Special Issue

Intelligent Sensors for Biomechanics, Exercise Physiology and Performance Analysis

Message from the Guest Editor

Intelligent sensors are revolutionizing the fields of biomechanics and exercise performance by providing real-time evaluation of exercise physiology and motion-related parameters with high accuracy. Accelerometers, pressure sensors or electromyography can track and analyze (ab)normal movement patterns or evaluate postural alignment. Also, they help to tailor exercise programs in both rehabilitation and performance optimization. In this context, they may allow for continuous tracking of an athlete's performance, such as power, acceleration, and muscle activation. Sensors combined with computer algorithms can generate information to guide athletes and coaches in refining training techniques and preventing overtraining.

This topic is in the scope of Sensors, as it will highlight the benefits of this field research in creating highly personalized and adaptive programs; detecting early signs of overuse injuries or movement inefficiencies; optimizing techniques and ensuring safety during training sessions or remote monitoring of athletes' health remotely.

This Special Issue is addressed to sensor-based evaluation of biomechanics and exercise analysis.

Guest Editor

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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