

Table of Contents

1.	Lelyakov A.P. Distribution of potential of a scalar field for “thick” null string of constant radius.....	3
2.	Usachyov A.S., Lelyakov A.P. Quadratic form, describing gravitational field of the radially expanding closed null string.....	13
3.	Pushkarev A.B. Investigation of a parsec-scale structure of the quasar 1642+690.....	17
4.	Narmansky V.J. Correlation of weather, climate and planetary cycles.....	24
5.	Alexeyev C.N., Barshak E.V., Yavorsky M.A. The structure of the modes and the evolution of optical vortices in optical fibres with acousto-optic interaction.....	42
6.	Alexeyev C.N., Yavorsky M.A., Boklag N.A. Vector theory of higher order modes of parallel waveguides.....	54
7.	Dzedolik I.V., Karakchieva O.S., Mikulska J.P. Polariton spectrum control in dielectric medium.....	64
8.	Kulish V.V., Tomchuk P.M. One-electron optical properties of ellipsoid metal nanoshells.....	75
9.	Krasnyuk I.B., Melnik T.N., Yurchenko V.M. Ideal turbulence in nonlinear “quantum” physics of polymers.....	94
10.	Fridman Yu.A., Gorelikov G.A., Klevets Ph.N. Influence of biaxial anisotropy on phase states of magnetoordering crystal with S=1.....	108
11.	Roshchupkin S.N. The constructing correlation function from its frequency moments.....	117
12.	Ryabushkin D.S. Accuracy of evaluation of NMR line moments in solids.....	125
13.	Ponomarenko V.I., Popov V.V., Skalskaya O.L. Effective dielectric permittivity of thin strip in the field of longitudinal electromagnetic wave.....	131

14. Belyaeva A.I., Galuza A.A., Savchenko A.A., Slatin A.A. Influence of deuterium ions bombardment on the morphology and optical properties of recrystallized tungsten.....	136
15. Bolotin D.D., Macksimova E.M., Strugatsky M.B. Comparative analysis of crystalomagnetic structure of iron borate and hematite.....	149
16. Yevstafyev O., Preobrazhensky V.L., Pernod P., Berzhansky V.N. Low temperature three wave magnetoelastic coupling in FeBO ₃ single crystal.....	156
17. Lysov V.I., Tsaregradskaya T.L., Turkov O.V., Saenko G.V. Receipt of nanocrystalline materials a way by crystallization of amorphous alloys.....	174
18. Suchikova J.A., Kidalov V.V., Gaichuk A.S. Polishing of monocrystalline n-InP.....	182
19. Yatsenko Y.I., Kidalov V.V., Sukach G.O. Preparation and investigation of the porous layer GAP	187
20. Berzhansky V.N., Vlasova T.A., Lagunov I.M. The automated system of control and experimental data registration in physical experiment.....	193
21. Lyashko D.A., Alevantiev D.V. Programmatic complex for emulation of spectrums of ultraviolet space eshelle spectograph «TUES».....	202
Information About Authors.....	210
Table of Contents.....	217