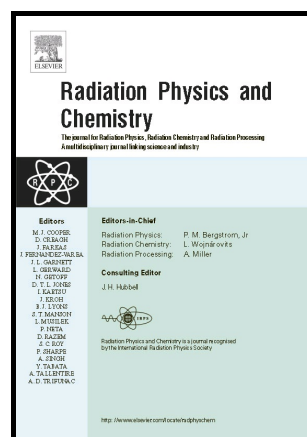


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HIGHLIGHTS

- X-ray counter based on two energy-range selecting devices has been constructed.
- Each device is realized by two comparators and a microcomputer.
- Photon energy determination was carried out online using microcomputers.
- CT was performed for two X-ray energy ranges.
- Iodine and gadolinium K-edge CT was accomplished simultaneously.

Keywords:

X-ray photon counting

CdTe detector

Energy-selecting device

Photon-count energy subtraction

Dual-energy CT

K-edge CT

ABSTRACT

To obtain two kinds of tomograms at two different X-ray energy ranges simultaneously,

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