

Developments in the determination of the charged particle LET threshold of the HPA-RPD neutron PADC dosimeter, and its relevance to the estimation of neutron doses on the International Space Station.

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Recent exposures to ^4He , ^{12}C , and ^{56}Fe ions performed at the HIMAC facility in Japan are being used to give a better understanding of the charged particle LET threshold of the PADC neutron dosimeter using the electrochemical etch method. It is hoped ultimately to obtain a better understanding of the proton LET threshold, so that the unwanted contribution to the total track count from direct protons can be estimated, and discarded from the dose assessment. This will be used to provide a better determination of the neutron and high energy proton dose.