

Preliminary Results of Hard X-ray Phase-contrast Imaging

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Phase-contrast x-ray imaging is an emerging imaging technique that can be implemented at synchrotron radiation sources or by a microfocus x-ray source. The new technique is also developed and applied at Beijing Synchrotron Radiation Facility (BSRF). We present some results of X-ray phase-contrast imaging using synchrotron radiation at BSRF. The samples being imaged include gold fish, insects, SD rat and artificial objects made of plastic. Phase-contrast X-ray computed tomography is also explored.

Following figure is the pictures of gold fish with phase-contrast x-ray imaging. Soft tissues such as intestine, intestinal structures and spinal cord of the fish are seen clearly.



Fig. 1 phase-contrast x-ray imaging of gold fish