



Gyroscopes and Accelerometers

Guest Editors:

Dr. Ahmed Zaki

School of Engineering, Brown
University, Providence, Rhode
Island 02912, USA

Prof. Dr. Richard J. Vaccaro

Electrical, Computer and
Biomedical Engineering Pastore
Hall, 51 Lower College Rd,
Kingston, RI, 02881 - USA –
401.874.2506

Deadline for manuscript
submissions:

closed (20 September 2019)

Message from the Guest Editors

Dear Colleagues,

Inertial sensors, such as gyroscopes and accelerometers, are important components of inertial measurement units (IMUs). Inertial sensors provide an output that is proportional to angular velocity or angular acceleration. The output signal is corrupted by additive noise plus a random drift component. Many modeling, sensor fusion and calibration techniques are used to estimate and remove sensor bias. The objective of this Special Issue is to present significant work in this field. Papers will address wide range of applications such as gyroscope and accelerometer error modeling, modeling of array of low-cost sensors, calibration, bias estimation with Kalman filter or other techniques, GPS and/or other long-term bias-free integration methods with IMUs.

Dr. Ahmed Zaki
Prof. Richard J. Vaccaro
Guest Editors





sensors



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria
Elettrica e dell'Informazione
(Department of Electrical and
Information Engineering),
Politecnico di Bari, Via Edoardo
Orabona n. 4, 70125 Bari, Italy

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.

Author Benefits

Open Access : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

Contact Us

Sensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)