Special Issue

Advances in Sensing-Based Animal Biomechanics

Message from the Guest Editor

Sensors in animal biomechanics are used for clinical applications as well as for animal monitoring in all areas. In particular, inertial measurement units (IMU) are key elements in lameness evaluation, feedback systems, and motion analysis in animal biomechanics and can be combined with EMG systems (muscle activity) and ultrasound systems to detect muscle activity and tendon strains. This Special Issue aims to highlight advances sensing in animal biomechanics covering the development, testing, and modeling of biomechanical sensors on the component level as well as within biomechanical systems. Topics include but are not limited to:

- Accelerometers;
- Gyroscopes;
- Force sensors (strain gauge, piezo, etc.);
- Pressure sensors (capacitive, optical, piezo, strain gauge, etc.);
- Fibre optic sensors;
- EMG electrodes (surface, needle, array, capacitive);
- Ultrasound sensors;
- Ultra-wide band radar;
- Gonimeters;
- Optical tracking systems;
- Nanomaterial-based sensors;
- Advanced sensor characterization techniques;
- Sensor error modeling and online calibration;
- Pattern recognition algorithm;
- Deep learning.

Guest Editor

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Biomechanics (ISSN 2673-7078) is an international, peer-reviewed, and open access journal devoted to the fast publication of the latest achievements of scientific research in the area of biomechanics. Both experimental and theoretical papers are published. We hope that the submission guidelines and submission template will assist you in your submission of your research to this journal, and that you will enjoy reading the articles in Biomechanics.

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