

TABLE OF CONTENTS:

<i>Yu. F. Vaksman, Yu. A. Nitsuk</i> PHOTOCONDUCTIVITY AND PHOTOLUMINESCENCE OF ZnSe:Cr CRYSTALS IN THE VISIBLE SPECTRAL REGION	5
<i>A. V. Glushkov, V. B. Ternovsky, V. V. Buyadzhi, P. A. Zaichko, L. V. Nikova</i> ADVANCED RELATIVISTIC ENERGY APPROACH TO RADIATION DECAY PROCESSES IN ATOMIC SYSTEMS	11
<i>P. O. Kondratenko, Yu. M. Lopatkin, A. V. Glushkov, T. N. Sakun</i> EXPERIMENTAL AND THEORETICAL STUDYING PHOTOCONDUCTIVITY OF POLYMERIC LAYERS WITH DYES	23
<i>I. K. Doycho, S. A. Gevelyuk, E. Rysiakiewicz-Pasek</i> PHOTOLUMINESCENCE OF TAUTOMERIC FORMS OF NANOPARTICLE ENSEMBLES OF DYES BASED ON THE 4-VALENCE STANNUM COMPLEXES IN POROUS SILICA GLASS	30
<i>G. P. Prepelitsa</i> NEW NONLINEAR ANALYSIS, CHAOS THEORY AND INFORMATION TECHNOLOGY APPROACH TO STUDYING DYNAMICS OF THE QUANTUM GENERATOR AND LASER SYSTEMS	38
<i>I. N. Serga</i> RELATIVISTIC THEORY OF SPECTRA OF PIONIC ATOMS WITH ACCOUNT OF THE NUCLEAR AND RADIATIVE CORRECTIONS: RADIATIVE TRANSITION PROBABILITIES	44
<i>V. S. Grinevich, L. M. Filevska</i> RAMAN SCATTERING IN NANOSCALE TIN DIOXIDE	50
<i>Yu. V. Dubrovskaya, O. Yu. Khetselius, A. V. Ignatenko, D. E. Sukharev</i> RELATIVISTIC AND NONRELATIVISTIC APPROACHES IN THEORY OF PERMITTED BETA-TRANSITIONS: AN EFFECT OF ATOMIC FIELD ON FERMI AND INTEGRAL FERMI FUNCTIONS VALUES	58
<i>O. Yu. Khetselius, T. A. Florko, A. V. Smirnov, Yu. Ya Bunyakova</i> HYPERFINE STRUCTURE PARAMETERS OF THE HEAVY ISOTOPES: CONSISTENT NUCLEAR-QED THEORY	65
<i>Borschak V. A., Brytavskiy Ie. V., Kotalova M. I.</i> MODELLING OF RAPID STAGE DECAY OF SIGNAL OF OPTICAL SENSOR BASED ON HETEROSTRUCTURE CdS-Cu ₂ S	72

<i>A. V. Glushkov, V. B. Ternovsky, S. V. Brusentseva, A. V. Duborez, Ya. I. Lepich</i> NON-LINEAR DYNAMICS OF RELATIVISTIC BACKWARD-WAVE TUBE IN SELF-MODULATION AND CHAOTIC REGIME	77
<i>T. B. Tkach</i> QUANTUM DEFECT APPROXIMATION IN THEORY OF RADIATIVE TRANSITIONS IN SPECTRUM OF Li-like CALCIUM	88
<i>A. V. Glushkov, A. A. Svinarenko, V. B. Ternovsky, A. V. Smirnov, P. A. Zaichko</i> SPECTROSCOPY OF THE COMPLEX AUTOIONIZATION RESONANCES IN SPECTRUM OF HELIUM: TEST AND NEW SPECTRAL DATA	94
<i>N. S. Simanovych, Y. N. Karakis, M. I. Kutalova, A. P. Chebanenko, N. P. Zatovskaya</i> THE PROCESSES ASSOCIATED WITH THE BIFURCATION IN THE CURRENT-VOLTAGE CHARACTERISTICS	103
<i>A. N. Shakhman</i> RELATIVISTIC THEORY OF SPECTRA OF THE PIONIC ATOMS WITH ACCOUNT OF STRONG PION-NUCLEAR INTERACTION EFFECTS	109
<i>A. V. Ignatenko, E. L. Ponomarenko, A. S. Kvasikova, T. A. Kulakli</i> ON DETERMINATION OF RADIATIVE TRANSITIONS PROBABILITIES IN RELATIVISTIC THEORY OF DIATOMIC MOLECULES: NEW SCHEME.....	116
<i>YU. G. Chernyakova, L. A. Vitavetskaya, P. G. Bashkaryov, I. N. Serga, A. G. Berestenko</i> THE RADIATIVE VACUUM POLARIZATION CONTRIBUTION TO THE ENERGY SHIFT OF SOME LEVELS OF THE PIONIC HYDROGEN	122
<i>V. V. Buyadzhi</i> LASER MULTIPHOTON SPECTROSCOPY OF ATOM EMBEDDED IN DEBYE PLASMAS: MULTIPHOTON RESONANCES AND TRANSITIONS.....	128
<i>A. A. Kuznetsova</i> PENNING AND STOCHASTIC COLLISIONAL IONIZATION OF ATOMS IN AN EXTERNAL MAGNETIC FIELD: MODEL POTENTIAL SCHEME.....	134
<i>A. S. Kvasikova</i> ON PROBABILITIES OF THE VIBRATION-NUCLEAR TRANSITIONS IN SPECTRUM OF THE RuO ₄ MOLECULE.....	141
<i>T. A. Florko, A. V. Glushkov, Yu. M. Lopatkin, S. V. Ambrosov, V. P. Kozlovskaya</i> ON INTENSITY OF EMISSION OF THE METALS ATOMS IN A HYDROGEN-OXYGEN FLAME IN A PRESENCE OF A MAGNETIC FIELD.....	146
ІНФОРМАЦІЯ ДЛЯ АВТОРІВ НАУКОВОГО ЗБІРНИКА "PHOTOELECTRONICS"	151
ІНФОРМАЦІЯ ДЛЯ АВТОРІВ НАУЧНОГО СБОРНИКА "PHOTOELECTRONICS".....	153
INFORMATION FOR CONTRIBUTORS OF "PHOTOELECTRONICS" ARTICLES.....	155