

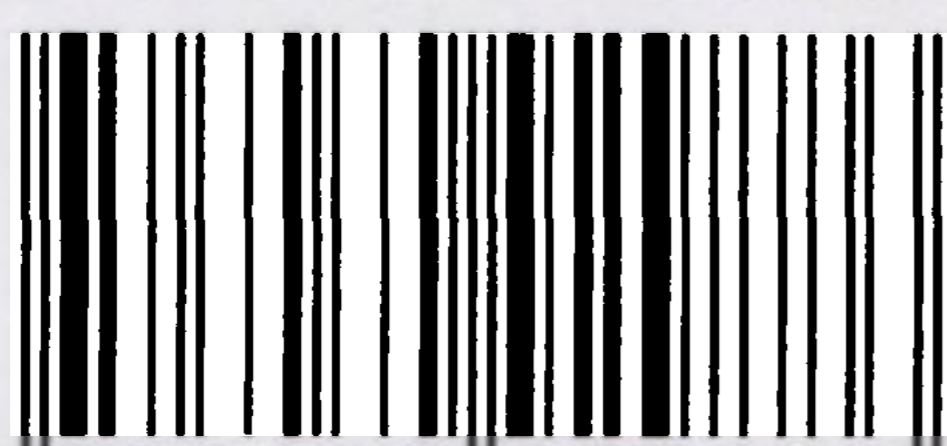
Krzysztof (Kris) Iniewski *Editor*

Advanced X-Ray Radiation Detection

Medical Imaging and Industrial Applications

This book offers readers an overview of some of the most recent advances in the field of technology for X-ray medical imaging. Coverage includes both technology and applications in SPECT, PET and CT, with an in-depth review of the research topics from leading specialists in the field. Coverage includes conversion of the X-ray signal into analogue/digital value, as well as a review of CMOS chips for X-ray image sensors. Emphasis is on high-Z materials like CdTe, CZT and GaAs, since they offer the best implementation possibilities for direct conversion X-ray detectors. The discussion includes material challenges, detector operation physics and technology and readout integrated circuits required to detect signals processes by high-Z sensors. Authors contrast these emerging technologies with more established ones based on scintillator materials. This book is an excellent reference for people already working in the field as well as for people wishing to enter it.

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