

1. Record Nr.	UNINA9910438128303321
Titolo	Practical SPECT/CT in nuclear medicine // David Wyn Jones, Peter Hogg, Euclid Seeram, editors
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	1-4471-4703-0
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (345 p.)
Altri autori (Persone)	JonesDavid Wyn HoggPeter SeeramEuclid
Disciplina	616.07575
Soggetti	Single-photon emission computed tomography Tomography Nuclear medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	SECTION 1 - Scientific Principles -- (Introduction): Overview of Molecular Imaging -- Basic Discussion on Electromagnetic radiation Part 1. Gamma Radiation in Relation to SPECT imaging -- Part 2. X-rays in relation to SPECT/CT systems -- Gamma Camera SPECT – Physical Principles, Basic Instrumentation and Quality Control -- CT Components available for use in SPECT/CT – Physical Principles, Instrumentation and Quality Control -- SECTION 2 - Selection and Design -- Selecting an appropriate SPECT/CT Scanner -- Design of a suitable facility to house a SPECT/CT scanner -- SECTION 3 - Clinical SPECT/CT -- Clinical Utility of SPECT-CT -- SECTION 4 - Radiation Protection -- Radiation Protection for SPECT/CT Systems -- Optimal Utilization of Imaging Parameters in CT Scanning -- SECTION 5 – Imaging Principles -- Cross Sectional Anatomy in Multi-planar Imaging -- Radiological Contrast Media and Injector Systems -- Practical Considerations for Performing Clinical SPECT/CT. .
Sommario/riassunto	Nuclear Medicine is a diagnostic modality which aims to image and in some cases quantify physiological processes in the body to highlight disease or injury. Within nuclear medicine, over the past few decades, major technological changes have occurred and concomitantly changes

in the knowledge and skills required have had to evolve. One of the most significant technological changes has been the fusion of imaging technologies, to create hybrid systems such as SPECT/CT, PET/CT and PET/MR. With these changes in mind, Practical SPECT/CT in Nuclear Medicine provides a handy and informative guide to the purchase, clinical implementation and routine use of a SPECT/CT scanner. Practical SPECT/CT in Nuclear Medicine will be a valuable resource for all personnel working in nuclear medicine and it will be of particular value to trainees.

---