



Techniques of EMG Signal Analysis: Detection, Processing and Applications

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Message from the Guest Editors

Dear Colleagues,

An electromyographic (EMG) signal is a recording of the electrical activity of a skeletal muscle. EMG signals provide muscular morphological, electrophysiological and motor control information. EMG signal analysis plays a major role in clinical diagnosis and treatment of neuromuscular disorders and injuries, in ergonomic assessment of muscular activity, in studies of aging and muscular pain and fatigue, in the development and assessment of rehabilitation therapies and physical exercise strategies, and in control of exoskeletons, artificial limbs and orthotic devices. This issue of *Sensors* is intended to present the most salient and current developments in algorithmic techniques, sensor devices and applications in the field of EMG signal analysis within the following areas:

- Quantitative EMG signal analysis applied to clinical neurophysiology;
- HD-SEMG devices, algorithms and applications;
- EMG wearable devices;
- AI techniques applied to EMG signals;
- Use of EMG signals in rehabilitation;
- EMG signal-controlled exoskeletons and functional prosthesis.





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Message from the Editor-in-Chief

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