

CONTENTS

Efficient and tunable THz radiation based on selenide and sulfide crystals R.M. Sardarly, O.A. Samedov, A.P. Abdullayev, M.M. Tagiyev, F.T. Salmanov, A.A. Orujova.....	5
Dielectric and electrical relaxation in TlInS ₂ crystals irradiated by γ - quanta O.A. Samedov, O.Z. Alekperov, A.I. Nadjafov, S.F. Samedov, M.M. Guliyev, X.Z. Fatalizadeh, N.T. Mosumli, N.I. Huseynov.....	11
Effect of γ -radiation on the charge state of PTFE / CdS nanocomposites A.M. Maharramov, M.A. Nuriyev, A.A. Shukurova, S.M. Nuriyev.....	18
Photosensitive epitaxial heterojunctions CdTe/ Cd _{1-x} Mn _x Te I.R.Nuriyev, M.A.Mehrabova, A.M.Nazarov, R.M.Sadigov, E.I.Mirzayev.....	26
Frequency dispersion of electroconductivity and dielectric characteristics of composites of polyethylene / TiO ₂ M.M. Guliyev, N.Sh. Aliyev, A.M. Maharramov, R.S. Ismayilova, M.N. Bayramov.....	35
Mathematical modelling of the process of water radiolysis under the influence of low-energy electrons Y.D. Jafarov, R.T. Quliyeva.....	44
Definition refractive index of neutron waves in the crystals S.G. Abdulvahabova.....	53
The investigation of giant resonances in nuclei by inelastic scattering of protons M. M. Mirabutalybov.....	58
Derivatography study of adsorbed phase at radiolysis of phenol in water solutions in the presence of nano- γ AL ₂ O ₃ M.A. Gurbanov, U.A. Guliyeva, E.T. Abdullayev, O.H. Mahmudov.....	67
Radiation resistance of tar fractions of bituminous oil N.K. Guliyeva, N.A. Ibadov, S.F. Aliyeva-Chichek, S.M. Aliyev.....	71
Changes of acidity and chemical oxygen demand at the radiolysis of the water solutions of formic acid Z.I. Iskenderova, U.A. Guliyeva, S.Q. Mamedov, M.A. Gurbanov.....	78
Gamma radiation influence on morphological features and biochemical properties of genetically distant wheat hybrids N.R. Rzayev.....	82
Influence of environmental pollutants to the venom of <i>Macrovipera lebetina obtusa</i> H.A. Abiyev, Sh.A. Topchiyeva, M. A. Mehrabova.....	88

ICP-MS determination of uranium and thorium in water samples taken along river Kura
**M.M. Ahmadov, F.Y. Humbatov, V.S. Balayev, B.A. Suleymanov, K.S. Yusifova,
Y.M.Aliyeva.....95**