

CONTENTS

2020, Vol. 12, No 4

| | |
|---|----------|
| Shano Ahmed M., Ali Zainab S. , Fabrication and Characterization of Polyaniline Nanofiber Films by Various Techniques | 04001(5) |
| Khomenko A.V., Logvinenko D.T., Khyzhnya Ya.V. , Nonlinear Model of Ice Surface Softening during Friction Taking into Account Spatial Heterogeneity of Temperature | 04002(6) |
| Gaidar G.P., Baranskii P.I. , Effect of Different Heat Treatment Regimes on Electrical Properties and Microstructure of <i>n</i> -Si | 04003(5) |
| Garg Vijay, Sharma Harsh, Rehani Divya, Kumari Renu, Kumar Vipin, Kumar Tiwari Manoj, Sharma Shailesh Narain, Saxena Manish , Synthesis and Characterization of Temperature Controlled SnO ₂ Nanoparticles by Solid-state Reaction Method..... | 04004(6) |
| Borysiuk V. , Simulation of Fracture Dynamics of Two-dimensional Titanium Carbide Ti ₂ C under Different Types of Tensile Loading..... | 04005(4) |
| Lysenkov E.A., Klepko V.V., Lysenkova I.P. , Features of Structural Organization of Nanodiamonds in the Polyethylene Glycol Matrix | 04006(6) |
| Harsono Heru , Characterization of Crystal Structure and Magnetic Properties of Zn _(1-x) Mn _x O (<i>x</i> = 0.086 and 0.090) Nanoparticles Synthesis Results Using Coprecipitation Method..... | 04007(4) |
| Kaykan L.S., Mazurenko J.S., Ostapovych N.V., Sijo A.K., Ivanichok N.Ya. , Effect of pH on Structural Morphology and Magnetic Properties of Ordered Phase of Cobalt Doped Lithium Ferrite Nanoparticles Synthesized by Sol-gel Auto-combustion Method..... | 04008(7) |
| Khezzar D., Khedrouche D., Denidni A.T., Kärnfelt C. , A Low-profile Ultra-wideband LTCC Based Microstrip Antenna for Millimeter-wave Applications under 100 GHz..... | 04009(6) |
| Pujar Malatesh S., Sidarai Ashok H. , Fabrication and Interpretation of Zinc-Cerium Composite: Structural and Thermal Studies | 04010(5) |
| Malykhin S.V., Kondratenko V.V., Kopylets I.A., Surovitskiy S.V., Shipkova I.G., Mikhailov I.F., Zubarev E.N., Bogdanov Yu.S. , Features of the Initial Stage of the Formation of Ti-Zr-Ni Quasicrystalline Thin Films | 04011(6) |
| Khan S., Vyas A., Rajan S., Jani S., Brajpuriya R. , Structural Studies of Mechanically Alloyed Fe _{1-x} Al _x Powder | 04012(5) |
| Petrushenko I.K. , Hydrogen Adsorption on Li ⁺ and Na ⁺ Decorated Coronene and Corannulene: DFT, SAPT0, and IGM Study | 04013(6) |
| Zegadi C., Lounis Z., Haichour A., Hadj Kaddour A., Ghaffor D. , Realization of the Kelvin Probe System for the Surface Treatment of a Semiconductor | 04014(6) |
| Handique K.C., Kalita P.K. , Effect of Weak Confinement on the Optical Properties of Chemically Synthesized ZnS Nanoparticles | 04015(5) |
| Konobeeva N.N., Belonenko M.B. , Influence of the Vector Order Parameter on the Dynamics of 3D Ultrashort Pulses in Carbon Nanotubes | 04016(4) |

