

COLLECTED SCIENTIFIC TRANSACTIONS

NANOSISTEMI, NANOMATERIALI, NANOTEHNOLOGII

FOUNDED IN OCTOBER, 2003

Volume 22, Issue 3 (2024)

CONTENTS

Editorial Announcements	Information for Subscribers Information for Contributors Publication Ethics	X XIII XVI
	C ₆₀ Fullerene Contributes to the Restoration of Precise Positioning of the <i>muscle soleus</i> After Achillotomy-Induced Atrophy <i>D. N. NOZDRENKO, O. P. MOTUZUK, O. V. DOLHOPOLOV, I. V. PAMPUHA, and K. I. BOGUTSKA</i>	527
	Enhanced Efficiency of Samarium-Doped TiO ₂ Nanoparticles for Targeted Imaging: Characterization and <i>in vivo</i> Evaluation <i>W. M. Abd EL-KADER, R. ABO-GABAL, A. M. ABDELGHANY, and A. H. ORABY</i>	535
	Synthesis of Silver Nanoparticles <i>via</i> Pulsed-Laser Ablation in Deionized Water: Characterization and Antibacterial Applications <i>Khalaaf AJAJ, Mushtaq Abed AL-JUBBORI, and Abdullah M. ALI</i>	557
	Fabrication of SiC-SrTiO ₃ -Nanoparticles-Doped PMMA/PEO Blend for Antibacterial and Radiation Shielding Fields <i>Hiba Kamil JAAFAR, Ahmed HASHIM, and Bahaa H. RABEE</i>	569
	Accident Prevention Using IoT-Based Smart Helmet <i>P. VIVEKANANDAN, P. RADHIKA, A. SIVAMANI, P. PRADEESH, and D. RAKESH</i>	577
	Raman Effect during Formation of the Ordered L1 ₀ -FePd Phase <i>R. A. SHKARBAN, D. S. LEONOV, M. Yu. NATALENKO, T. I. VERBYTSKA, M. Yu. BARABASH, and Iu. M. MAKOGON</i>	591
	Exploring the Dielectric Properties of Fe ₂ O ₃ -In ₂ O ₃	

Nanocomposites for Electrical and Electronics Applications <i>Ahmed HASHIM and Farhan Lafta RASHID</i>	603
Optical Properties of PVA–Cr ₂ O ₃ –Sb ₂ O ₃ Nanocomposites for Optoelectronics Fields <i>Ahmed HASHIM and Farhan Lafta RASHID</i>	613
Study of the Effect of Li Doping on ZnO Films Using RF-Magnetron Sputtering Method at Low Temperature <i>Israa Akram ABBAS, Ameera J. KADHM, and Raheem Lafta ALI</i>	623
Electrophysical Properties and Thermal Conductivity of Composite Based on Zinc Oxide and Reduced Graphene Oxide (1 vol.%) <i>B. TURKO, V. VASIL'EV, B. SADOVYI, R. BIHUN, I. PYLYPIV, V. KAPUSTIANYK, and D. LEONOV</i>	637
Design, Optimization, Structural and Electronic Properties of PVA/ZnO/SnO ₂ Nanostructures for Nanoelectronics Fields <i>Ali S. HASAN and Ahmed HASHIM</i>	643
Fabrication and Enhanced Dielectric Properties of PVA–Cr ₂ O ₃ –Sb ₂ O ₃ Nanocomposites for Electrical and Electronics Applications <i>Ahmed HASHIM and M. H. ABBAS</i>	655
Exploring the Optical Properties of PVA–ZrO ₂ –Sb ₂ O ₃ Nanostructures for Low-Cost Nanoelectronics Fields <i>Ahmed HASHIM and Aseel HADI</i>	665
Structural and A.C. Electrical Properties of Polyvinyl Alcohol/Iron Oxide Nanocomposites for Electronic and Electrical Applications <i>Zainab Sabri JABER and Majeed Ali HABEEB</i>	675
Exploring the Optical Properties of BaTiO ₃ /CuO-Nanoparticles-Doped PVA Polymer for Optoelectronic Applications <i>Majeed Ali HABEEB and Araa Hassan HADI</i>	687
Exploring the Structure, Optical and Electronic Properties of New PVA–PEO–Ba–Si ₃ N ₄ Structures for Electronics Applications <i>Hind AHMED and Ahmed HASHIM</i>	699
Design and Exploring the Structure and Electronic Characteristics of PS/MnO ₂ /NiO Nanosystem for Optics and Electronics Nanodevices <i>Ali S. HASAN, Ahmed HASHIM, and Zinah S. HASAN</i>	713
Effect of ZrO ₂ –CuO Nanofiller on the Optical Constants and Optical Conductivity of Biopolymer <i>Majeed Ali HABEEB, Idrees OREIBI, and Rehab Shather ABDUL HAMZA</i>	727
Low-Cost TiO ₂ /MWCNT/Ag Dye-Sensitized Solar Cell Based on Polypyrrole/SDS Counter Electrode <i>Nuhad SAAD and Oraas ADNAN</i>	739

CONTENTS, Iss. 3 (Vol. 22)

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

Executive Managing Editor—*V. V. Lizunov*

Technical Editors—*D. S. Leonov, I. M. Zabolotnyy*

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

State Registration Certificate of the Printed Mass Medium: Media Identifier R30-03169

Editorial Office: 36 Academician Vernadsky Boulevard, UA-03142 Kyyiv, Ukraine

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

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