1. Record Nr. UNINA9910917188703321

Autore	Fesenko Olena
Titolo	Nanooptics and Nanoelectronics, Nanobiotechnology, and Their Applications : Selected Proceedings of the 11th International Conference on Nanotechnology and Nanomaterials (NANO2023), August 16-19, 2023, Bukovel, Ukraine / / edited by Olena Fesenko, Leonid Yatsenko
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031675270 3031675274
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (498 pages)
Collana	Springer Proceedings in Physics, , 1867-4941 ; ; 312
Altri autori (Persone)	IAtsenkoL. P (Leonid Petrovich)
Disciplina	530.41 620.115
Soggetti	Nanoscience Nanotechnology Nanobiotechnology Nanochemistry Nanophysics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Effect of Nano-Complexes Based on Vanadium Nanoparticles and Cholesterol on Immune System of Tumor-Bearing Animals -- Low-power optical irradiation influence on alcohols droplets evaporation processes -- FRACTAL APPROACH TO ANALYSIS OF MAGNETIC STRUCTURE OF DOMAIN WALL WITH BLOCH POINT IN CYLINDRICAL FERROMAGNETIC NANOWIRE -- Extraction and use of nanocellulose from non-wood plant materials in the composition of paper and cardboard -- Effects of Non-Reciprocity in Multilayer Semiconductor Nanowires with Radial Subsequence of the Layers -- Comparative PALS-tracking of photopolymerization volumetric shrinkage in polymer-filler dental restorative nanocomposites -- Structural Features and Mechanical Behavior of Pseudo--Ti-Mo-Sn Alloys As-Quenched and As-Aged for Biomedical Application -- Analysis of Structural and Optical Features of Nanosized ZnO Films by Modulation Polarimetry

Methods -- Central Defect Containing Feedback Photonic Structures for THZ and Infrared Beams Collimation -- Laser-induced breakdown spectroscopy as a promising nanotechnology for cadmium and chromium detection in aqueous solutions -- Complexation of HSA with the medicine quercetin -- Electrical properties of photosensitive MnFe2O4/n-CdTe heterojunctions -- Electrical properties of the p-CuNiO2/n-Si heterojunction produced by radio frequency magnetron sputtering -- Complex formation in aqueous solutions of adenosine triphosphate with Mg2+ and Ca2+ ions -- Advanced polymeric nanomaterials for biomedical application -- X-RAY DIAGNOSTICS OF NANOSCALE DEFECTS IN SINGLE CRYSTALS -- BY DEFORMATION DEPENDENCIES METHOD FOR TOTAL INTEGRATED INTENSITY OF DYNAMICAL DIFFRACTION -- Polymer Hydrogels Based on PAA as Matrices for the Controlled Release of Bioactive Molecules -- Features of Additional Impact of Biocolloidal Processes on the Geomechanical Transformation of Deep Clayey Oceanic-Marine Sediments -- Interphase Nano- and Microstructural Transformations of Disperse Suspensions of Iron-Aluminosilicate Deep-Sea Sediments -- Antibacterial properties of silver nanoparticles deposited on different carriers -- THE EMISSION SPECTRA OF PRISTINE AND ELECTRON-IRADIATED InGaN UV LEDs AT DIFFERENT TEMPERATURES AND INJECTION CURRENTS -- Quantum – Confined Electron States in Perovskite Quantum Dots -- Sorption of U(VI) ions on nanocomposites based on zirconium compounds containing partially unzipped carbon nanotubes -- Effect of the solution concentration and temperature -- Peculiarities of the sensory effect in the structures "prism – gold nanolayer – protein receptor" N-heterocyclic azo dyes immobilized on silica gel for solid-phase detection of traces of nickel, cobalt and copper by diffusion reflectance spectrometry -- INJECTABLE HYDROGEL COMPOSITES FOR BIOMEDICAL APPLICATIONS BASED ON NANOSTRUCTURED BIOGENIC HYDROXYAPATITE AND SODIUM ALGINATE -- Energy transfer processes in composites based on CdS QDs, Ag NPs and dyes -- Synthesis of tungsten carbides submicron powders by high-frequency electrospark treatment method -- MULTICOMPONENT COMPOSITE LAYERS AS ELEMENTS FOR EFFECTIVE MULTILAYERED MICROWAVE SHIELDS AND ABSORBERS -- THE EMISSION SPECTRA OF PRISTINE AND ELECTRON-IRADIATED InGaN UV LEDs AT DIFFERENT TEMPERATURES AND INJECTION CURRENTS -- Dielectric relaxation of solid water solutions of hydroxypropylmethylcellulose: the role of ions -- Acoustoelectronic effect in semiconductor quantum dots with a multilayer shell -- Nanoporous humidity-sensitive thick films derived from spinel MgAl 2 O 4 ceramics: sintering, structural analysis and electrophysical investigations -- Electrophysical properties and current transport mechanisms in semiconductor complex compounds with supramolecular structure.

Sommario/riassunto

This book highlights some of the latest advances in nanotechnology and nanomaterials from leading researchers in Ukraine, Europe, and beyond. It features contributions from participants of the 11th International Conference Nanotechnology and Nanomaterials (NANO-2023) in Bukovel, Ukraine on August 16-19, 2023 organized by the Institute of Physics of the National Academy of Sciences of Ukraine, University of Tartu (Estonia), University of Turin (Italy), and Pierre and Marie Curie University (France). Worldwide experts present scientific achievements in key topics such as nanophysics, nanophotonics, nanooptics, nanoplasmonics, nanoelectronics, and nanobiotechnology. The book explores a significant branch of nanoscience and introduces new opportunities for synergistic research. Specifically, it: • presents new methods for the synthesis and characterization of nanomaterials,

nanocomposites and various nanostructures • presents microscopy, spectroscopy and laser imaging techniques for nanomaterials and nanocomposites • presents novel advances in nanophysics, nanooptics, nanophotonics, and nanoplasmonics • covers nanobiotechnology and nanochemistry, and their applications. This Book is essential reading for advanced undergraduate and graduate students, senior scientists, and industry representatives. It includes up-to-date results of investigations in nanotechnology and nanomaterials, along with promising its applications from nanophysics to nanomedicine. .