

Here we introduce a non-contact system for continuous monitoring of nocturnal blood pressure, utilizing ballistocardiogram signals. The key component of this system is the utilization of ...

These systems can collect information from the vibrations in the chest due to blood pumping and the movements generated by breathing, known as ballistocardiography (BCG). This work presents the ...

This article presents a noncontact ballistocardiogram (BCG) monitoring system utilizing a fiber optic sensor (FOS) for PAC identification and short-term heart rate variability (HRV) analysis.

Based on the use of fiber optic sensing, an algorithm for heart rate signal analysis with optimized variational modal decomposition (OVMD) is proposed. Fiber Bragg Grating Sensors ...

After studying the different approaches used to interpret the hydraulic based-BCG signals, the following section will address the various strategies used to analyze fiber optic based-BCG signals.

Abstract: A compressed sensing (CS) framework is built for ballistocardiography (BCG) signals, which contains two parts of an optical fiber sensor-based heart monitoring system with a CS module and an ...

The micro-bend fiber optic BCG sensor and fiber Bragg grating BCG sensor are designed and manufactured, and experiments show that they can effectively acquire BCG.

Aims: To improve telemonitoring strategies in heart failure patients, there is a need for novel non-obtrusive sensors that monitor parameters closely related to intracardiac filling pressures.

Real time heart rate acquisition testing is conducted for testers, using an electrocardiograph and fiber optic sensing system simultaneously. The system obtains BCG and ...

Aims: To improve telemonitoring strategies in heart failure patients, there is a need for novel non-obtrusive sensors that monitor parameters closely related to ...

A packaging structure for fiber Bragg grating sensors is proposed, and experimental results demonstrate its effectiveness in capturing BCG signals. Evaluating the quality of ...



Bcg fiber optic sensor

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