

concepts and evolution of photoelectronic digital imaging devices, emphasizes temporal subtraction in i.v. angiography. The chapters that follow include such topics as the assessment of organ function (Price et al.), contrast media time-concentration curves (Burbank and Brody), evaluation of left ventricular function (Higgins et al.), and contrast materials for cardiovascular digital subtraction angiography (Gerber and Higgins). While the individual chapters cover a broad spectrum of topics, the papers vary greatly both in the thoroughness and depth of the covered material. Many of the chapters are state-of-the-art summaries of current research, while others provide a tutorial review of techniques. A particularly good example of the latter is Lantz's article on video dilution techniques. Only a few papers are primarily devoted to clinical case reports. In addition, the book also contains several articles on digital radiographic instrumentation and processing techniques. For nuclear medicine scientists, Schneider's discussion of the sampling theorem's application to digital radiographic systems should be of special interest.

The potential reader should be aware, however, that while the title, *Digital Image Processing in Radiology*, implies a comprehensive survey of a broad range of disciplines, in actuality the material covered is generally restricted to digital videofluoroscopic systems. In addition, this book does not provide a comprehensive review of data processing techniques in radiography, and when this topic is covered (e.g., recursive filters), the material is treated in a limited manner. Finally, there is minimal discussion of current commercial equipment and software. These limitations are, however, balanced by the inclusion of a large number of relevant topics and the candid commentary on the advantages and limitations of each technology.

In summary, while individual articles vary in completeness, this book serves as a good state-of-the-art summary for digital radiographic systems dedicated to digital subtraction angiography. The book will appeal particularly to readers with a background in radiology and with prior knowledge of computer technology. In general, there is sufficient material to make this book a desirable addition to most nuclear medicine reference libraries.

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## Books Received

**Thyroid and Parathyroid Imaging.** *M. P. Sandler, J. A. Patton, C. L. Partain. East Norwalk, Appleton-Century-Crofts, 1985, 379 pp, \$75.00*

**Manual of Clinical Magnetic Resonance Imaging.** *J. P. Heiker, H. S. Glazer, J. K. T. Lee, et al., Eds. New York, Raven Press, 1985, 124 pp, \$19.50*

**Musculoskeletal Magnetic Resonance Imaging.** *E. J. Easton, J. A. Powers. Thorofare, SLACK, Inc., 1985, 166 pp, \$39.50*

**Environmental Health Criteria 46: Guidelines for the Study of Genetic Effects in Human Populations.** *Geneva, The World Health Organization, 1985, 126 pp, 12 Swiss Francs*