文 献 紹 介

文 献 委 員 会

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Some Sources of artifact in Computed Tomography.

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Measuring Radiographic Bone Density and Irregularity in Normal Hands

Paice. F., *Brit. J. Radiol.*, 52, 624, 925-935, (1979).

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The Monte Carlo Calculation of Integral Radiation Dose in Xeromammography.

Dance DR, *Phy Med Biol*, 25(1), 25, (1980).

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Magnification Radiography of the Temporomandibular Joint: Technical Considerations.

Murphy WA, et al., *Radiology*, 133, 1, 524-527, (1979).

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A Mammography Quality Assurance Test Program.

Burgess A., *Radiol*, 133(1), 491-495, (1979).

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消化器疾患診断用の新しい拡大撮影X線装置について
佐藤敬明, 臨放, 25, 149, (1980).

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Experimental Xenon Enhancement with CT Imaging: Cerebral Applications.

Drayer BP, et al., *Amer. J. Roentgenol.*, 134(1), 39-44, (1980).

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Effect of Radiographic Magnification on Image Contrast of Blood Vessels.

Sandor T., et al., *Amer. J. Roentgenol.*, 134(1), 159-162, (1980).

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Physics and Technical Considerations in the Design of the DSR: A High Temporal Resolution Volume Scanner.

Ritman EL, et al., *Amer J. Roentgenol*, 134(2),

369-374, (1980).

Summary

A multiple x-ray source, high-speed, transaxial scanner system (DSR) is about to undergo evaluation studies. The capability for programmable scanning modes and operator-interactive retrospective reconfiguration of scan data makes the DSR a very powerful research tool. The physics and technological basis for system design and selection of several major components of the DSR scanner are discussed.

21437

Direct Sagittal Computed Tomographic Scans in the Radiographic Evaluation of the Pelvis.

Osborn AG, et al., *Radiol*, 134(1), 255, (1980).

Summary

The authors describe a method for obtaining direct sagittal and coronal computed tomographic (CT) scans of the pelvis using a special accessory table adapted for use in wind-aperture whole-body scanners. In these scans the spatial and density resolution are nearly equivalent to those in axial scans. A case is described in which sagittal scanning helped define a pelvic mass.

21437

Clinical and Experimental Investigation of a Smoothed CT Reconstruction Algorithm

Joseph PM, et al., *Radiol*, 134(2), 507, (1980).

Summary

The usefulness of a smoothed reconstruction CT algorithm was studied using raw data from the EMI Mark I head scanner. The reconstruction algorithm operated on an off-line computer, independent of the EMI algorithm. This technique greatly reduces image noise and improves the visibility of very low-contrast structures, but at the cost of reduced spatial resolution. Phantom tests with contrasts as low as 0.14% demonstrated the