激光技术 2014, 38(2) 218-224 DOI: 10.7510/jgjs.issn.1001-3806.2014.02.016 ISSN: 1001-3806 CN: 51-1125/TN

激光与光电子技术应用

一种改进的小波阈值算法在激光侦听中的应用

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摘要： 为了更好地实现激光侦听中的语音降噪，采用一种改进的小波阈值去噪算法，进行了理论分析和实验验证，取得了一系列仿真数据。结果表明，改进后的算法与传统的降噪算法相比，降噪后的语音信噪比显著提高，降噪效果明显，信号波形更加平滑、失真度小。

关键词： 激光技术 去噪 小波阈值算法 仿真

An improved wavelet threshold algorithm applied in laser interception

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Abstract: In order to get better denoising result in laser interception, an improved wavelet threshold denoising algorithm was proposed. Through theoretical analysis and experimental verification, a series of simulation data were obtained. The results show that, compared with the traditional denoising algorithm, the speech signal-to-noise ratio after denoising is improved greatly. Denoising effect is obvious, signal waveform is smoother and

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distortion is less.

Keywords: laser technique denoising wavelet threshold algorithm simulation

收稿日期 2013-06-04 修回日期 2013-07-06 网络版发布日期 2014-01-06

DOI: 10.7510/jgjs.issn.1001-3806.2014.02.016

基金项目:

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