

Contents

| | |
|--|----|
| Efficiency of transgenerational transfer of the damages from M_1 to M_2 generations of barley under thermal neutron irradiation N.M. Rashedov, V.V. Berezhna, A.S. Abdullayev, O.G. Nesterenko, V.I. Sakada, L.D. Nesterenko | 5 |
| Influence of protons on the anisotropy of $TlInS_2$ crystal O.A. Samedov, O.Z. Alekperov, Kh.B. Orujova, N.M. Mehdiyev, S.F. Samadov, R.N. Mehdiyeva | 14 |
| Characteristics of the effect of radiation defects on the current-carrying mechanism in the p-CuTIS single crystal R.S. Madatov, G.B. Baylarov, R.M. Mamishova, U.F. Faradjova, K.Z. Bakishova | 19 |
| Environmental monitoring in some villages of Saatli and Imishli districts S.A. Mammadli, M.F. Farajov, Z.H. Muslumova | 28 |
| Detection of copper EPR signals in the photosynthetic apparatus of the plants: <i>in vitro</i> investigations A.N. Nasibova | 34 |
| Ab initio calculations of defects in $Cd_{1-x}Mn_xTe(Se)$ semimagnetic semiconductors M.A. Mehrabova, N.H. Hasanov, N.I. Huseynov, A.I. Kazimova | 39 |
| Gamma scintillation detector based on silicon MAPD matrix S.M. Nuruyev | 43 |
| Production of molecular hydrogen in nano- SiO_2/H_2O system with particle size $d = 20\div 60$ nm under the influence of gamma-quanta Y.D. Jafarov, S.M. Bashirova, K.T. Eyyubov, S.M. Aliyev | 48 |
| Regularities of the distribution of radionuclides in soil samples and tobacco plants in the Sheki-Zagatala zone of the Republic of Azerbaijan I.B. Asadova | 55 |
| Purification of soil from natural isotopes Kh.F. Mammadov, H.N. Shiraliyeva | 62 |
| Thermoluminescence properties of irradiated quartz and feldspar at different dose rates S. Mammadov, O. Samedov, M. Gurbanov, M. Bayramov, A. Abishov, A. Ahadova | 70 |

Influence of γ -rays on dielectric properties of TlInS₂ crystals
O. Samedov, N. Mehdiyev, N. Nabiye.....**76**

Determination of radionuclides in bottom sediment samples taken from the central part of Azerbaijan sector of the Caspian Sea
F.Y. Humbatov.....**81**