

1. Record Nr.	UNINA9910151622403321
Autore	Bushong Stewart Carlyle
Titolo	Radiologic science for technologists : physics, biology, and protection / / Stewart Carlyle Bushong, ScD, FAAPM, FACR
Pubbl/distr/stampa	Saint Louis, Missouri : , : Elsevier, , [2017] ©2017
ISBN	9780323429429 0-323-42945-9 9780323353779
Edizione	[Eleventh edition.]
Descrizione fisica	1 online resource (666 pages) : colour illustrations, tables
Disciplina	614.839
Soggetti	Radiation - Safety measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	PART I: RADIOLOGIC PHYSICS -- 1. Essential Concepts of Radiologic Science -- 2. The Structure of Matter -- 3. Electromagnetic Energy -- 4. Electricity, Magnetism, and Electromagnetism -- PART II: X-RADIATION -- 5. The X-ray Imaging System -- 6. The X-ray Tube -- 7. X-ray Production -- 8. X-ray Emission -- 9. X-ray Interaction with Matter -- PART III: THE RADIOGRAPHIC IMAGE -- 10. Concepts of Image Quality -- 11. Control of Scatter Radiation -- 12. Screen-Film Radiography -- 13. Screen-Film Radiographic Technique -- PART IV: THE DIGITAL RADIOGRAPHIC IMAGE -- 14. Introduction to Computer Science -- 15. Computed Radiography -- 16. Digital Radiography -- 17. Digital Radiographic Technique - NEW -- PART V: IMAGE ARTIFACTS AND QUALITY CONTROL -- 18. Screen-Film Radiographic Artifacts -- 19. Screen-Film Radiographic Quality Control -- 20. Digital Radiographic Artifacts -- 21. Digital Radiographic Quality Control -- PART VI: ADVANCED X-RAY IMAGING -- 22. Mammography -- 23. Mammography Quality Control -- 24. Fluoroscopy -- 25. Digital Fluoroscopy -- 26. Interventional Radiography -- 27. Computed Tomography -- PART VII: VIEWING THE DIGITAL IMAGE -- 28. Features of the Digital Image -- 29. The Digital Image Display - NEW -- 30. Viewing the Digital Image -- 31. Digital Display Device Quality Control -- PART VIII: RADIOBIOLOGY -- 32. Human Biology -- 33. Fundamental

Principles of Radiobiology -- 34. Molecular and Cellular Radiobiology
-- 35. Deterministic Effects of Radiation Exposure -- 36. Stochastic
Effects of Radiation Exposure -- PART IX: RADIATION PROTECTION --
37. Health Physics -- 38. Designing for Radiation Protection -- 39.
Patient Radiation Dose Management -- 40. Occupational Radiation
Dose Management

Sommario/riassunto

"Develop the skills and knowledge to make informed decisions regarding technical factors and diagnostic imaging quality with the vibrantly illustrated Radiologic Science for Technologists, 10th Edition. Updated with the latest advances in the field, this full-color and highly detailed edition addresses a broad range of radiologic disciplines and provides a strong foundation in the study and practice of radiologic physics, imaging, radiobiology, radiation protection, and more. Unique learning tools strengthen your understanding of key concepts and prepare you for success on the ARRT certification exam and in clinical practice"--Publisher's summary.