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## **X-Ray Image Restoration in the Wavelet Domain**

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**Abstract :** Wavelet expansions and wavelet transforms haveproven to be very efficient and effective in analyzing a verywide class of signals and phenomena. Wavelet expansion allows more accurate local description and separation of signalcharacteristics. While Fourier coefficient represents a component that lasts for all time, a wavelet expansioncoefficient represents a component that is itself local and iseasier to interpret. In this work, we have used images obtained by the microfocus radioscopy system for the quality control of the metallization step of silicon solar cells. In many systems, the observed image can result from the convolution of the true image and the point spread function (PSF) contaminated bynoise from various sources. The goal of this paper is to investigate the discrete wavelet transform (DWT) and itsapplication to X-Ray image denoising

Keywords : discrete wavelet transform (DWT), image denoising, wavelet, X-ray