesis Characterization and Particle Size	
<i>Ahmad AL-HAMDAN, Ahmad AL-FALAH, and Fawaz AL-DERI</i>	791
Synthesis and Characterization of Polypyrrole by Ammonium Persulfate as Oxidizing Agent and Study of Its Nanoparticles	
<i>Ahmad AL-HAMDAN, Ola AMER, Ahmad AL-FALAH, Ibrahim AL-GHORAIBI, Fawaz AL-DERI, and Mirna JABBOURE</i>	799
Structure and Mechanical Properties of (PMMA-ZrO ₂ - Ag) Nanocomposites for Medical Applications	

CONTENTS, Iss. 3 (Vol. 20)

<i>Aseel HADI and N. S. RADHI</i>	809
Preparation of PEO/CuO–In ₂ O ₃ Nanocomposites' Films for Antibacterial Fields	
<i>Huda Bukheet HASSAN, Ahmed HASHIM, and Hayder M. ABDULJALIL</i>	815
Fabrication of NiO–In ₂ O ₃ -Nanoparticles-Doped Organic Polymer Films for Antibacterial Applications	
<i>Huda Bukheet HASSAN, Ahmed HASHIM, and Hayder M. ABDULJALIL</i>	821
Nanoparticle Preparation and Antibacterial-Activity Analysis Using Pulsed Ablation at 1064 and 532 nm	
<i>Ruaa A. MOHAMMED, Falah A-H. MUTLAK, and Ghada Mohammed SALEH</i>	829

Scientific Editor of the Issue—*V. A. Tatarenko*

Executive Managing Editor—*V. V. Lizunov*

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-03142 Kyiv, Ukraine

Telephone: +380 44 4229551, +380 44 4249042, +380 44 4241221. Fax: +380 44 4242561

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