Special Issue

New Advances in Electrochemical Motion Sensors

Message from the Guest Editors

Electrochemical motion sensors use mass and charge transfer in miniature liquid-based electrochemical cell as a readout mechanism to transduce mechanical motions to variations in the interelectrode current. Based on these operating principles, highly sensitive motion sensors have been created to be used in various fields, such as seismic sensors, accelerometers, and angular velocity sensors. New applications of electrochemical motion sensors assume the use of sensors integrated with actuators as a part of integrated microfluidics system. Papers are invited to contribute which revolve areas below (not limited to these):

- Studies of fundamental physical and electrochemical processes that determine conversion of signals in electrochemical motion sensors;
- New designs of electrochemical cells and technological aspects related to manufacturing of sensors;
- New engineering approaches to expand technological possibilities by combining sensors with signal conditioning, control, power electronic circuits and built-in actuators:
- Use of new electrolytes and materials to build electrodes:
- Application examples from various fields.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2023)



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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.

Editor-in-Chief

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