

1. Record Nr.	UNINA9910591034503321
Titolo	Proceedings of the National Workshop on Recent Advances in Condensed Matter and High Energy Physics : CMHEP-2021 // edited by Kusum Lata Pandey, Pradip Kumar Priya, Umesh Kumar Yadav, Prashanta Kumar Khandai
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2022
ISBN	981-19-2592-5
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (194 pages)
Collana	Springer Proceedings in Physics, , 1867-4941 ; ; 278
Disciplina	530.41
Soggetti	Condensed matter Particles (Nuclear physics) Quantum theory Plasma (Ionized gases) Condensed Matter Physics Particle Physics Quantum Physics Plasma Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Ground state properties of spin1/2 Falicov-Kimball model on a triangular lattice with uniform external magnetic field -- Tuning the morphology of lanthanum cobaltite using the surfactant-assisted hydrothermal approach for enhancing oxygen evolution catalysis -- Synthesis of Novel Complex Metallic Alloys -- A TiO2 based Gas Sensor for Liquefied Petroleum Gas -- A study of the Solar Cycle 21 to 24 and the starting phase of solar cycle 25 -- Theoretical approach to modify the Born-Mayer Parameters in layered superconductor -- Effect of varying the grating length in an Optical Read-out Scheme Based on Grated Waveguide Cantilever Cavity Resonance -- Synthesis and Characterization of MoO3 Nanomaterials for Energy Storage Application -- Enhancement in optical absorbance of ZnO nanoparticles by introducing MoS2 nanosheets -- Effect of different ablation time of ns-pulsed laser on the synthesis of silver nanoparticles in liquid --

Investigation of Thermodynamical and Electro-optical properties of Nematic Liquid Crystals dispersed with Low wt% BaTiO₃ Nanoparticles -- Elastic and mechanical investigation of high temperature Ir_xRe_{1-x} alloys -- Comparative study of photocatalytic activity of ZnS and CuS Nanoparticles for Dye degradation under visible light irradiation -- Microstructural properties of palladium doped tin oxide thick film -- PVDF based nanocomposite polymer electrolyte for enhancement in stability of dye sensitized solar cells -- Morse Potential in Y-123 High temperature layered Superconductors -- Effect of dispersion of thiol capped AuNPs in room temperature discotic material -- Neutrinos properties and its detection -- Identified Charged Particle Production in Pb+Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV using Tsallis Distribution Function -- Multiplicity features of the grey particles emerged in ⁸⁴Kr₃₆+Em interaction at 1 GeV per nucleon -- Quantifying the performance of Multilayer insulation technique for cryogenic application -- Identification of bulk and surface event in pointcontact germanium detector at sub-keV energy region -- Fragmentation characteristics of the projectile fragments emitted in ⁸⁴Kr₃₆ + Em interaction at 1 A GeV -- Study of the multiplicity characteristics for target fragments produced in ⁸⁴Kr₃₆+Em interaction at relativistic energy -- Characteristics of the high purity germanium detectors in dark matter and neutrino sector. .

Sommario/riassunto

This book presents peer-reviewed articles from the National Workshop on Recent Advances in Condensed Matter and High Energy Physics-2021 (CMHEP-2021). This workshop was held in the Department of Physics, Ewing Christian College (ECC), Prayagraj, in collaboration with National Academic of Sciences (NASI), Prayagraj, India, in 2021. The book highlights recent theoretical and experimental developments in condensed matter and high energy physics which include novel phases of matter, namely crystalline and non-crystalline phases, unconventional superconducting phases, magnetic phases and Quark–Gluon plasma phases along with searches of neutrino and dark matter. This book provides a good resource for beginners as well as advanced researchers in the field of condensed matter and high energy physics.
