Record Nr. UNINA9910678263203321 **Titolo** Nanooptics and photonics, nanochemistry and nanobiotechnology, and their applications: selected proceedings of the IX international conference nanotechnology and nanomaterials (NANO2021), 25-28 August 2021, Lviv, Ukraine / / edited by Olena Fesenko and Leonid Yatsenko Cham, Switzerland:,: Springer,, [2023] Pubbl/distr/stampa ©2023 **ISBN** 3-031-18104-2 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (447 pages) Springer Proceedings in Physics, , 1867-4941; ; 280 Collana Disciplina 621.366 Soggetti Lasers Nanoscience Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Part I: Nanooptics and Photonics -- Properties of renormalized spectra Nota di contenuto of localized guasiparticles interacting with one- and two-mode phonons in Davydov's model at T = 0K -- Fluorinated oligoazomethine with azo-groups in the main chain as stimuli-responsive photoactive

of localized quasiparticles interacting with one- and two-mode phonons in Davydov's model at T = 0K -- Fluorinated oligoazomethine with azo-groups in the main chain as stimuli-responsive photoactive materials -- Surface plasmon enhanced copper monosulfide-based core shell nanoparticles -- Luminescent properties of opal – active dielectric matrix nanocomposites activated by ions of rare earth elements -- Nanostructured Optical Composites Of Tio 2 (C 3 N 4 Ox)/ Pani For Photocatalytic Application -- Local Modes and Local Resonances in Defect Containing 1D Photonic Structures: Signal Processing and Collimation of THz Irradiation -- Features of surface structuring of direct and indirect band gap semiconductors by femtosecond laser -- Dielectric and Photoluminescent Properties of the Water-Cellulose-NaCl Systems in a Wide Range of Temperatures: What is the Role of lons?.-Part II: Nanochemistry and Nanobiotechnology -- The Effect Of Medium Acidity And Basicity On The Stability Of Tryptophan And Formylkynurenine Species With Silver -- Dielectric properties of blood cells as biomarkers for stroke diagnostics -- Catalysis of Wastewater Pollutants by Ruthenium Nanooxide in Porous

Glass -- Physical, nanostructural, and biocolloid-chemical transformations of marine iron-aluminosilicate sediments and their chemical, and mineral ore conversions -- Prospects for the catalytic conversion of plastic waste -- Antibiotic-loaded polyacrylamide-based hydrogels for infected wound care -- Prediction of isomorphous substitutions and stability of solid solutions with -yf 3 structure in lu 1-x ln x f 3, ln = sm-yb systems -- Viability of deconserved sheep sperm for adding nanomaterial of ultrafine silica -- The effect of stirring on the electrodeposition of [(Cu-Zn) base /(Cu-Zn) add] n coatings from pyrophosphate-citrate electrolyte -- Features Of Plasma-Electrolyte Synthesis Of Heterooxide Nanocomposites On Multicomponent Alloys Of Valve Metals -- Deterioration of Crack Growth Resistance Characteristics of a Fine-Grained YSZ-NiO(Ni) Anode Material during Its Degradation in a Hydrogen Sulfide Containing Atmosphere -- Synthesis and characterization of deca-quinoline bearing pillar[5]arene macrocycle -- Synthesis And Photochemical Properties Of Benzylidene Containing Polymers.-POSS-containing Nanocomposites Based on Polyurethane/Poly(hydroxypropyl methacrylate) semi-IPN matrix.-Iron oxide nanomaterials for bacterial inactivation and biomedical applications -- Proliferative activity of Ehrlich carcinoma cells after use of nanocomplexes.-Extraction and properties of nanocellulose from hemp fibers -- Impact of gold nanoparticles on metabolic and antioxidant status of cryopreserved mesenchymal stem cells from adipose tissue -- Chemical transformations of phosphoric acid on hydrated anatase surface: a quantum chemical simulation -- Structural Functionalization Of The Polymer Matrix In PVC-MWCNT Nanocomposites -- Hydrogel Materials for Biomedical Application: a review.

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 presented at the 8th International Science and Practice Conference Nanotechnology and Nanomaterials (NANO2020), which was held on August 25–28, 2021 at Lviv Polytechnic National University, and was jointly organized by the Institute of Physics, the National Academy of Sciences of Ukraine, Lviv Polytechnic National University, University of Tartu (Estonia), University of Turin (Italy), Pierre and Marie Curie University (France), European Profiles S.A. (Greece), Representation of the Polish Academy of Sciences in Kyiv, University of Angers (France), Ruprecht Karl University of Heidelberg (Germany). Internationally recognized experts from a wide range of universities and research institutions share their knowledge and key findings on material properties, behavior, and synthesis. This book's companion volume also addresses topics such as nano-optics, energy storage, and biomedical applications.