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~(60)Co集装箱检测系统探测器输出信号的等效统计时间研究

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摘要 对集装箱检测系统探测器信号的统计特征进行分析,选取合适的图像扫描参数对提高检测图像质量有十分重要的意义。本工作通过引入等效统计时间的概念,可简明有效地对系统探测器输出信号进行分析,可较好地描述不同扫描条件下探测器信号的统计涨落特征,并确定多次迭加时探测器信号统计噪声减小的规律,具有一定的理论指导意义。

关键词 [60Co集装箱检测系统](#) [统计涨落](#) [探测器信号](#)

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Research on the Equivalent Statistical Time of Output Signal for Detector of ~ (60)Co Container Inspection System

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Abstract It is very important to analyze the statistic character of detector signal of container inspection system and further to choose suitable image scanning parameter. In the paper, by introducing the concept of equivalent statistical time, the detector signal could be analyzed easily and clearly. Also the statistical fluctuation character of detector signal under different scanning conditions is described by examples, and we can get some rules of decreasing the detector signal statistic noise by the average method of a certain times of measurement. This work can provide some directions in theory.

Key words [~\(60\)Co container inspection system](#) [statistical fluctuation](#) [detector signal](#)

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