

CONTENTS

2021, Vol. 13, No 4

Osadchuk A.V., Osadchuk I.O., Semenov A.O. , The Mathematical Model of Radio-measuring Frequency Transducer of Optical Radiation Based on MOS Transistor Structures with Negative Differential Resistance	04001(6)
Khediri A.H., Talbi A., Benamara M.A., Benamara Z. , Electrical Characterization and Interface State Density in Au/ <i>n</i> -InN/InP Schottky Diode.....	04002(5)
Syrotyuk S.V., Malyk O.P. , Effect of the Spin-orbit Interaction on the Electronic Band Energies in Cadmium Chalcogenides Evaluated within the HSE06-GW Approach.....	04003(5)
Melouki M., Mehnane H.F., Djelloul A., Larbah Y., Adnane M. , Improvement of Electrical Properties of Grätzel Cells by Tuning the Dye Layer with CdS/ZnO Junction	04004(5)
Brajpuriya R., Vij A. and Sharma Ram K. , Thickness Dependent Magnetic Study of Fe Thin Films	04005(3)
Kashuba A.I., Andriyevsky B., Ilchuk H.A., Petrus R.Yu., Malyi T.S., Semkiv I.V. , Optical and Dispersion Parameters of the Al-doped ZnO Thin Film	04006(7)
Sandeep V., Pravin J. Charles , Effect of ZrO ₂ Dielectric over the DC Characteristics and Leakage Suppression in AlGaIn/InGaIn/GaN DH MOS-HEMT.....	04007(5)
Solovan M.M., Parkhomenko H.P., Brus V.V., Mostovyi A.I., Maryanchuk P.D. , Influence of the NaCl Dielectric Layer on the Electrical Properties of Graphite/ <i>n</i> -Cd _{1-x} Zn _x Te Schottky Diodes Fabricated by Transferring a Drawn Graphite	04008(4)
Lepikh Ya.I., Glauberman M.A. , Influence of the Ionizing Irradiation on the Magneto-sensitive Transistor Structures	04009(4)
Shipkova I.G., Veretennikova Yu.I., Kholodov H.A. , Magnetostatic Fields in Multilayer Composite Films with a Bimodal Granule Size Distribution	04010(5)
Gavrilchenko I.V., Milovanov Y.S., Ivanov I.I., Zaderko A.N., Oksanich A.P., Pritchyn S.E., Kogdas M.G., Fedorchenko M.I., Goysa S.N., Skryshevsky V.A. , Luminescent Properties of Electrochemically Etched Gallium Arsenide	04011(6)
Ostrovskaya K.O., Druzhinin A.A., Liakh-Kaguy N.S., Ostrovskii I.P. , Generator of EEG Delta Rhythms Based on Si Nanowires.....	04012(5)
Volchenko D.A., Kindrachuk M.V., Dolishniy B.V., Skrypnyk V.S., Zhuravlov D.I., Malyk I.B., Yurchuk A.O., Dukhota A.O. , Nanofluids in Cooling Systems and Their Efficiency	04013(8)
Kulkarni Sudheendra , Patil Arundhati H., Mathad Shridhar N., Khadke U.V. , Dielectric Spectroscopy of Ferroelectric Crossbred PVDF-ZnO Polymer Composite Thin Films.....	04014(5)
Thakran Mamta, Kumar Sumeet, Phogat Rohit, Ray S.K., Brajpuriya R., Rana Abhimanyu Singh, Kumar Brijesh , High Pressure Growth Approach for the Preparation of Reduced Graphene Oxide and its Investigation Using Raman Spectroscopy.....	04015(5)
Wanninayake Aruna P. , Annealing Effects on the Optoelectronic Performance of Au and CuO Nanoparticles Incorporated P3HT/PCBM Solar Cells	04016(6)

