

Study of muscle fatigue across typical physical exercise by using different techniques of analysis

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Description

In this paper, a new approach for the detection of muscle fatigue is described. This approach uses a combination of several analytical techniques based on processing (Matlab). We applied one of the standard physical exercises causing the fatigue of the hand's muscles. After recording by the Arduino acquisition card of the raw signal EMG (electromyography; it's an electrical signal translating muscular effort) during physical exercise, we subsequently applied a series of analytical techniques to detect muscle fatigue. The results of these techniques are almost in agreement, which explains the performance of this new approach.