

强噪条件下基于小波降噪的陀螺仪声信号处理方法

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摘要:

为了将噪声诊断技术应用于陀螺仪性能分析, 针对陀螺仪声音信号信噪比较低的特点, 提出了一种小波降噪的新方法, 通过尺度系数的比对有效地在复杂强噪声条件下提取出所需的陀螺仪音频信号, 为性能分析提供了保证。实验验证降噪取得了较好的效果。

关键词: 陀螺仪; 声信号; 尺度系数; 小波降噪

Method of Processing Gyro Noise Signal Based on Wavelet Denoising Under Strong Noise

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Abstract:

To imply noise diagnosis technology to the analysis of gyro performance, a new method based on wavelet denoising was presented considering the character of lower SNR of the gyro noise. The needed signal was picked up with noise mostly removed by comparing the wavelet scale coefficients, and the analysis of gyro performance is ensured. The experiment results demonstrate the effectiveness of the presented methods.

Keywords: gyro; noise; scale coefficient; wavelet denoising

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