

Radiation hardness of vacuum phototriodes – VPT.

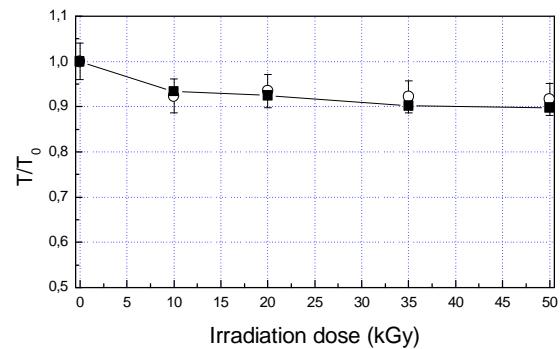
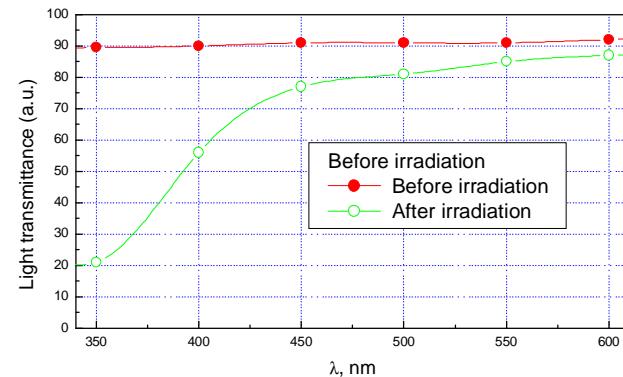


Fig 1.

Relative light transmission of UV faceplate in the emission range of PbWO₄ crystals (■) and relative anode response of VPT (○) at $\lambda=450$ nm. Excess noise factor after 50 kGy gamma irradiation on 10% more than before irradiation.



Relative light transmission spectra of UV faceplates before and after irradiation: $7 \cdot 10^{14}$ neutron/cm² and ~ 100 kGy gamma. Measurements at PNPI reactor. The loss of PbWO₄ scintillation light in the range of (350-600) nm – 19 %.