Asfour I. , Theoretical Simulations of the Structural Stability, Elastic, Electronic, Magnetic and Thermodynamic Properties of New Half-metallic $\text{Cr}_2\text{GdSn}_{1-x}\text{Pb}_x$ Alloys	04017(7)
Laoufi Amina Maria, Dennai B., Kadi O., Fillali M. , Study of the Effect of Absorber Layer Thickness of CIGS Solar Cells with Different Band Gap Using SILVACO TCAD	04018(5)
Shruthi B., Madhu B.J. , Structural, Dielectric and AC Conductivity Behavior of Multi-component $\text{TeO}_2\text{-ZnO-Li}_2\text{O-Na}_2\text{O-B}_2\text{O}_3$ Glasses	04019(5)
Kaminskii V.M., Boledzyuk V.B., Vodopyanov V.M., Savitskii P.I., Zasloukin A.V., Zapolovskiy M.V. , Photoelectric and Electrical Properties of Composite Materials Based on $n\text{-InSe}$ and Graphite	04020(4)
Vimala P., Bassapuri Manjunath, Harshavardhan C.R., Harshith P., Jarali Rahul, Arun Samuel T.S. , Study of a New Device Structure: Graphene Field Effect Transistor (GFET)	04021(5)
Slimani D., Souigat A., Gheriani R., Bentouila O. , Effect of Sintering Temperature and Aluminum Concentration on the Hardness, Microstructure and Density of Copper-Aluminum Alloys	04022(4)
Mygal V.P., Mygal G.V. , Topological 3D Model of the Functioning of a Dynamic System – Cognitive Estimation of Complexity	04023(6)
Brytan V.B., Peleshchak R.M., Uhrun Y.O., Seneta M.Ya., Tadeush O.H. , Influence of the Degree of Atomic Hydrogen Passivation of Electrically Active Centers in $\text{Cd}_{1-x}\text{Zn}_x\text{Te}$ on the Resolution of Optical Recording of Images with $n\text{-p-i-m}$ Nanostructures	04024(6)
Lukavenko I.M., Symonenko I.A. , Diagnostic Visualization of Changes in Biological Tissues by Ultrasound method Based on Doppler Effect.....	04025(5)
Bogdanovich D.V., Tsar'kova A.I., Petrushenko I.K. , Hydrogen Physisorption on BNC Heterostructures: A Systematic Theoretical Study	04026(10)
Lysenko A.V., Volk I.I., Oleksiienko G.A., Korovai M.A., Shevchenko A.T. , Plural Three-Wave Resonant Interactions in the Transit Section of Two-Stream Superheterodyne FEL with a Longitudinal Electric Field	04027(6)
Najim S.A., Muhammed K.M., Pogrebnyak A.D. , Design of Al:ZnO/p-Si Heterojunction Solar Cell Using SCAPS Simulation Program.....	04028(4)
Verbitskiy V.G., Antonyuk V.S., Voronko A.O., Korolevych L.M., Verbitskiy D.V., Novikov D.O. , Matrix of Photosensitive Elements for Determining the Coordinates of the Source of Optical Radiation	04029(6)
Buryk I.P., Holovnia A.O., Martynenko I.M., Tkach O.P., Odnodvoretz L.V. , Numerical Simulation of a Stress-strain Field-effect Transistor with a Channel in the Form of a Nanowire	04030(4)
Peleshchak R., Kuzyk O., Dan'kiv O. , The Spectrum of Natural Frequencies of Acoustic Oscillations of a Spherical Quantum Dot with a Multilayer Shell.....	04031(5)
Galiy P.V., Nenchuk T.M., Ciszewski A., Mazur P., Tsvetkova O.V., Dzyuba V.I., Makar T.R. , Solid-state Dewetting Formation of In/InTe Nanosystem	04032(6)
Gulomov J., Aliev R. , Study of the Temperature Coefficient of the Main Photoelectric Parameters of Silicon Solar Cells with Various Nanoparticles	04033(5)

Yatsenko I.V., Maslov V.P., Antoniuk V.S., Vashchenko V.A., Kirichenko O.V., Yatsenko K.M., Electron Beam Technology in Optoelectronic Instrumentation: High-quality Curved Surfaces and Microprofile Creation in Different Geometric Shapes	04034(5)
Pazukha I.M., Shchotkin V.V., Pylypenko O.V., Mykytyn V.Z., Shkurdoda Yu.O., Peculiarity of Magnetoresistance of Composite Materials Based on Co and SiO.....	04035(4)
Kurskoy Yu.S., Hnatenko O.S., Afanasieva O.V., Precision Synchronization of Chaotic Optical Systems	04036(5)
Kumar Tripathy Sumanta, Kumar Sanjay, Ali Azeez Mohammed, Microstructure Analysis of Friction Stir Welding of Aluminum Alloy 6061 Coated with Copper Nanofilm.....	04037(4)
Information for authors.....	I-1