| | |
|---|----------|
| Veerabhadrayya M., Ananda Kumari R., Nagaraju G., Udayabhanu, Ravikiran Y.T., Chethan B., Structural, Optical and Electrical Properties of Ce Doped SnO ₂ Nanoparticles Prepared by Surfactant Assisted Gel Combustion Method | 04017(6) |
| Kazi Sadiya, Savanur Feeda, Kakati Sushant, Mathad Shridhar N., Jeergal P.R., Pujar A.S., Hiremath C.S., Galgali S.L., Rendale M.K., Pujar R.B., Sintering Temperature Dependent Structural and Mechanical Studies of Ba _x Pb _{1-x} TiO ₃ Ferroelectrics..... | 04018(5) |
| Kumar Tripathy Sumanta, Madeen Kumar M., Impact of Concentration of Nanoparticles on Characteristics of Transformer Oil..... | 04019(4) |
| Oksanich A.P., Pritchich S.E., Mashchenko M.A., Bobryshev A.Yu., Effect of the Porous Silicon Layer Structure on Gas Adsorption | 04020(5) |
| Pavlyuk S.P., Ishchuk L.V., Telega V.M., Malyshev V.Yu., Dubovyk S.G., Light Emission from Silicon Structures with Dielectric Insulation..... | 04021(5) |
| Patel Piyush, Vyas S.M., Patel Vimal, Pavagadhi Himanshu, Crystal Growth and Electro-optical Characterization of In ₂ Se _{2.7} Sb _{0.3} Compound | 04022(4) |
| Gulyamov G., Gulyamov A.G., Davlatov A.B., Shahobiddinov B.B., Electron Energy in Rectangular and Cylindrical Quantum Wires | 04023(5) |
| Berbara D., Abboun Abid M., Hebali M., Benzohra M., Chalabi D., An Ultra-low Power, High SNM, High Speed and High Temperature of 6T-SRAM Cell in 3C-SiC 130 nm CMOS Technology..... | 04024(4) |
| Pavliuchenko A.M., Shyiko O.M., Klochkova T.I., Measurement of the Angle of Attack of an Aerophysical Missile Complex in Flight Based on the Hall Effect Sensor and Electronic Measurement System | 04025(5) |
| Onanko A.P., Kuryliuk V.V., Onanko Y.A., Kuryliuk A.M., Charnyi D.V., Kulish M.P., Dmytrenko O.P., Peculiarity of Elastic and Inelastic Properties of Radiation Cross-linked Hydrogels | 04026(5) |
| Kumar Suresh , Arora Divya, Dhupar Anu, Sharma Vandana, Sharma J.K., Sharma S.K., Gaur Anurag, Structural and Optical Properties of Polycrystalline ZnO Nanopowder Synthesized by Direct Precipitation Technique..... | 04027(5) |
| Minakova K.A., Zaitsev R.V., Improving the Solar Collector Base Model for PVT System..... | 04028(5) |
| Sukhodub L.B., Sukhodub L.F., Kumeda M., Prylutskyy Y., Evstigneev M., Kostjukov V., Slobodyanik M., Ritter U., The Effect of Graphene Oxide on the Properties and Release of Drugs from Apatite-Polymer Composites..... | 04029(7) |
| Beresnev V.M., Lytovchenko S.V., Mazilin B.O., Horokh D.V., Stolbovoy V.A., Kolesnikov D.A., Kolodiy I.V., Zhanyssov S., Adhesion Strength of TiZrN/TiSiN Nanocomposite Coatings on a Steel Substrate with Transition Layer..... | 04030(6) |
| Turbin P.V., Horokh D.V., Thermal Effects on the Surface Morphology of an Ion-plasma Coating..... | 04031(5) |
| Krivtsov V.V., Kukla V.V., Krivtsov V.V., Shidlovskiy A.I., Bordyuk M.A., Some Properties and Structural Features of Poly(Vinyl Chloride)/Cu Films with Copper Nanoparticles Obtained by Exploding Wire Method | 04032(5) |

| | |
|---|----------|
| Dubyk Kateryna, Chepela Lesia, Alekseev Sergei, Kuzmich Andrey, Zousman Boris, Levinson Olga, Rozhin Aleksey, Geloen Alain, Isaiev Mykola, Lysenko Vladimir, Some Types of Carbon-based Nanomaterials as Contrast Agents for Photoacoustic Tomography..... | 04033(6) |
| Filipova N.Y., Korzhik O.V., Chayka A.S., Naida S.A., Korzhik M.O., Naida A.S., Dynamics of Receiving Electroelastic Spherical Shell with a Filler | 04034(7) |
| Danilevska N.B., Moroz M.V., Nechyporuk B.D., Haievska S.H., Novoseletskyi M.Yu., Prokhorenko M.V., Yarema N.P., Yukhymchuk V.O., Tesfaye Fiseha, Reshetnyak O.V., The Effect of Chemical Composition and Electrolyte Temperature on the Size and Structure of Cadmium Sulfide Nanocrystals Obtained by the Electrolytic Method | 04035(6) |
| Artyukhova N.O., Morphological Features of the Nanoporous Structure in the Ammonium Nitrate Granules at the Final Drying Stage in Multistage Devices..... | 04036(6) |
| Lysenko A.V., Brusnik A.Yu., Volk I.I., Korovai M.A., Ilin S.S., Bunetskyi O.L., On Theory of Superheterodyne FELs with Longitudinal Electrostatic Undulator | 04037(5) |
| Muratov M., Myrzabekova M., Guseinov N., Nemkayeva R., Ismailov D., Shabelnikova Ya., Zaitsev S., Experimental Investigation of the Distribution of Energy Deposited by FIB in Ion-beam Lithography | 04038(3) |
| Shevchenko A.B., Barabash M.Yu., Peculiarities of Magnetocaloric Effect in Ferromagnetic Cylindrical Nanowires with a Domain Wall | 04039(3) |
| Information for authors..... | I-1 |