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Design, simulation and construction of a position sensitive X-ray gas detector

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Abstract

In this paper a one dimensional position-sensitive X-ray gas detector has been designed, simulated and constructed based on Multi Wire Proportional Chamber (MWPC) with delay line position readout. These kinds of detectors are useful in soft X-ray imaging and are capable of being extended to two dimensions position readout easily. The position resolution of this detector is estimated to be 230 μ m.

Keywords: X-ray detector, delay line

For full article, refer to the Persian section