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II. Description of the Imaging System and Collimator Geometry
III. Description of Collimator Imaging Properties; IV. Septal Penetration; V. Optimal Design of Parallel-Hole Collimators; VI. Secondary Constraints; VII. Summary; Chapter 9. Annular Single-Crystal SPECT Systems; I. Overview: Annular Single-Photon Emission Computed Tomography Systems; II. Principles and Design of CeraSPECT; III. Annular SensOgrade Collimators; IV. Modification of Light Optics in a Scintillation Camera; V. NeurOtome, A Bridge between Single-Photon Emission Computed Tomography and Positron Emission Tomography
VI. MammOspect, an Annular Breast Single-Photon Emission Computed Tomography Camera

Sommario/riassunto

PET and SPECT are two of today's most important medical-imaging methods, providing images that reveal subtle information about physiological processes in humans and animals. Emission Tomography: The Fundamentals of PET and SPECT explains the physics and engineering principles of these important functional-imaging methods. The technology of emission tomography is covered in detail, including historical origins, scientific and mathematical foundations, imaging systems and their components, image reconstruction and analysis, simulation techniques, and clinical and laboratory applications. The
