15. PLANAR SENSORS FOR DOSIMETRY IN MIXED GAMMA - NEUTRON FIELDS

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Circular silicon *p-i-n* diodes fabricated by planar technology have been studied. The diodes allow simultaneously measurements of neutron doses and gamma dose rates in mixed fields. The neutron dose is determined from the shift of the forward current voltage characteristic. Gamma dose is obtained from measurements of the ionization current in the photodiode mode. Small sizes of sensors (few millimeters) allow measuring the spatial distribution of radiation fields.